An Optimized Alert System Based on Geospatial Location Data

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(ABSTRACT)

Crises are spontaneous and highly variable events that lead to life threatening and urgent situations. As such, crisis and emergency notification systems need to be both flexible and highly optimized to quickly communicate to users. Implementing the fastest methods, however, is only half of the battle. The use of geospatial location is missing from alert systems utilized at university campuses across the United States. Our research included the design and implementation of a mobile application addition to our campus notification system. This addition is complete with optimizations including an increase in the speed of delivery, message differentiation to enhance message relevance to the user, and usability studies to enhance user trust and understanding. Another advantage is that our application performs all location data computations on the user device with no external storage to protect user location privacy. However, ensuring the adoption of a mobile application that requests location data permissions and relating privacy measures to users is not a trivial matter. We conducted a campus-wide survey and interviews to understand mobile device usage patterns and obtain opinions of a representative portion of the campus population. These findings guided the development of this mobile application and can provide valuable insights which may be helpful for future application releases. Our addition of a mobile application with geospatial location awareness will send users relevant alerts at speeds faster than those of the current campus notification system while still guarding user location privacy, increasing message relevance, and enhancing the probability of adoption and use.

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Contents

| 1 | Intr | oduct | ion | 1 |
|----------|------|--------|--------------------------------|----|
| | 1.1 | Introd | luction | 1 |
| | 1.2 | Relate | ed Work | 3 |
| | | 1.2.1 | Crisis Management Systems | 3 |
| | | 1.2.2 | Sociological Factors | 5 |
| | | 1.2.3 | Current Designs | 6 |
| | | 1.2.4 | What's Next for Alert Systems? | 7 |
| 2 | Sys | tem D | esign | 9 |
| | 2.1 | Syster | n Design Enhancements | 9 |
| | | 2.1.1 | Usage Scenario | 10 |
| | | 2.1.2 | Current System | 11 |
| | | 2.1.3 | Integration Requirements | 15 |
| | | 2.1.4 | Integration Model | 18 |

| | | 2.1.5 Optimizations | 23 |
|---|-----|--|----|
| | | 2.1.6 Summary | 26 |
| 3 | Use | r & Location Privacy | 27 |
| | 3.1 | Related Work | 27 |
| | 3.2 | Combating Mobile Location and Privacy Concerns | 31 |
| | | 3.2.1 Are they tracking me? | 31 |
| | | 3.2.2 Is my location accurate? | 32 |
| | | 3.2.3 Won't location applications kill my battery? | 33 |
| | | 3.2.4 Is this application worth giving up my location? | 34 |
| 4 | Usa | bility Survey | 35 |
| | 4.1 | Survey Design | 35 |
| | 4.2 | Survey Results | 36 |
| | 4.3 | Discussion | 40 |
| 5 | Usa | bility Study | 42 |
| | 5.1 | Study Design | 42 |
| | 5.2 | Study Results | 43 |
| | 5.3 | User Interface | 47 |
| | | 5.3.1 Critical Incidents | 52 |
| | | 532 Redesign Solutions | 5/ |

| | 5.4 | Follow-up Prototype Testing | 55 |
|----|------------------------------------|---|----------------------|
| | 5.5 | Follow-up Findings | 55 |
| 6 | And | droid Implementation | 60 |
| | 6.1 | Collaboration | 60 |
| | 6.2 | Prototype Application Development | 60 |
| | 6.3 | CNS Webform | 61 |
| | 6.4 | CNS Developments | 63 |
| | 6.5 | Geospatially Aware Addition to Push Application | 66 |
| | 6.6 | Testing & Future Development | 67 |
| | | | |
| 7 | Con | nclusion & Future Work | 71 |
| 7 | Con 7.1 | Broader Applications | 71 71 |
| 7 | | | |
| 7 | 7.1 | Broader Applications | 71 |
| 7 | 7.1 7.2 | Broader Applications | 71 72 74 |
| | 7.1 7.2 7.3 7.4 | Broader Applications | 71 72 74 |
| Bi | 7.1 7.2 7.3 7.4 | Broader Applications | 71 72 74 75 |
| Bi | 7.1 7.2 7.3 7.4 ibliog | Broader Applications | 71 72 74 75 76 |

| A.3 | IRB Approval Letter | 87 |
|-------|-------------------------------------|-----|
| A.4 | IRB Research Protocol | 88 |
| A.5 | Survey Data | 99 |
| Appen | dix B Usability Interview | 197 |
| B.1 | Recruitment Announcement | 198 |
| B.2 | Consent Form | 199 |
| В.3 | Pre-Questionnaire | 200 |
| B.4 | Interview Transcript | 201 |
| B.5 | Post-Questionnaire | 203 |
| B.6 | IRB Approval Letter | 204 |
| B.7 | IRB Research Protocol | 205 |
| B.8 | Interview Data | 216 |
| Appen | dix C Usability Follow-up Interview | 225 |
| C.1 | Recruitment Announcement | 226 |
| C.2 | Consent Form | 227 |
| C.3 | Interview Transcript | 228 |
| C.4 | Post-Questionnaire | 229 |
| C.5 | IRB Approval Letter | 230 |
| C.6 | IRB Research Protocol | 231 |

| C.7 | Interview Data | | | | | • | • | • | • | • | 242 |
|-------|----------------|---------|----------------|------|------|-------|-------|-------|-------|-------|---------|
| | | | | | | | | | | | |
| Appen | dix D Prototy | pe Code | \mathbf{URL} | | | | | | | | 245 |

List of Figures

| 2.1 | Process flow of current VT alert system | 17 |
|-----|--|----|
| 2.2 | Process flow of VT alert system with on-going changes | 20 |
| 2.3 | Process flow of VT alert system after in progress optimizations | 21 |
| 2.4 | Sample application map view of alert area and user location | 25 |
| 4.1 | The mobile device usage habits of 1057 participants by percentage | 38 |
| 4.2 | The application permissions preferences of 1057 participants by percentage . | 39 |
| 5.1 | The initial opinions of 12 participants by percentage | 44 |
| 5.2 | The final opinions of 12 participants by percentage | 49 |
| 5.3 | Alert details interface | 49 |
| 5.4 | Map interface shown zoomed on earth view to user's location and relevant alert | 50 |
| 5.5 | Map interface shown zoomed out in map view of user's location and relevant | |
| | alert | 50 |
| 5.6 | Interface for map shown zoomed out in map view of user's location and all | |
| | alerts | 51 |

| 5.7 | Interface for alert details shown after selection of a map geofence | 51 |
|------|--|----|
| 5.8 | New alert details interface | 56 |
| 5.9 | New map interface shown zoomed on earth view to user's location and relevant | ۲, |
| | alert | 56 |
| 5.10 | New map interface shown zoomed out in map view of user's location and | |
| | relevant alert | 57 |
| 5.11 | New interface for map shown zoomed out in map view of user's location and | |
| | all alerts | 58 |
| 5.12 | Interface for alert details shown after selection of a map geofence | 58 |
| 5.13 | The follow-up interview opinions of 4 participants by percentage | 59 |
| 6.1 | Prototype webform | 62 |
| 6.2 | $Interactive \ map \ web \ page, \ http://www.maps.vt.edu/interactive \ \dots \dots \dots$ | 63 |
| 6.3 | CNS provided demo interface | 65 |
| 6.4 | CNS provided alert details | 66 |
| 6.5 | CNS provided alert details screen with alteration for nearby alerts | 68 |
| 6.6 | CNS provided alert details screen with alteration for active alerts | 68 |
| 6.7 | Zoomed map interface on earth view | 69 |
| 6.8 | Map interface on street view with relevant alert | 69 |
| 6.9 | Map interface on street view with all alerts | 70 |

List of Tables

| 2.1 | System performance comparison | 14 |
|-----|--|----|
| 2.2 | System features outline over time | 22 |
| 4.1 | Participant traits | 36 |
| 4.2 | Device traits | 37 |
| 4.3 | Device habits | 38 |
| 4.4 | Automatic messages | 40 |
| 5.1 | Pre-Questionnaire background | 43 |
| 5.2 | Quantitative interview results on current system | 46 |
| 5.3 | Quantitative interview results on current system (continued) | 47 |
| 5.4 | Quantitative interview results on proposed addition | 48 |

Chapter 1

Introduction

1.1 Introduction

Technologies utilizing the right communication channels can help quickly disseminate pivotal information during and after a crisis. Success with these channels is fueled by the fact that today, with such a wide array of electronic devices, users are more connected than ever before. It is not uncommon for people to carry numerous devices including tablets and smartphones. All types of emergency communication systems have taken advantage of this and include SMS messages as well as phone calls to send notifications. Even now, advances in technologies are providing methodologies to reach more users in shorter periods of time. The most recent update to alert systems has included the adoption of a standard protocol for consistent alert message dissemination over different communication channels with the Common Alerting Protocol (CAP) [11], and the addition of new smartphone applications capable of delivering fast push notifications to users. Alarmingly, with all of this progress many unimplemented optimizations still exist for both national and local level alert systems. Key functionalities can be added to alert system designs and processes to increase not only

efficiency, but also effectiveness and reliability. Geospatial location has been recognized as a vital element for use with emergency notification systems, yet it is almost completely absent from university systems. User location awareness can provide the ability for a system to support message differentiation. This is an essential step allowing a system to deliver separate crisis instructions to users depending on their proximity to the crisis triggering event. Finally, usability studies and device usage surveys are another missing element for alert notification system research that can provide critical design guidelines and reveal important user privacy concerns and usage trends.

This research focused on designing, implementing, and analyzing the operation of a software application for an optimized crisis alert system. A geospatially aware push notification application for smartphones was designed to be integrated with the entire process flow and operation of the current Virginia Tech campus alert notification system. The optimized addition utilizes the geospatial location of the users kept on the client device to allow for the selection of differentiated messages. These elements are key optimizations that had not previously been fully explored or utilized for use in notification systems. Differentiated messaging allows for unique messages to be sent to users according to their location and proximity to a crisis to both minimize confusion and allow campus or emergency personnel to direct specific instructions. Through these enhancements, this research explored the design of an optimized, reliable, and situationally customized crisis notification system fit for integration with the fully operational Virginia Tech alerts notification system, VT Alerts [47]. This was the first stage and contribution of this research shortly followed by further design iterations and refinement related to user privacy, usability, and implementation requirements. Design changes have been made to ensure user location privacy and a survey of over 1057 representative users of the Virginia Tech campus population was conducted to gain an understanding of mobile device usage habits and mobile application preferences. These results have guided the further design and development and can aid the potential release and communication of our geospatial location mobile alert notification application to the campus.

1.2 Related Work

1.2.1 Crisis Management Systems

Crisis notification systems send alerts to users in the event of a crisis. However, there are more requirements of an alert system beyond sending alerts. What makes a notification system both efficient and effective? Efficiency includes more than sending every message. For instance, it involves the speed of delivery. Effectiveness encompasses more than reaching every user. For example, it is essential that the users read and understand the message. Important questions include: how are the alerts sent out? and what information is included in the alerts? The "how" involves identifying the best-suited technologies and procedures, and includes many human factors such as the procedure for first responders who report the emergency, and operators who control the system. The "what" must be mapped appropriately to the technologies and methods chosen and can also include human factors and user evaluations. If designed appropriately, technological communications and systems are successful in supporting emergency management and planning. Fundamental attributes of these systems include providing accurate, timely information and personnel or organizational communication channels. As crises situations are non-routine, highly variable, and often abrupt occasions, specific emergency procedures are never an exact fit with regards to the needs required during and following a crisis. There is a balance which must be met regarding fixed task automation and human decision and control [4]. Emergency planning personnel and system developers must consider this balance when formulating or designing any procedures or systems. Emergency management personnel and developers need reliable, flexible, and customizable preparations and procedures in order to react properly and in an adequate time frame. These procedures need to be highly situation-dependent. Crises can occur naturally, such as severe weather conditions, or can be human contrived, involving the use of weapons or threats to generate highly life threatening and urgent situations. Researchers have explored the complexities surrounding the response and recovery of crisis events. Asmussen and Creswell conducted a case study after what was considered a "near miss" incident involving a gunman in a college classroom. This research outlines the reactions and concerns of the individuals both directly and indirectly related. Many themes were explored to gain insight on campus safety, emergency response procedures, as well as, the psychological welfare of the victims and external individuals. The data gathered showed a trend in the pressing desire and need for a centralized emergency system [1]. Naturally, once the need for a system is determined, the proper communication channels and implementation methods must be decided.

Desired communication channels can utilize information technologies and systems to quickly disseminate information. However, developing an alert notification system is complex, because when lives are potentially at stake efficiency and performance are essential concerns. Traditional alert systems utilize SMS messages along with phone calls to contact users. The common use of SMS messaging revolves around the premise that, today users are more connected than ever before. People often possess numerous devices, including tablets and smartphones, which are in their immediate reach and realm of visual or aural attention. In this increasingly connected society, there has been a rise in the use of social media and technologies to gather information both during and after large scale crises. Liu et al. explored the on-line social convergence activities surrounding six major disasters by surveying Flickr, a social media website for photo sharing. Their Crisis Informatics research describes

the emergence of "citizen journalism" and "self-organization" through the use of social media and portable technologies. Flickr provides a convenient outlet for conveying messages and spreading information. It also serves as a source for news agencies and organizations for disaster response, recovery, and education. These agencies and researchers have barely begun to exploit the benefits of this wide-scale social interaction for purposes within disaster response and recovery [32].

1.2.2 Sociological Factors

The choice of communication channels, methods, and overall effectiveness of a system is linked to sociological factors. The use of new technologies and social media has also been explored for potential benefits for citizens and governments to improve services and communications [28]. Identifying a method for communication does not guarantee popular or effective use of the method. The introduction of new technologies presents new concerns which must be addressed. For example, common complications surrounding the use of multiple communication channels, especially computer-mediated communication systems (CMCS's), include user information overload and perception of messages and notifications as "junk." Developers can implement message organization and filtering to minimize these negative effects by allowing operating or receiving individuals the ability to select the notification criteria to direct appropriate and valuable information to each user [23]. The use of various communication channels to provide "fast, accessible crisis information" also leads to questions of how to control the validity of notifications and prevent illegitimate and potentially harmful communications. One driving question for future research is how to mitigate these risks and analyze the effectiveness of different technologies and communication methods in response to crises [43]. Social media is a promising emerging resource in the emergency management field, but mobile communication is currently the core channel for mass alert message dissemination.

1.2.3 Current Designs

Currently, messaging through mobile carriers is one of the most widely used methods to alert users of a crisis. One such system, the FEMA Wireless Emergency Alerts (WEA), sends notifications to recipients in the event of extreme weather conditions, threatening circumstances, AMBER alerts, or presidential alerts during cases of national emergencies. The WEA system uses the recipient geospatial location to send alerts for specific areas whereby capable cell phones within range of selected cell towers receive the alert notification [12]. The system interfaces with the Federal Communications Commission's Commercial Mobile Telephone Alerts System (CMAS). This joint effort, now simply referred to as the WEA, allows for commercial mobile service providers, CMS, to communicate emergency alerts to users with WEA-capable cell phones [10]. Similarly, universities of all sizes have implemented emergency alert systems utilizing methods such as email, voice messages, loudspeakers, electronic displays, and text messaging [9].

One such university, Virginia Tech, included multi-modal communications within the design guidelines used to develop the current VT Alerts emergency notification system. Developers chose to prioritize the methods of communication used within the system. Since text messages are processed first followed by phone calls and emails. The knowledge that an estimated 96 percent of the students at the university carry cell phones on their person wherever they are further supported the design organization [44], yet surprisingly, these statistics were only estimated and never verified through any usability surveys or interviews with actual people on the campus. This translates to few sites having verified how well their alert systems function. As alert systems are becoming essential for college campuses and utilized nationally, researchers are focusing on the next design steps for enhancing their performance.

1.2.4 What's Next for Alert Systems?

Geospatial information has been identified as an important alert system design aspect in order to integrate assessments, reports, and notifications into a "common operating picture" [25]. Mobile communications and the use of geospatial location provide promising functionalities to reach people based on the geographic location of the threatening event and the recipient themselves. Fires and natural disasters are tracked and mapped in specific locations and bomb threats or other reported crisis situations are localized to certain buildings or areas. These and other human driven crisis situations have been mapped in case studies showing that they are centered in one location or are tracked and localized in specific points [1, 44]. Current research has been conducted to gauge the effectiveness of different communication channel choices and the related design decisions for emergency notification systems. One study focused on the alert interface and what particular information to provide to users [39]. Other research in this area has concentrated on evaluating the security and risks of large scale alert systems. The sociological factors surrounding how to get people to participate in these large scale systems [46], sociological combined with technological factors [20], and the use of social network algorithms based on cell phone location to aid in crisis management decision making [38] have all been explored. Further research has surveyed the impacts of SMS-based [42] and multicast-based [31] alert systems. The protocols for use with mass public communication systems have been evaluated as well [5], but the design of the message dissemination algorithms or procedures are not elaborated. Likewise, social and technical factors have been equally addressed with regard to emergency planning, but the system design implications and methods are not thoroughly investigated [21].

Knowledge of these social and technical factors paired with new smartphone application capabilities to deliver push notifications to users in massively shorter time frames than many other technologies has led to a new phase for alert system design and analysis. Key optimizations and functionalities can advance alert notification systems to deliver messages based on a risk level assessment mapped to the geospatial location of the crisis triggering event and the current location of the user. Location is a key communications contributing factor to message clarity and can also aid decision makers. It provides the ability to implement message differentiation either at the user device or at the sending device. Geospatial mapping is an essential task in quickly and efficiently communicating specific messages to users in specific locations. Crises are often infrequent, but high-risk and variable situations. Therefore, with an application as critical as an alert system, speed and performance are crucial elements which must be considered with regard to all of the complex social and technical factors surrounding these crisis events.

The remaining chapters are organized as follows: Chapter 2 describes the overall system design including a usage scenario, details on the current Virginia Tech system, integration requirements, integration model, and optimizations. Chapter 3 contains a literature review on user location and privacy, as well as, the chosen methods for combating mobile location and privacy concerns. Chapter 4 and 5 detail the user survey and interviews respectively. These chapters outline the entire usability engineering process including the design, results, and a discussion on the findings, as well as, the resulting prototype interface iterations. An implementation overview for the prototype Android system is included in Chapter 6 and includes the developments provided through the collaboration with CNS. Chapter 7 provides the applications, limitations, contributions, conclusion, and future work sections. Finally, Chapters 8, 9, and 10 are the appendices for the usability survey, interview, and follow-up interview complete with the Institutional Review Board approved forms and the raw semicolon separated data.

Chapter 2

System Design

2.1 System Design Enhancements

This design aims to provide an implementation of an optimized alert system which will include functionality driven by user location. The design derives from the complex social and technical factors corresponding to emergency response and recovery from previous research. This knowledge paired with an understanding of needed performance improvements provide a complete base for the design of an optimized alert system. When dealing with often infrequent, but high-risk and variable crisis situations, speed and performance are critical variables that should shape the development process of any management or alert system. Sociological factors play a role in the choice of communication channels, methods, and overall effectiveness of any system. Social media and new technologies have been explored for their benefits to citizens and governments to improve services and communications. Therefore, not only is an efficient application needed in terms of speed, but testing and analysis must be done to verify the chosen system functionalities and measure their appropriateness. The chosen implementation target for this system design concept is an addition to VT Alerts which allows

for an in-depth design example and specific functionalities which can be integrated for future testing and analysis. The following sections provide a detailed look at the Virginia Tech alert system complete with rationale and limitations for the current design, functionality, and performance. This is followed by the case specific system development design outline including requirements for the technical and physical integration with the current system flow model and the human interaction communication channels. Next, specific choices are selected for the initial system development to uphold the required functionalities and performance targets.

2.1.1 Usage Scenario

It is 10 AM on Wednesday morning. Professor Smith has just begun her lecture on an introduction to macroeconomics to 500 students in Classroom Hall. Other classes have begun on the other floors of the building. Nearby buildings are filled with students eager to learn, as other students remain in their dorms, having chosen later classes or having failed to get up at their alarm clocks. On the far end of campus students are in the gym for their morning exercises. Still, others are in the nearby veterinary clinic working on labs. Many graduate students are working in off-campus research labs while others are at conferences in Big Town. All continues as normal until a late arrival to the macroeconomics class notices a person placing a suspicious looking package outside the classroom exit door. Being aware of this unusual behavior, the student notifies the police. At this time the police recognize the need to evacuate the building and notify the rest of the campus of this threat and the potential for others. A message needs to be sent to all students immediately to make them aware of the potential threat(s). The problem is that sending a simultaneous message to all 31,000 students as well as many more faculty and staff through text message is ineffective and likely to be extremely slow. Students and faculty in the macroeconomics classroom

and the rest of the building must be notified to evacuate immediately and the rest of the campus community who are local today need to be notified to stay clear of the threat. Students in adjacent space along with others who have a high likelihood of moving across campus in the direction of the threat must be notified of the location of the crisis to avoid the area. Throughout this process, it would confuse users to receive an evacuation message which did not apply to them. Many users are either off-campus that day, or not based on the main campus, but based in one of the two auxiliary campuses many miles away. This scenario describes the general situation that we are looking to address in this project. Using geospatial information, our system is able to optimize notification strategies by allowing the client device to display relevant messages based on the user location. Future functionality could include the facility to allow the user to choose to send location information from the client device to report to automated notification systems, or to human operators to support emergency decisions.

2.1.2 Current System

Following the April 16, 2007 shootings, Virginia Tech began evaluating and developing their new and existing emergency response procedures and system. VT Alerts is a crisis and emergency management system that sends out text messages to subscribed users in the event of an emergency. These emergencies can range from bad weather conditions, to mentally disturbed assailants on campus, to terrorist actions like those of the Boston Marathon of 2013 and the attacks of September 11th, 2001. Selection of appropriate responses to these situations by individuals and first responders can be strongly driven by the available communication channels to students, university faculty, and staff. The current alert system uses SMS messages and phone calls to notify users, who choose their preferred contact method and provide primary and secondary contact phone numbers. Participation is not required for these contact

methods, but is strongly encouraged. Other notification channels are mandatory. These include the Virginia Tech website homepage, emails to all vt.edu accounts, electronic message boards placed in hallways and classrooms on campus, and finally campus sirens and loud-speakers. The diversity of these communication channels shows the high commitment taken to ensure the reliability of the system and is an effort to make sure that if one channel fails to reach a user another channel may succeed [6]. For instance, if a user is walking outside and has no access to the internet or their phone, then the load speaker would be the method most likely to reach and alert him or her of an event. This variation is also an attempt to cover all possible delivery methods in case one system is prevented from functioning from circumstances of an event.

This research focuses on the voluntary, but perhaps most essential channel of communication. As mentioned, with the high prevalence of smart phones and other electronic devices, an enormous amount of people are in constant communication. Considering this, one of the most effective channels for reaching users is through mobile phones. Prior research conducted for this research has included interviews with the Virginia Tech CNS Chief Technology Architect focusing on the current system functionalities as well as the rationale for future improvements they have already undertaken [7]. The system currently utilizes SMS messaging and phone calls with an upcoming release of a smart phone application for faster push notifications. With this implementation no current geospatial data is kept or utilized other than for the separation of the Northern Virginia and Blacksburg campuses. Reliability and speed are critical for any alert system. Crisis events are non-routine and often require highly customized emergency procedures. Notifications need to be delivered to all participating users within an acceptable time frame. Depending on the severity of the crisis, this could be a few minutes, and not half an hour. VT Alerts has over 50,000 users, many with multiple contact methods. For any given alert approximately 100,000 notifications may be

sent. Presently, the fastest notifications are SMS messages, which are sent first. These are followed by the phone calls. With system performance playing such a key role, measures have been implemented in an attempt to prevent any failures and curb delays.

The current Virginia Tech alert system has several methods in place to attempt to prevent known issues. These important considerations are not easily controlled and can have a devastating effect on system performance. With so many users, the system must consider delays that could come from the attempted delivery of many notifications at once. *User send order randomization* is used to alleviate overwhelming a single carrier or cell tower. Although this certainly works to reduce the odds of overloading the resources of one company and/or tower, the downside is the randomization itself. The strategy is reasonably effective but unrelated to the situation. The process is the same no matter the crisis or location of the users.

Another high priority consideration is the secondary effect of network congestion. This is not directly related to the processing or functionality of the system, but certainly can be an impediment once the congestion begins. Network congestion normally occurs after an alert is released as the recipients begin to search for more information. This has been addressed in two ways. A mitigation with the use of an interface which provides users with more information was researched at Virginia Tech [39], and it showed the need to provide users with supportive information during a crisis event. As simply providing more information by no means can be a complete solution, network congestion is still considered a major issue. Added congestion often results in carriers throttling back the network. This in turn can cause more delays which are not small in impact. For this reason the current system has implemented a "stop trying" or "user reached" functionality. The system recognizes that a user has been reached when the user either responds with a "yes" message for the SMS messages or answers a phone call notification. Only then will the system try and reduce the

| System | Estimated Time to Reach 80% of Users | | | | | |
|-------------------------------------|---|--|--|--|--|--|
| Present | 20 Minutes | | | | | |
| Addition of smart phone application | 3 Minutes | | | | | |

Table 2.1: System performance comparison

load of messages by attempting to pull the other contact methods for this one user out of the notification queue. This mitigation, however, is only effective if the user responds in time for the system to be able to stop the processing of the other contact methods. Otherwise, it will process every contact number and method for the user.

Overall, with the currently operating VT Alerts, about eighty percent of the registered users are notified within twenty minutes after the alert release. This is a wide span of time mostly due to the phone call notifications. Even so, this performance can be drastically enhanced with push notifications. Table 2.1 shows the comparison of the present system with text messaging and phone calls to a smartphone application which has been estimated to reach 80% of users within a range of 3 minutes. With the current system, any two users in relatively the same location, even within the same building, could be notified anywhere between a few minutes to half an hour apart or more either due to the network congestion or the randomization. Depending on the severity of the alert, this timing could be deemed unacceptable. In the hopes of alleviating or reducing these issues, more situationally customized optimizations can be added. Message differentiation can also be added to enhance the relevance of messages sent to target users, beginning with their location.

2.1.3 Integration Requirements

Current work is being done to add functionality and optimization to VT Alerts and address known major considerations so that the system will be able to notify users in an efficient and worthy time frame and provide the ability to alert users based on the most recent location data. This research incorporated the Virginia Tech current system process cycle from the first alert release request by the police or management personnel all the way through the processing of user location, notification formation, and message delivery.

In order to make sure the optimizations and functionality fit into the process cycle and work flow, procedural information was gathered with the aid of interviews and data from CNS employees [7]. The Virginia Tech alert system process begins with an alert triggering event, also termed a crisis, which poses enough of a threat and risk to warrant notifying registered users. The current database information as well as information flow data initially put into the system at the time of first recognition of the crisis is undergoing changes. These changes lay the foundation for this research to advance the system design. The changes provide the means to compare a crisis location with user location data and to determine and update the applicable and customized alert notifications.

First, Virginia Tech is surveying the entire campus and surrounding affiliated areas. Official street names as well as building names are being created for areas which in the past had no formal identifying name [26]. These addresses are being added to the Master Street Address Guide, MSAG, a key component for GIS technologies such as Google Earth and Google Maps. These services and other database information play a key role in not only allowing the first responder beginning the alert process to mark or indicate an existing affected or occurrence area for a crisis, but also in the process of determining the nearby risk priority groups of users by location.

The second change currently being implemented is the conformity to the Federal Emergency Management Agency, FEMA, Common Alerting Protocol. This is a digital format to standardize data formatting for use within different alert communication systems. These standards require a noted area of influence with each alert request submission [11]. At Virginia Tech, functionality will be developed for the dispatcher or official personnel inputting the alert request into the system web interface. The goal is to avoid pure textual input and include an interface with the ability to locate an area on a map and to draw or estimate a radius of influence, to the extent that a location is known. For Virginia Tech, the first dispatcher is often a member of the police force or crisis/emergency management team composed of university relations staff. These team members are non-police employees considered the best suited to update information for alerts or to begin the request for any follow up notifications. They are less likely to be directly involved with the physical operations and mitigations at the early time of the crisis and less likely be surrounded by distractions, thereby having a decreased cognitive load in comparison to police officers and personnel.

The final change is the release and use of a smart phone application option. It was projected that users will be both more likely to register for VT Alerts and more likely to be quickly alerted with the addition of a mobile application. As mentioned, this estimate led to the release of a campus-wide survey which indeed did support the claim and the results are discussed in detail in later sections. Overall the design aim was to dramatically enhance the performance of the alert system itself, specifically with regard to message delivery time and message differentiation, therefore relevance. The new functionality is designed for seamless integration with the system with a goal to enhance and not reduce reliability or security. User concerns as well as system designs related to location and user privacy are also discussed in later sections.

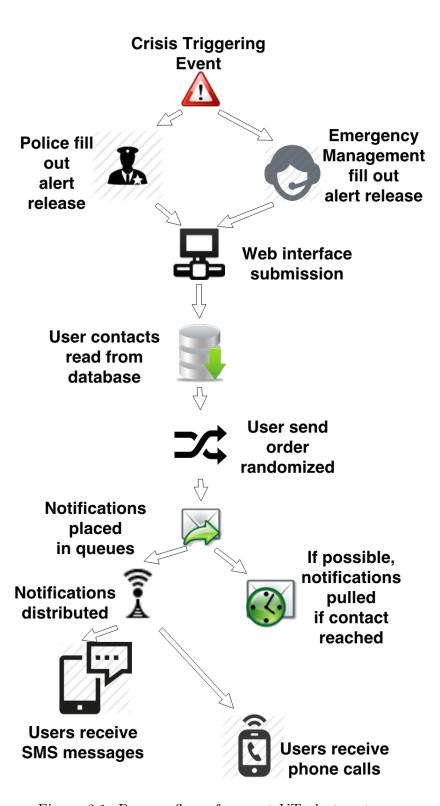


Figure 2.1: Process flow of current VT alert system

2.1.4 Integration Model

The current process flow model, outlined in Figure 2.1, begins at the start of a crisis triggering event. At this time, the first responder, often a member of the police department, fills out an alert release form which is submitted through a web interface. Then, the system utilizes the user information stored in one master database and potentially from multiple standbys. The need for updating a database at the time of release of an alert is rare, therefore, reading is the primary function. Message queues are used as data stores during the alert sending process. SMS messages are sent first in randomized order followed by phone calls. If a user is marked as having been reached and the other contact methods have not been processed, the user's duplicate numbers are pulled. Data logging is maintained throughout the time alerts are released. The responsibility of obtaining and storing the read and time receipts of the notifications is contracted out.

The process being implemented through efforts outside of this research can be seen in Figure 2.2. This process includes the addition and use of the newly created addresses and street names assigned around the Virginia Tech campus. Conformance to the FEMA, Common Alerting Protocol is the second key addition being added to the system [11]. The advancement of the current web form utilized by the police or university relations personnel to allow for the entry of more specific location information, preferably with a graphical display, ties into this conformance. Lastly, this figure shows the upcoming integration of a smart phone application. This application may later be merged with this research application for testing and analysis of the geospatially optimized and differential messaging functionality.

The final diagram, Figure 2.3, shows the functionality additions this research is developing and preparing for integration, testing, and analysis. This additional functionality includes a smart phone application for which location permissions are set but only accessed on the

client device. Differentiated messages are also implemented to alert users based on their location and the crisis area of influence. It is important to keep and maintain the existing logging data not only because it is a requirement, but because the send and read receipts give insight into the performance of the system. The number of users reached and other data can be gathered for testing and analysis. Through logging, the entire time from the submission of an alert request through delivery to all of the recipients can be calculated. All other functionalities already in place as well as the reliability and security will remain. These additions aim to increase the reliability, speed, and customization of the system. Table 2.2 outlines the main features of the current system, the system modifications outside this research, and the system with the modifications being designed by this optimization research.

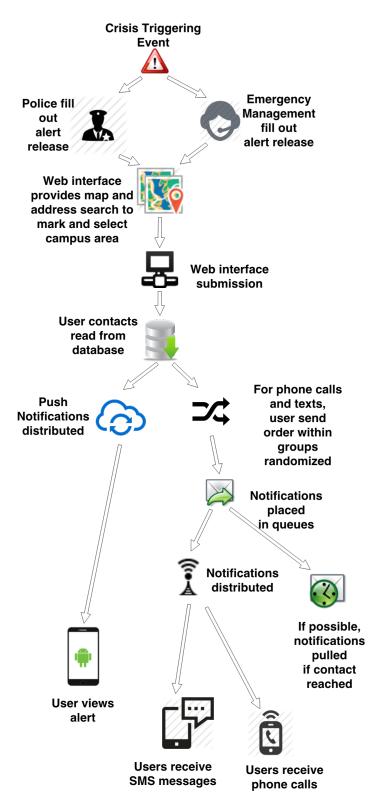


Figure 2.2: Process flow of VT alert system with on-going changes

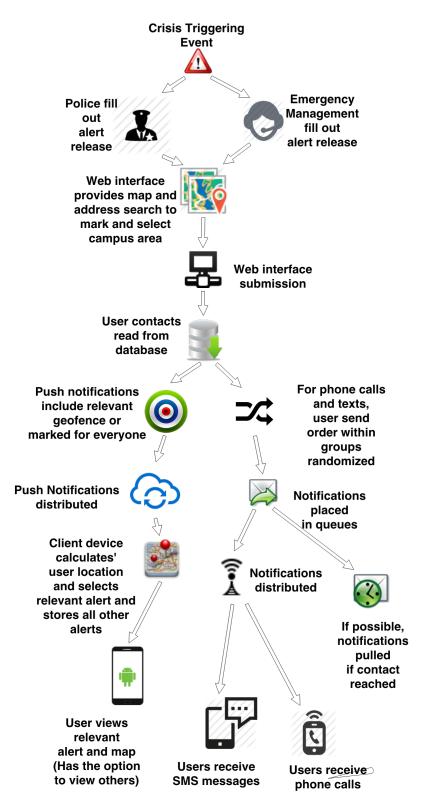


Figure 2.3: Process flow of VT alert system after in progress optimizations

| | Current System | VT Upcoming Release | Optimization Project |
|---|-------------------|---------------------------|-------------------------|
| Web Interface Alert Release Form | V | N | |
| Crisis Area of Influence Marked | | K | \square |
| Common Alerting Protocol Standardized | | Ŋ | N |
| Randomized User Send Order | Ŋ | Ŋ | S |
| User Reached/ Stop Trying | Ŋ | Ŋ | Ŋ |
| SMS Messages | V | ∇ | S |
| Phone Calls | Ŋ | Ŋ | Ŋ |
| Push Notifications | | N | N |
| User Location Awareness | | | Ø |
| Differentiated Messaging | | | N |

Table 2.2: System features outline over time $\,$

2.1.5 Optimizations

Our research took into account a smooth integration with the existing VT Alerts system and provides a detailed design for providing key optimizations. These optimizations can be applied to other alert systems and the testing and analysis encompassed in this research will provide usability and device usage metrics to guide and validate the choice of communication channels of future emergency notification systems. The functionality is fitted into the system process cycle from the first alert release request by the police or management personnel to the processing of user location, notification formation, and message delivery. The key optimizations from prior research and the additions we address here include:

Initial Design Highlights [47]

- Smartphone application for fast push notifications
- Geospatial location awareness
- Differentiated messaging capabilities

Further Design Additions

- User location privacy
- Usable application supported by user survey and usability survey

Without these optimizations the system is randomly notifying users with non-targeted and generic messages.

Police or the first emergency management responders contact the university staff relations personnel in charge of dispatching the request for an emergency alert after any crisis triggering event. The dispatcher is often a member of the police force or a team composed of

university relations staff who are not directly involved with the physical operations. For proper integration with VT Alerts, the alert release web form the dispatcher uses will be adjusted to allow the input of the crisis location(s). This input will be facilitated by a clickable map which can be overlaid with drawn polygon areas or marked through the selection or entering of building addresses or coordinates. This information will provide the system with the crisis location in order to direct the decision for allocating different notification messages.

A geospatially aware smartphone application utilizing push notifications will drastically decrease the amount of time needed to contact the majority of participating users regardless of whether or not they are connected to the Virginia Tech campus network. An estimated eighty percent of the approximately 50,000 users can be notified within as little as three minutes if the application is adopted. We have implemented an Android application which utilizes the user's location to deliver specific alert notifications paired with the pertinent location, as a geofence. This application also addresses specific location and privacy concerns based on previous research and the privacy needs of the users. Figure 2.4 shows a sample interactive map view a user may see of the alert geofence and the user's location. These design choices are further supported by the results of the campus-wide survey and interviews conducted which show promise for the application acceptance and adoption.

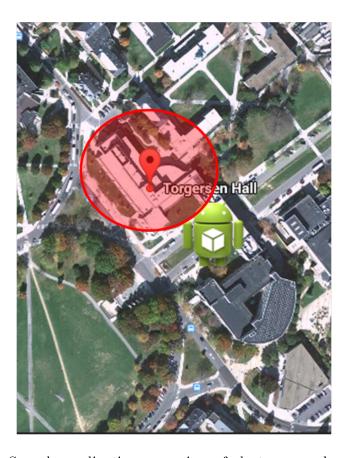


Figure 2.4: Sample application map view of alert area and user location

2.1.6 Summary

The system design enhancements and optimizations were chosen based off of the analysis of the Virginia Tech Alert System. This analysis was comprised from the numerous interviews with CNS and aimed to adequately assess the operations and functionalities of the current system. Fast push notifications, message differentiation, and the use of geospatial location awareness were targeted as key optimizations to provide an overall enhancement to the efficiency of the current system. These optimizations, however, can also be applied to other systems and adjusted for integration with other process flows. The design process would be incomplete, however, without further investigation of the impact these optimizations would have on the security and privacy of the system. The user concerns surrounding location privacy and the chosen system implementation methods all needed to be assessed to ensure the security and acceptance of the system design.

Chapter 3

User & Location Privacy

Potential location and privacy concerns of the users and future administrators of this system were considered and played a key role in determining the design and implementation methods selected for this alert system prototype application. An overview of the related work which helped to shape the design as well as common user concerns are detailed in this chapter. The security concerns include both historically known concerns and those pulled from the usability survey.

3.1 Related Work

In 2003, Beresford and Stajano introduced and explored techniques to allow users to benefit from location-based applications and services while at the same time preserving location privacy. The underlying policy behind the methodology involves obscuring the true identity of the users from the application utilizing the location information. It is explained that people do not wish their location information to be shared between applications and as a rule the authors treat location-based applications as untrusted applications. Further, these location-based applications can be grouped into categories based on the requirement of needing to know the user's identity to function. Some applications need these credentials in order to work properly or at all, while other applications do not require this information and can operate with the user identity being completely anonymous. In between these categories are those applications that can use a pseudonym to keep the user identity anonymous. For such applications, user privacy has been shown to be enhanced through the use of different changing pseudonyms for different location-based applications and anonymous communication through mixed zones and anonymity sets [3].

The use of location-aware mobile features has become widely common as more contextaware mobile applications are released and downloaded. Context-aware applications aim to minimize user interaction and automatically provide relevant information to the user based on known elements, commonly including location. Kaasinen presents the key issues of such location-aware mobile services from the perspective of the user needs [27]. The evaluations included scenario evaluations and were done through group interviews, the collection of user data from two commercial location-aware services, and expert evaluations. Topical information, based on a change in environment or data, was seen as needed to alert users in emergency situations and if given on a small device should allow for access to more information. Further, users believed they would not mind information being pushed to them if the information or service was needed and relevant to their situation. Interestingly, other research on end-user requirements for context-aware applications also report user willingness to allow for special exceptions in cases of privacy when they are considered for emergency situations [24]. Also noted was the idea that personalization in location-aware services can improve usability and help to provide the most essential information. Consistency was mentioned as necessary to ensure the user can easily operate the application and to limit confusion. Also, the application should aim to be seamless in functionality, even when connectivity is lost. There were relatively few people in the interviews who voiced concerns over an invasion of privacy as a result of location aware services. In fact, overall, most interviewees trusted the technologies, service-providers, and policy makers. The need was mentioned to simply relate to users any data that is collected, for what purpose, and who has access to such data [27].

Kaasinen points out "From the point of view of the service, the simplest method of locating the user is to let him/her tell the location [27]." Of course, this means that the service must rely on the effort of the user device to define and inform of the location. There are several positioning systems which can be utilized for location determination. These include the GPS if it is included in the user device, which can very precisely locate a user's position with an accuracy between 2-20 meters. These, however, do not work indoors but mobile phones can also get their location through the telecom operator in the network by identifying the mobile network cell in which the device is located or measuring the distances to overlapping cells. This method can be used on any mobile device, even without extra equipment but may involve the cooperation of several service providers. This cell-location-based services method can provide an accuracy in urban areas of an estimated 50 meters, or several kilometers in rural areas. The final method for pinpointing location is identification through a service point such as one utilizing WLAN, Bluetooth, or infrared technologies. These proximity positioning systems utilize a dense network of access points and can provide location accuracy down to 2 meters. Due to infrastructure requirements, these methods must be utilized in predefined areas which the user must be within [27].

Marmasse and Schmandt point out that performing any location tracking and analysis solely on the client device can avoid many of the problems with privacy [34]. In fact, other research has suggested such a model of capturing, storing, and processing such personal information on the end-user device in order to minimize privacy concerns as much as possible [24, 2]. Services relying on the user device to have the location knowledge are referred to as position-aware services in contrast to the location-tracking services. Further, there is a trade-off between the user benefit and user allowed privacy intrusion. If the user perceived benefit from an application is high enough, then the user will allow and accept some degree of loss on the side of privacy [33].

Some of the challenges of location privacy, a key feature toward establishing ubiquitous computing, have been addressed in [29]. An authorized-anonymous-ID-based scheme was proposed to enable users who prefer to keep their location anonymous and for administration to have legitimate user verification. This scheme utilizes the blind signature cryptographic technique to periodically generate an authorized and anonymous ID. An architecture for location privacy control was designed at Carnegie Mellon University. This architecture, the WirelessAndrew network, is an IEEE 802.11 wireless local area network (WLAN) covering the entire campus and allows for users to issue a set of permission rules with privacy preferences. This system, however, has a central server with stored locations, leaving the privacy of the user location outside of the user control and also creating a single point of failure and unscalable centralized architecture. The authorized-anonymous-ID-based scheme allows for complete control of their user privacy [29].

The protection of user privacy has been identified as one of the most significant issues related to location-based and ubiquitous computing services [24, 30]. Several other methodologies proposed to protect user privacy in instances requiring location data include the use of false dummies, in which falsified location data is passed to service providers along with the true location position of a user to conceal the true user location [30], infospaces, focusing on sharing selected information with selected people and services through the use of network-addressable logical storage units of context data [24], location perturbation, through the use

of spatial and temporal cloaking, [13, 14, 22], and also obfuscation, or deliberately degrading the quality of location information [35].

Another methodology for concealing the location information of a user utilizing a locationbased service but additionally addresses query anonymity is presented in [36]. Casper is a scalable framework which allows mobile and stationary users to utilize location-based services anonymously while still providing a high-quality service. Casper includes a location anonymizer and a privacy-aware query processor to conceal the exact user location into "cloaked spatial regions" and allow these cloaked areas to be utilized by the location-based database server. This allows for both data and query anonymity. A privacy profile allows users to designate a "k" and " A_{min} " value such that k-anonymous means the user is not distinguishable among other k users and A_{min} is the area within the user wants to hide his or her location data. Having larger values for both these parameters increases the privacy strictness [36]. The k-anonymity is based on the work by Sweeney, [41], in which anonymity is achieved through generalization, utilizing a less-specific but "semantically consistent value" to replace another value, and suppression, releasing no value. This method results in data holders remaining anonymous without diminishing the usefulness of the data itself [40]. Casper also covers a mixed classification range of query types including, private queries over public data, public queries over private data, and private queries over private data [36].

3.2 Combating Mobile Location and Privacy Concerns

3.2.1 Are they tracking me?

Whether you call it being cautious, risk adverse, or paranoid, as technologies and the services they provide enhance in functionality there is an overarching concern of security and privacy when it comes to mobile devices and the permissions which mobile device applications request [3, 29, 24, 30]. In the worst case, users fear that applications are accessing improper information. In the specific instance of applications requesting user location information, this fear manifests in the form of someone tracking user movements. Finding the appropriate security options for storing user contact information and corresponding geospatial location is not trivial. Chosen methods need to properly secure user information from malicious attacks without being detrimental to the service of the application. What is the best option? Not storing the user location information at all. As seen in the related works in user location and privacy, user location confidentiality can be achieved. By relying on the user mobile device to pull the appropriate notifications, user privacy is protected while still allowing for the geospatial location based notification messages to be utilized [34, 24, 2].

In our geospatial alerts mobile application, notifications are pushed with a corresponding latitude and longitude position and radius, a geofence. The user mobile device then selects the appropriate message based on the current location of the user. The message is then displayed and an interactive map can be viewed by the user to show the user's current position and a display of the geofence or geofences, depending on the number of alert notifications released. In this way, the user location information is never stored or sent from the user device.

3.2.2 Is my location accurate?

Another concern when utilizing geospatial location data within mobile applications is the accuracy of the location information. Mobile devices have multiple methods for locating the positions of users through GPS, cell-location-based services, and service point proximity positioning systems [27]. These methods can be very precise and accurate in pinpointing

user location down to 2-20 meters, 50 meters, and 2 meters respectively [27]. Our mobile application includes the permission setting to access the user fine location which can be found utilizing both the network provider and gps provider methods, whereas the coarse location permission only utilizes the network provider method. Further, the accuracy of the user location is strengthened by the design and security choice to not store the user location data on a server, but instead to leave the calculation and usage to the client mobile device. This allows the current location of the user to be queried at the time of the receipt of the alert notification and utilized so that the user is displayed the appropriate message or messages.

3.2.3 Won't location applications kill my battery?

The common trend of having a mobile device constantly at your side often coincides with issues of battery life. While it is true that there are many different factors and applications which can drain the battery of a device, mobile applications utilizing location services which are always running or constantly active can escalate this problem. The design helps to combat this issue because the application is not constantly querying the user for a location to store. The user internal location will be updated, but only when there is an active alert. After an alert is released the user device computes the geospatial location, pulls the appropriate notifications, and displays the alert. If the user views the map, his or her location and any current alert areas, the geofences, are displayed. For all other times, the Android application utilizing push notifications with Google Cloud Messaging (GCM) does not have to be running. The system will wake the application at the arrival of a message. This will be done in a similar way in an iOS application in which a non-running application link will be displayed in a pop-up notification alert so that a user can view a push notification.

3.2.4 Is this application worth giving up my location?

There is a trade-off to consider for mobile applications and services. This trade-off is between the benefit of the application and the permissions which are required for its use and the potential for abuse of this information. The willingness of users to give up information or permissions has been shown to increase with the user perceived benefit of the application [24, 27, 33]. This trade-off can also be seen in the results of the campus-wide survey that also gives highly significant insights into the mobile device usage patterns and the perspectives of the participants. This survey has proven valuable in assessing the potential adoption and acceptance of our alert notification system mobile application which requires access to user location. It will also serve to guide the eventual release of the application Android and future iOS versions.

An awareness of previous research findings and common concerns surrounding mobile geospatial location privacy can greatly aid the design of mobile software applications and predict potential user concerns which may arise if such an application was to be released for use by a user population. This knowledge, however, does not factor in many of the specific circumstances surrounding the development of an application. For instance, the trade-off between user privacy and the perceived benefit of an application depends on the functionalities and purpose of the application. The target user population will also directly impact the projected willingness to adopt the application. The next few chapters summarize the usability engineering portions of this research including a campus-wide survey on mobile device usage as well as interviews and follow-up interviews involving paper interface prototype iterations.

Chapter 4

Usability Survey

4.1 Survey Design

An Institutional Review Board, IRB, approved campus-wide survey was conducted and aimed to gain usability data and mobile device usage habits and preferences from a representative group of the Virginia Tech campus population. The online survey consisted of 16 questions and was estimated to take participants around 3 to 5 minutes to complete. We hoped to further explore user trends related to smartphone usage including device characteristics, device access, device connection routines, as well as, user application downloading practices and other usability practices. To limit any bias, the survey was introduced as a mobile device usage questionnaire to benefit campus wide communication research and was not described as an alert notification system questionnaire. The anonymous contributions were electronically recorded after participants were authenticated with their campus user id and password, which was not recorded. This prevented any possibility of repeat submissions and ensured that the participants were affiliated with the campus. 1057 participants completed the survey. Table 4.1 shows the results of the questions related to the traits and variety of

Table 4.1: Participant traits

| Please select your role on campus | |
|-----------------------------------|-----|
| Graduate Student | 6% |
| Undergraduate Student | 91% |
| Faculty Member | 2% |
| Staff Member | 1% |
| Please select your gender | |
| Male | 32% |
| Female | 67% |
| Prefer not to answer | 1% |
| No answer | 0% |
| Do you live on campus? | |
| Yes | 48% |
| No | 51% |
| No answer | 1% |

participants. Participation was sought from all potential users of VT Alerts from the campus population including graduate students, undergraduate students, faculty members, and staff members.

4.2 Survey Results

An area of interest included the OS of the mobile devices participants commonly utilized and their accompanying habits of use shown in Table 4.2 and Table 4.3 respectively. Participants were prompted to mark the kinds of mobile devices they owned. A staggering 94% of users owned a smartphone. This high popularity and use was estimated by campus officials, but no queries had been made on the campus to find out a percentage. The next highest mobile device was a tablet at 17%, with 6% having a standard mobile phone, and 0% having no mobile device. Of these devices iOS was the most common operating system followed by Android, Windows, and then any other OS. Continuing to device usage habits, only 8% of participants do not connect any mobile devices to the campus network and most people, a

Table 4.2: Device traits

| What kind of mobile device(s) do you own? | |
|---|-----|
| Standard mobile phone | 6% |
| Smartphone | 94% |
| Tablet | 17% |
| None | 0% |
| What OS does your mobile device(s) run? | |
| Android | 23% |
| iOS | 73% |
| Windows | 5% |
| Other | 5% |

total of 92%, noted that they connect 1 or more devices. The percentages for the estimated times the participants allow location permissions to applications for their mobile devices were 7% and 9% for both extremes of never and all of the time. For the middle tendencies 30% allow location permissions most of the time, 39% some of the time, and 15% almost never.

The results for a set of Likert scale questions on general mobile device usage are summarized in Figure 4.1. It is worth noting that the total percentages of participants above neutral, including those which agree or strongly agree, are all well above any negative, disagree and strongly disagree percentages. About 96% have a mobile device with them at all times, about 98% have a mobile device with them when they are on campus, and about 75% connect their mobile devices to the campus network.

Perhaps the most telling results were seen in the series of questions related to mobile device application usage, more specifically related to Likert scale questions asking further about location service permissions in general and then for specific cases such as when an application is for safety alerts as well as for enhancing safety alert speed and message relevance. The results can be seen in Figure 4.2. When asked if they would allow an application access to the location services of their mobile device if the application did not store that location

| Table 4.3: Device habits How many mobile device(s) do you connect | |
|--|-----|
| | |
| to the campus network? | |
| 0 devices | 8% |
| 1 device | 47% |
| 2 devices | 37% |
| 3 devices | 7% |
| More than 3 devices | 1% |
| No answer | 0% |
| I allow applications access to the location | |
| services of my mobile device(s). | |
| All of the time | 9% |
| Most of the time | 30% |
| Some of the time | 39% |
| Almost never | 15% |
| Never | 7% |
| No answer | 1% |

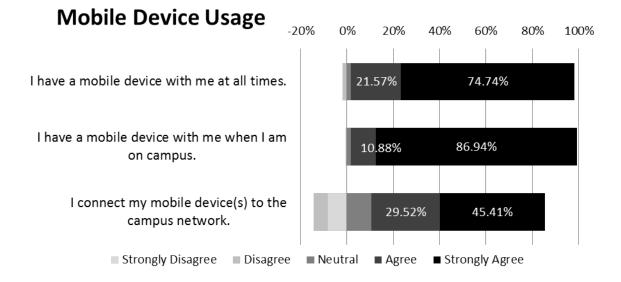


Figure 4.1: The mobile device usage habits of 1057 participants by percentage

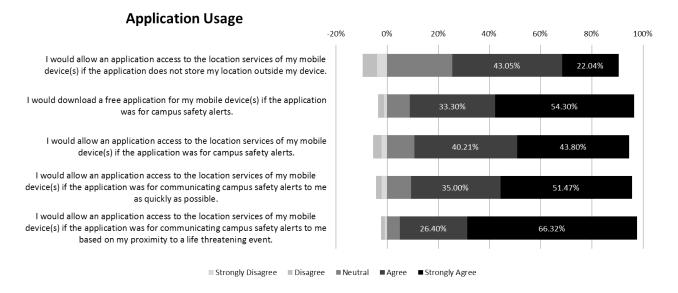


Figure 4.2: The application permissions preferences of 1057 participants by percentage

outside of the device, a total of about 65% of participants agreed or strongly agreed. When asked if they would download an application for campus safety alerts those above neutral equated to a total of about 88%. Once the questions probed for allowing access to location services if it was for campus safety alerts, or for campus safety alerts to alert as quickly as possible, or for campus safety alerts to alert based on proximity to a life threatening event, the percentage of participants above neutral jumped to approximately 84%, 86%, and 93% respectively.

Finally, the survey queried participants if they would want an automatic message sent to their mobile device for campus safety alerts. Table 4.4 summarizes this question and shows that a total of 95% of participants either agree or strongly agree. This is great support for enabling automatic push notifications or other methods for alerting users.

Table 4.4: Automatic messages

| I would want an automatic message sent | |
|--|-----|
| to my mobile device(s) for campus safety | |
| alerts. | |
| Strongly Agree | 67% |
| Agree | 28% |
| Neutral | 4% |
| Disagree | 1% |
| Strongly Disagree | 0% |

4.3 Discussion

The survey results support the prior and the commonly accepted notion that most people carry a mobile device with them, with the majority of people carrying smartphones. This solidifies our decision to create a smartphone application to deliver push notification alerts. Our application design can be utilized to implement for all smartphone operating systems. The initial test implementation is for Android. However, as most users carry an iOS device, once the Android application has been tested an iOS version should be implemented and tested to allow for release at the same time. Overall, the results of the survey clearly show that many users are more willing to give location access permissions for applications which they perceive as beneficial and are most willing when the application is for campus safety. There were other trends and areas worth exploring further in future usability interviews which were uncovered in comments left by the participants.

For this survey, participants were allowed to type any additional explanations or comments for each question. Many of the comments that were given related to privacy. One user mentioned that they only allow location access if they believe it is necessary for the application and many other users mentioned that they allow it for maps applications. On the other side, some users mentioned "I want privacy" or "I worry about security from giving this information away." The majority of participants did not leave comments, but of those who

decided to write additional information, privacy was a common trend. Battery drainage was only mentioned a couple of times.

As is shown, participants were much more likely to allow an application access to their location if it was for the purpose of receiving campus safety alerts and this could be traced in the comments sections. The same user who simply mentioned "I want privacy" and marked that he or she almost never allows applications access to the location services of his or her mobile device later put "I want privacy other than in an emergency."

Communication of the privacy methods utilized in this design to the users may be challenging. When asked if they would allow location permissions if the application only stored their location locally on their device, many people commented as to how would they verify this or trust the application. One user stated "I'm paranoid." This user, however, is clearly not alone in his or her skepticism and this would need to be considered before the release of an application such as ours.

Finally, there was a trend of users who commented on the questions asking about allowing location permissions for applications to communicate campus safety alerts quickly or based on proximity to a life threatening event. Most participants who commented on these questions either wondered about the current system or made encouraging remarks. Some users asked what was wrong with the current system, VT Alerts, yet others were enthusiastic and answered "ABSOLUTELY" or "I like where this is going..." Even with all of the enthusiasm, there were some participants on the opposite spectrum who would never give an application permission to access their location. For one user's final comment, the questions was raised, "what the ... is an app going to do to protect me? Nothing." Some participants with more information seem willing, most are extremely willing, but a very small portion will be much harder to convince to adopt certain applications, if ever. These are some of the challenges we plan to address in our future work and current usability study interviews.

Chapter 5

Usability Study

5.1 Study Design

Following the campus-wide survey, an IRB approved usability study was conducted in order to gather more details about the current understanding users have of the VT Alerts system as well as to provide the opportunity for a more in depth discussion with users concerning features of the new system. An interview transcript was read and any provided feedback or answers to questions from 12 interview subjects were recorded. Further, the users were prompted to show and explain their understanding and how they would interact with the functionalities of five different interface prototype screen shots. Participants recruited included undergraduates, graduates, faculty, and staff at Virginia Tech. With a total of 5 undergraduate students, 3 graduate students, 2 faculty, and 3 staff interviews. One participant was counted as both a graduate student and current staff member. Each interview took approximately half an hour during which participants completed a pre-questionnaire asking basic demographic and background information followed by the interview about VT Alerts and the new design. Finally, more questions were asked and the participants elaborated

Table 5.1: Pre-Questionnaire background

| Participant Roles | |
|-----------------------|-----|
| Graduate Student | 25% |
| Undergraduate Student | 42% |
| Faculty Member | 17% |
| Staff Member | 25% |
| Participant Gender | |
| Male | 50% |
| Female | 50% |
| Prefer not to answer | 0% |

on how they would complete the given tasks with the provided paper interface prototype screens. Afterwards, each user completed a post-questionnaire on their experience.

5.2 Study Results

The pre-questionnaire confirmed the variety of participants interviewed as can be seen in Table 5.1. It also allowed for an initial overview of the current opinions and feelings overall towards the VT Alerts and gauged each participant's self reported familiarity with interactions on a mobile device. These can be viewed in Figure 5.1. When asked if they were familiar with the VT Alerts system based on a Likert scale from strongly disagree to strongly agree, all participants were neutral, agreed, or strongly agreed. All participants agreed or strongly agreed that they were familiar with interactions on a mobile device. When asked if they were content with VT Alerts, one participant disagreed, two were neutral, eight agreed and only one strongly agreed.

The interviews provided both quantitative and qualitative information on the current system as well as the design and prototype of the new Android application. A summary of all the quantitative information regarding the current system can be seen in Table 5.2 and are continued in Table 5.3. Table 5.4 covers the questions related to the new application and the

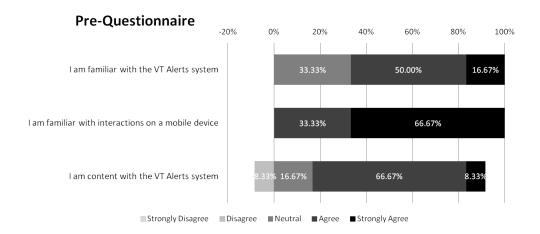


Figure 5.1: The initial opinions of 12 participants by percentage

prototype interface. Overall, most users responded that they were satisfied with VT Alerts, yet there was a noticeable lack of knowledge and confusion among the participants as to how the system currently operates. Most participants only registered one number for the alerts, and for most this included at least one smartphone. None of the participants, however, knew that if you had multiple numbers registered that you may not receive the alert on all of these numbers. They did not realize that the system will attempt to pull all other contact numbers from being processed if the system receives a response of "yes" as a verification that the alert was received. Of those participants registered to receive text messages, only 50% respond with a "yes" verification always and 33% don't reply at all. Regardless of whether or not the participants reply to the text messages, only two participants knew why this response was requested. That means that ten of the twelve participants either had no idea as to the purpose of replying or had doubts as to their understanding and therefore said they maybe knew the purpose. Finally, when asked to predict the amount of time it takes to reach all of the estimated fifty thousand users, ten of the twelve users estimated a time which was below the actual estimated time of twenty minutes.

The next portion of the interview dealt with the introduction of the smartphone application

for receiving alerts with push notifications and involved usability testing of the prototype interface with paper prints of the screen layouts. All participants were told a brief summary of the smartphone application and everyone responded that they would utilize such an application. After this explanation, participants were asked if they had any questions which were recorded and will be discussed with the qualitative data findings. Of the twelve, eight participants asked questions about the application. This shows how important communication of the application and how it works will be when it is ready for release. A huge majority of 92% of participants said that they would allow location permissions, and the only participant who would not answered that they would still use the application to view alerts on the map. Finally, 75% of participants found the zoom controls and map view option useful and 17% said it would maybe be useful. Many participants commented that they either prefer the earth satellite view or street map view depending on if they are familiar with the area of interest or if they are driving on campus instead of walking. A total of 92% of the participants found that the all alerts button which displayed all VT alerts, including those far away from the user's location useful, and the remaining participant responded that they were concerned that people would not look at all of the alerts and might miss important information.

The post-questionnaire results, summarized in Figure 5.2, again asked the participants if they were content with VT Alerts as it is after the interview which introduced them to the current operations and new application prototype. This time, no participants strongly agreed, eight again agreed, two remained neutral, and two disagreed. A total of 92% of participants agreed or strongly agreed that they would want a new mobile application for use with VT Alerts. The remaining one participant was neutral. Ten participants agreed or strongly agreed that they would enjoy using an interface based on this prototype, and two participants were neutral. These two people, however, commented that they would

Table 5.2: Quantitative interview results on current system

| Registered to receive VT Alerts | Celli |
|---|-------|
| Yes | 92% |
| No | 8% |
| Voluntary notifications received | 0 70 |
| · · · · · · · · · · · · · · · · · · · | 0.07 |
| Phone calls | 0% |
| Texts | 75% |
| Both | 17% |
| Neither | 8% |
| Number of phone numbers registered | o 04 |
| | 8% |
| 1 | 75% |
| 2 | 17% |
| Do all of the numbers belong to the user who | |
| registered them? | = : |
| Yes | 92% |
| No | 8% |
| N/A | 8% |
| How many of the registered numbers are smart- | |
| phones? | |
| All | 83% |
| One | 8% |
| N/A | 8% |
| Do you reply to the text alerts? | |
| Yes | 58% |
| No | 42% |
| Sometimes | 8% |
| N/A | 8% |
| Do you always reply yes to the text message | |
| alerts? | |
| Yes | 50% |
| No | 8% |
| Don't Reply | 33% |
| N/A | 8% |
| Do you know what the "yes" verification is for? | |
| Yes | 17% |
| No | 67% |
| Maybe | 17% |
| Are you satisfied with VT Alerts? | 11/0 |
| Yes | 92% |
| No | 0% |
| | |
| Maybe | 8% |

Table 5.3: Quantitative interview results on current system (continued)

| Were you previously aware that the alert notifi- cations may not go to all of your registered num- | |
|---|------|
| bers? | |
| Yes | 0% |
| No | 100% |
| How long would you predict it takes to reach all | |
| registered users with an alerts? | |
| No options were given, answers were grouped by range | |
| 1 to 5 minutes | 25% |
| 5 to 10 minutes | 8% |
| 10 minutes | 25% |
| 10 to 15 minutes | 8% |
| 15 minutes | 17% |
| 20 minutes | 8% |
| 30 minutes | 8% |
| Actual time is 80% in approximately 20 minutes | |

prefer the prototype to the current system as it gave them more information. For the interface prototype, three participants strongly agreed and eight participants agreed the it was intuitive to use. However, one participant disagreed that the interface was intuitive. The next section addresses the concerns and insights gathered from the qualitative data in the interviews in terms of the critical incidents which have led to another design iteration for the prototype interface. The original interface prototype screens are displayed in Figure 5.3, Figure 5.4, Figure 5.5, Figure 5.6, and Figure 5.7.

5.3 User Interface

Each participant was guided through a scenario which involved all of the five example interface paper prototype screens. Everyone was asked the same set of questions regarding thoughts on the purpose of each screen, how the user would complete certain actions given the interface, and the actions which each user would expect when clicking on each of the Table 5.4: Quantitative interview results on proposed addition

| Would you utilize a smartphone application for | |
|---|------|
| receiving push notification alerts based on this | |
| knowledge? | |
| Yes | 100% |
| No | 0% |
| Maybe | 0% |
| Do you have any questions about this applica- | |
| tion? | |
| Questions were recorded and addressed | |
| Yes | 100% |
| No | 0% |
| Would you allow location permissions? | |
| Yes | 92% |
| No | 8% |
| If not, would you still use the application to view | |
| the alerts on a map? | |
| Yes | 8% |
| No | 0% |
| N/A | 92% |
| Maybe | 0% |
| Do you find the zoom controls and map view | |
| options useful? | |
| Yes | 75% |
| No | 0% |
| Maybe | 17% |
| Do you find displaying alerts far from your loca- | |
| tion useful? | |
| Yes | 92% |
| No | 0% |
| Maybe | 8% |

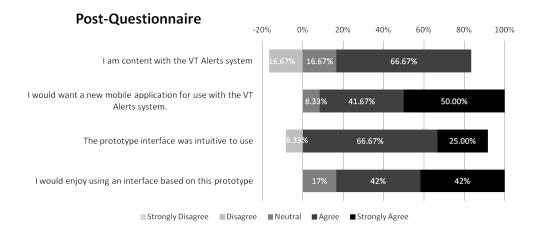


Figure 5.2: The final opinions of 12 participants by percentage

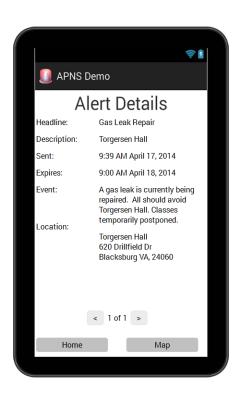


Figure 5.3: Alert details interface



Figure 5.4: Map interface shown zoomed on earth view to user's location and relevant alert

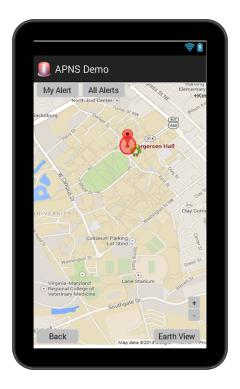


Figure 5.5: Map interface shown zoomed out in map view of user's location and relevant alert



Figure 5.6: Interface for map shown zoomed out in map view of user's location and all alerts

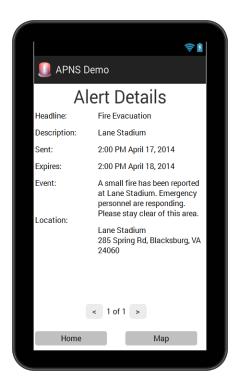


Figure 5.7: Interface for alert details shown after selection of a map geofence

available action buttons on the prototype of the map interface. During this portion of the interview the critical incidents for each participant were recorded and potential solutions for mitigating these incidents were included in a second design iteration of the interface. Several participants from the initial interview were asked to reassess this new interface with the new alterations.

5.3.1 Critical Incidents

The purpose of the "All Alerts" and "My Alerts" buttons was not clear

The "My Alerts" buttons were intended to provide a toggle between seeing all of the alerts nearest and therefore highly relevant to a user based on his or her geospatial location. In contrast, the "All Alerts" button was meant to show all active alerts on the map. This was not clear to most of the users during the interview portion which involved the paper screen view prototypes. Many users believed that the "All Alerts" was a type of history function which would take them back to a detailed view of the past alerts. Some of the users believed these buttons had to do with some user preference settings as to what alerts he or she wished to receive. Also, one user simply stated "I don't know. First I would have to understand which view I am looking at at the moment." This addresses the next critical incident, which involved the context for each screen.

The context for each screen and view was unclear

This study was conducted with paper prototypes which limited the exploring and functionality testing a user could perform. As such, it was unclear for many users as to the context of the view for each screen even as they were read the scenario. This also could be a manifestation of the user interface itself. Some users mentioned that the headings such as "Alert

Details" were too vague and mentioned that they were confusing. On the positive side, all users believed that clicking on the red marker characterizing an alert on the map would navigate to the details of such an alert. Many of the users, however, were not able to locate themselves on the map.

The buttons and interface design were not consistent with common application patterns

Many participants could not locate their position on the prototype map, which displayed the user location with the android robot logo. Some of the iOS product users incorrectly pointed to a blue dot on the map, mistaking it for the iOS blue dot user location standard. Even some android users correctly spotted their location, but had issues with the scalability and accuracy of the robot image. Other areas of confusion included the home button. This button led to questions as to what the home screen of the application would include, but most users stated that they would just use the navigation buttons built into their device. One user proclaimed "My smartphone comes with a home button, I usually just hit that." Finally, it was mentioned that the color of the buttons, a light grey, blended in with the map and should be given more contrast.

The purpose of the "map view" button was not initially apparent

The functionalities of the toggle "earth view" and "map view" button was not initially clear to all users. Several users related their confusion at seeing a "map view" button when they were already looking at a map. The map was currently in the earth view. It was not until they received the next interface prototype screen depicting the "map view" which displays the streets and names with the "earth view" toggle now appearing that most users understood

the differentiation.

The alert details confused users

The alert details screen displays several different fields of information related to a single alert message. These fields include the headline, description, sent time, expires time, event, and location. Many users mentioned the importance of the event including detailed instructions of what a user should do in the situation. Others pointed out that the order of the fields did not seem to correlate with the level of importance of the field. One user summarized this by saying, "You would think that the sent and expire would be further down the page. It should start with what I have to know." Finally, users believed that the expiration time could act as an "all clear" to an event unless another notice was sent out. This could be critical information for the personnel filling out the webform to know so that the expectations of the users match the expectations of those creating the alert.

5.3.2 Redesign Solutions

A second design iteration was created in order to solve many of the usability critical incidents discovered through the interviews conducted. First, the "My Alert" and "All Alerts" buttons were changed to "Nearby Alerts" and "All Active Alerts." These clarifications are aimed to provide more clarity as to the intention of the toggle view. Second, new headings and context clues have been added to the top of every interface screen to provide the user with a reference for the purpose of each screen and the information it provides. Third, certain elements of the interface have been redesigned to conform to standard visuals and clues commonly utilized in similar applications. For example, the user location will be provided with the standard layer of a blue marker and movement trail provided by the Google Maps API [16]. Similarly,

the home button has been removed to allow for the uniform use of the client device home and back buttons. The "earth view" and "map view" toggle was also updated to display "earth view" and "street view" in an attempt to limit confusion. The last change involved the redesign of the "Alert Details" screen so that the most urgent information is the focus and appears at the top of the screen.

5.4 Follow-up Prototype Testing

New paper interface prototype screens were created with the outlined design changes. Four interview participants, including one undergraduate, graduate, staff, and faculty member, were asked to complete a second interview based on the new design to evaluate the success or failure of the solutions targeting the critical incidents discovered in the first round of interviews. The second iteration interface prototype screens are displayed in Figure 5.8, Figure 5.9, Figure 5.10, Figure 5.11, and Figure 5.12. These follow-up interviews ultimately led to a third interface design.

5.5 Follow-up Findings

The follow-up interviews included four of the same participants from the original set of twelve. The intent of these follow-up interviews were to gather further usability information of the application with the second set of paper interface prototypes. Of the four participants, everyone agreed with the rearranging of the order in which the alert details were displayed to include those considered more important at the top, such as the headline and description. The distinction between the show nearby alerts and show all active alerts buttons were clear to the users, but it was mentioned that these two buttons could become one which toggles.

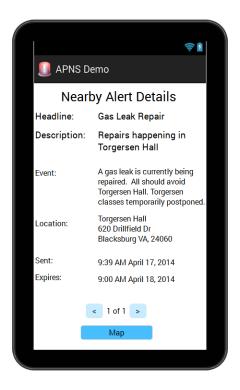


Figure 5.8: New alert details interface



Figure 5.9: New map interface shown zoomed on earth view to user's location and relevant alert

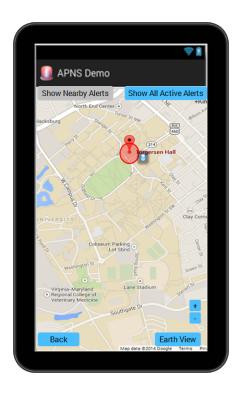


Figure 5.10: New map interface shown zoomed out in map view of user's location and relevant alert

Overall, however, users still had some questions when navigating through the alert details and nearby alert details pages when they were not in connection with the map by clicking on the alert display pin. Further, as with the first set of interviews, some participants expressed wanting more features added to this application. A buddy list to view friends or share your location with family, emergency evacuation route information, and a help button for choosing to send your location information to emergency personnel were all mentioned. A final common feature which several participants mentioned was a visual way for prioritizing the alerts. This severity ranking could be achieved through the use of symbols or different color markers for the alerts on the map. The results of the second interview follow-up post questionnaire are given in Figure 5.13. Three of the four participants agreed that the new prototype interface was intuitive to use with the remaining participant having selected neutral. Likewise, with the addition of the user location being displayed in the commonly

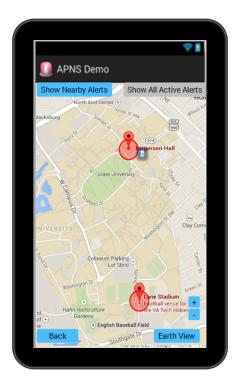


Figure 5.11: New interface for map shown zoomed out in map view of user's location and all alerts

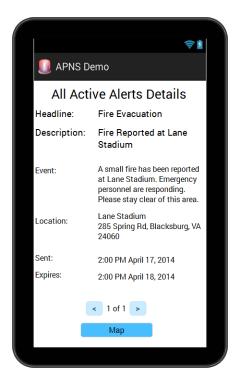


Figure 5.12: Interface for alert details shown after selection of a map geofence

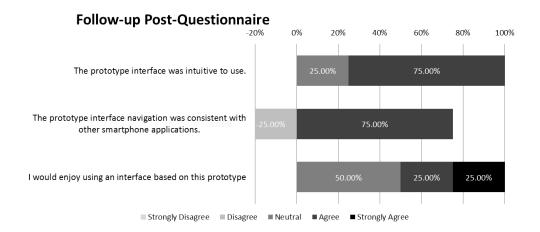


Figure 5.13: The follow-up interview opinions of 4 participants by percentage

utilized blue dot, three of the four participants thought that the prototype interface navigation was consistent with other smartphone applications. The final participant disagreed with this statement. Finally, when asked if they would enjoy using an interface based on this new prototype, two participants were neutral, one agreed, and one strongly agreed.

The results of these follow-up interview prompted a third iteration of the interface. New additions and changes included simplifying the map as much as possible in conformance with the standard API for the different map views and navigation. The "show nearby alerts" and "show all active alerts" was combined to be one toggle button. To combat the navigation confusion, the alert details pages were made static pages based on the user selection of an alert on the map. These were no longer made scrollable to the next page to browse through the stack of nearby and all active alerts. One alert details page was connected to one marker on the map and the navigation was simplified to returning back to the map after viewing the details of an alert. Future work and implementations will include the addition of a visual indication of the severity rankings of the alerts.

Chapter 6

Android Implementation

6.1 Collaboration

The implementation process involved close collaboration with the Communications Network Services (CNS) group at Virginia Tech. VT Alerts was internally designed and developed by members in CNS and as mentioned previously, a smartphone application for fast push notification alerts was already in the early stages of development. The prototype application was developed to integrate with the existing server side functionalities and base Android application provided by CNS. A prototype webform developed by CNS was also used for the initial testing of the application's receipt of alerts.

6.2 Prototype Application Development

The prototype application was developed utilizing the Android Developer Tools (ADT) Bundle for the Eclipse IDE and packaged with the Android SDK. The final version utilized was

the March 21st 2014 release [19]. A Nexus S with Android 4.1.2, Jelly Bean, was used for testing, but deployment was also tested on new devices running Android 4.4, KitKat. Android was selected as the first prototype operating system because of its widespread use and culture of open standards for mobile devices. Further, CNS had already begun the development of an Android application, webform, and server side functionality. This provided the underlying structure and support needed to implement the prototype for a compatible integration into the current VT Alerts system, allowed the opportunity for initial alert notification testing, and will allow for future system and performance testing as well.

6.3 CNS Webform

As can be seen in Figure 6.1, the webform allows for testing through sending sample alert notifications with all relevant fields as well as the ability to select the area of influence on a map, translating to a coordinate latitude and longitude point and corresponding radius. Future work will include usability studies concerning this interface and and assessment of the functionalities and ease-of-use for the personnel responsible for the compilation and submission of an alert for release. This webform is provided for quick access in the event of an emergency, but authentication of the personnel and security measures to prevent unauthorized access are required elements which will need to be put into place. Further, services and research provided by the Enterprise GIS, Virginia Tech Geospatial Information Sciences, can be utilized to enhance this webform. Customizations such as tools for finding specific campus buildings or reverse address look-ups have the potential to strengthen the functionality and may reduce user error [45]. A sample image of the interactive map can be seen in Figure 6.2. Finally, usability testing and process flow integration would be needed to strengthen and support any further design choices.

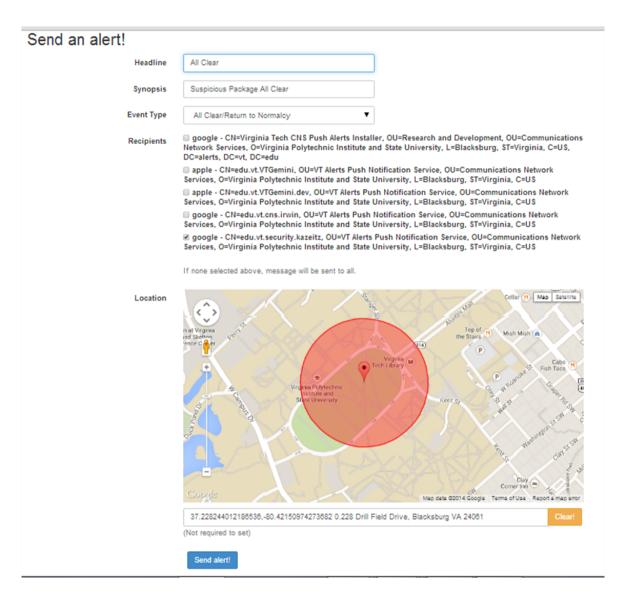


Figure 6.1: Prototype webform

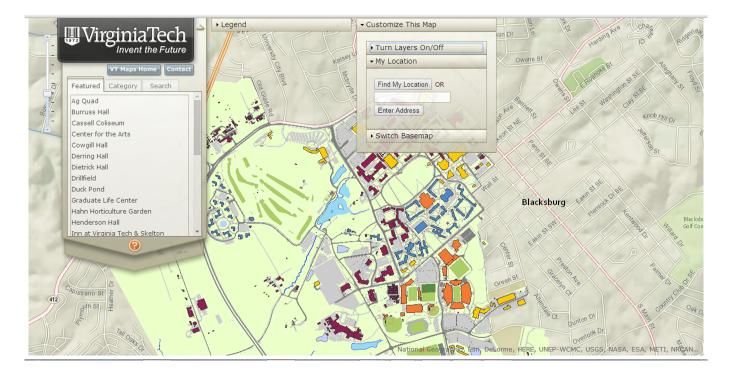


Figure 6.2: Interactive map web page, http://www.maps.vt.edu/interactive

6.4 CNS Developments

The next two key contributions for development from CNS include a push-library and basic demo application. The push-library includes an alerts service to retrieve the alert data based on the url supplied in the summary provided for each VT alert. A registration service and environment API are also included to allow for the registration of users to be able to receive the alert push notifications. The alert summary object and included info object are also detailed for each alert. These objects outline the consistent details to be included with each alert and those in the summary include an identifier, message type, date, status, scope, url, and further information. The "info" object additionally defines a category, event, headline, and expiration date. Callbacks for the alert, alert summary, registration, registration cancel, terms of service, and verification are also supplied to support the main activity interface of the CNS demo application. Conformance to the FEMA, Common Alerting Protocol was one

of the new changes being added to the VT Alerts system. A library is included based on the CAP version 1.2 [11]. Several exception handlers are provided for issues from the network or keystore. There are also utilities for saving the users credentials in a KeyStore, setting and obtaining the Google Cloud Messaging (GCM) id, handling the HttpClient configuration, and utilities for working with preferences. Finally, the last utility is a marshaller to convert the incoming JSON data into the AlertSummary objects, and an unmarshaller to convert them into an alert message or simply from a string to the Java representation.

The basic demo application consists of a main activity which supports the base functionalities of the application including registering the client device, verifying the registration, canceling the registration, fetching alert summaries, and displaying the alert summaries which can be clicked for the detailed view. The main activity interface can be seen in Figure 6.3. The detailed view is supported by the alert activity. This simply allows for a user to view the specific details of an individual alert as seen in Figure 6.4. This application is woken up by an intent service when an alert notification is sent. The geospatial aware features have been implemented on top of this basic demo to serve as the initial Android prototype.

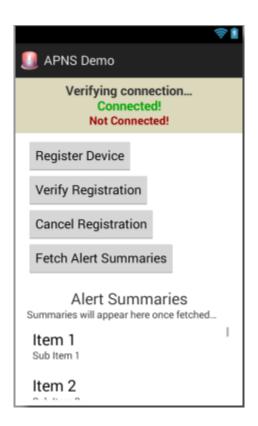


Figure 6.3: CNS provided demo interface



Figure 6.4: CNS provided alert details

6.5 Geospatially Aware Addition to Push Application

In order to allow the VT Alerts application to be geospatially aware, a location permissions request for access to the fine location of the client device has been added to the AndroidManifest.xml file which provides information details of the application to the Android system. Allowing $ACCESS_FINE_LOCATION$, enables both the network and gps provider methods for location calculation[18]. The addition also required the inclusion of the Google Play Services library to support the location and map services [17]. The key utility utilized for the geospatial awareness was geofencing. Geofencing allows for the specification of a location of interest through the specification of the latitude and longitude as well as a radius for proximity. It brings together the awareness of the current user location in relation to the area of interest, the geofence. The inclusion of multiple geofences is supported as well as detection of when a user either enters or exits from the given geofence area. Rel-

evant alerts may also be assigned based on the speed of travel and direction of travel of the user. Finally, the geofences can be created with duration limits by providing an expiration for each and an id for access. The provided Android sample geofence library was modified and included in the application prototype [15]. A map activity controls the functionality for a user to view their current location on a map as well as to display the relevant or all of the geofences corresponding to the alert push notifications. This is supported by the map and location services utilized with a location listener to ensure the application maintains the location of the client device. If the location permissions are not given, however, a user may still be able to view all of the alerts, but will not be assigned a relevant one. This leaves the user the responsibility of determining relevance. The alerts details screen provided by CNS was modified to include buttons to support the new map functionality which can be seen in Figure 6.5 and Figure 6.6. The map interface itself can be seen in Google earth view zoomed in to the user location in Figure 6.7, in Google street view zoomed out with one relevant alert in Figure 6.8, and finally in Google street view zoomed out with all of the alerts displayed in Figure 6.9.

6.6 Testing & Future Development

Initial testing for the basic application functionalities was done through the use of the webform to send test alerts to the Nexus S with the prototype application installed. Further testing will be done to test the efficiency of the application when utilized at a scaled up level of thousands of client devices and numerous alerts as the application is handed to CNS for further development and testing. Future development will then include the creation of an identical application in design and functionality for iOS and then other operating systems such as Windows.



Figure 6.5: CNS provided alert details screen with alteration for nearby alerts



Figure 6.6: CNS provided alert details screen with alteration for active alerts

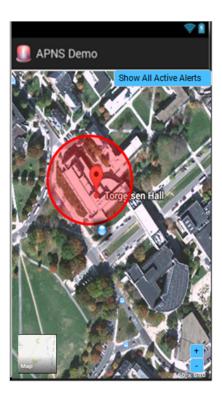


Figure 6.7: Zoomed map interface on earth view

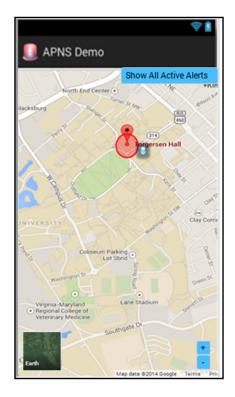


Figure 6.8: Map interface on street view with relevant alert

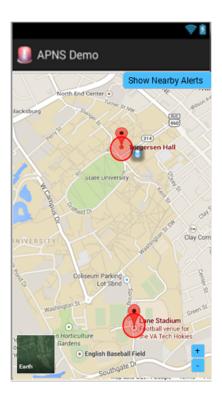


Figure 6.9: Map interface on street view with all alerts

The implementation of the Android prototype application provided a proof of concept and laid the ground work for future development of additional functionalities and features. The implementation showcases the value of the optimizations including the use of fast push notifications through Google Cloud Messaging, the inclusion of geospatial location awareness through the map view of the current location of the user in relation to the nearby and all of the active alerts, as well as, message differentiation by updating the map as the user moves and the filtering of alert notifications based on the location of the user. Further development and testing stemming from this prototype implementation would provide an opportunity to validate the design through large scale system testing and iterative interface and functionality design.

Chapter 7

Conclusion & Future Work

7.1 Broader Applications

This particular design methodology can be applied and expanded to meet the needs of specific crisis, emergency, or other notification or communication systems. The added functionality of differentiating the notification messages by user location and allowing users to view notifications on a map is applicable and would strengthen alert systems of all levels. It can be applied to community, state, and even national level alert systems. The technology and methods used for message differentiation and private location awareness could be utilized with other diverse systems. Mass or group directed communications within the military could be enhanced with location data. Scenarios could include field communications and even ship or ground weapon launch verification. With the addition of user database attributes, such as military rank or job title, messages could be sent to the highest ranking official within certain geospatial locations.

Medical personnel could benefit from this communications technology design as well. Alerts

could be sent to on-call medical or crisis personnel within a desired geospatial range. Even commercial uses apply. These include logistics coordination for employees in a location radius to alert them with company messages as well as hazardous conditions such as weather notifications or traffic accidents. More uses also exist in many different fields. A communications technology system with optimized features providing private geospatial information awareness and the ability to have reliable and fast differentiated messaging is versatile.

7.2 Limitations and theoretical contributions

Geospatial location is the main criteria for organizing crisis alert notifications within this system design. Relative to the VT Alerts application, the university not only has a Blacksburg and Northern Virginia campus, but has a large population of students living off of the central campus. In the event of a crisis users could be in immediate risk or headed toward an area in immediate risk and should be notified through a fast communication channel. This also leads to the need for message differentiation, as those in the midst of a situational crisis need different information and notifications than those too far to be affected. The strength of the design is the optimizations provided by being able to quickly send information to users thanks to the almost instant sending capabilities of smart phone push notifications. If there is no known or relevant location for a crisis, then all groups can be notified independent of location quickly. Why not notify everyone with all the messages? Firstly, different messages may be needed for specific groups of people in certain locations. Secondly, information overload and confusion may be controlled and avoided by sending appropriate and applicable messages. Within the information systems field there are many interwoven considerations such as the communication channels chosen and user participation based on sociological factors, technological constraints and requirements, high stakes mental and physical safety concerns, varied user groups, and finally urgent and differing crisis triggering events. Designing a notification system should not just meet an end goal of notifying the users. How users are notified, the accuracy of information sent, the time it takes to notify everyone, the resulting actions of those notified, and many more questions could become pivotal requirements for the system depending on the situation. This design balances these factors and provides multiple functionality options to best adapt and efficiently notify a given user population, in this case a university, of a crisis. The system is not utilized for trivial updates, but a communication for crisis situations utilizing the prevalent use of smart phone applications. What information to provide and to whom is a potential branch off of this research as well as research on actual application adoption and use.

This communication system design does not focus on the decision making and resources provided to emergency personnel. The extent of consideration in this area includes the needs of the system from operators sending out alerts. Future research can be done to widen this design to incorporate previous research on the informational needs of the alert recipients, the needs of the operators of the system, and to expand the design to include information to send to emergency response teams and organizations. The chosen example of the design is for use as an emergency notification system to users associated with Virginia Tech, and as such, to provide optimized alerts based on geospatial location. In other words, it is an optimized one-way communication of information to students. This could still be applied to two-way communication between operators and users that leads to questions of other filtering criteria. There exist projects such as Digital Humanitarians, [8], which coordinate based on technical expertise. Still other applications such as PulsePoint, [37], are driven by both location and skill, in this case CPR. Clearly the design of an electronic notification system only based on geospatial location could be enhanced to incorporate other filtering priorities, but further research is needed to evaluate its efficiency for the intended crisis or

more routine emergency situations.

7.3 Conclusion

This research focuses on the design and the integration of an optimized method for delivering alert notifications based on user geospatial location compared to the location of a crisis. Many factors surround the development of effective crisis communication systems such as the physical environment, sociological aspects, and technical constraints and requirements. All must be considered during the design, implementation, and analysis process. Further, the basic design must be fitted to the process flow, human interaction, and target system, as shown with this VT Alerts integration model.

Optimizations which can greatly enhance the speed and efficiency of alert notification systems include geospatial location awareness, smartphone applications with push notifications, and differentiated messaging. These optimizations alone, however, are not all that needs to be integrated and included in the design and implementation. When considering mobile applications and location permissions and services, a major area of concern for users is privacy. This is significantly related to an application's adoption and usability. We have addressed many of the major privacy concerns in the further design and implementation of an optimized alert system based on geospatial location to be integrated with the current and operational alert system at Virginia Tech. Further, we have conducted a usability study and a campus-wide survey of a representative group of 1057 participants including undergraduate students, graduate students, faculty, and staff. The survey has provided strong evidence of an extremely high percentage of the user population carrying smartphones with them while they are on campus and willing to allow an application access to their location services if it is for communicating campus safety alerts. The design and implementation process was also

enhanced by the usability study. The conducted interviews with campus users provided a gauge of the level of current understanding of the alert notification system, such as how it operates. Further, the study allowed for the evaluation of the usability of the interface for the new geospatial mobile alert system application.

Crisis situations are non-routine and often life threatening events. Thereby, a customizable and optimized alert system design is key to a successful response when a notification may be the difference between life and death.

7.4 Future Work

We hope to develop an identical application to our Android implementation for use with iOS and other operating systems. Our survey revealed that the majority of mobile devices owned by Virginia Tech students, faculty, and staff are iOS. Further, it standard for notification systems to have dual notification system communication channels, each uniquely suited for separate purposes. A second communication channel has the potential to reach users connected to the campus network in a fast time frame and could still provide complete user location confidentiality by relying on the connected device to pull the appropriate notification. In this case, message delivery can be done by location also with a reliable multicast communication channel over the campus network. The survey results of 91% of participants connecting 1 or more mobile devices to the network is encouraging. This may be included in our further testing and analysis of the security and performance of the mobile application implementation.

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Appendix A Usability Survey

A.1 Recruitment Announcement

Recruitment

Virginia Polytechnic Institute and State University

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A.2 Survey Transcript

Survey

Virginia Polytechnic Institute and State University

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Virginia Tech Institutional Review Board Project No. 14-184 Approved 02-17-2014

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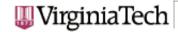
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A.3 IRB Approval Letter



Office of Research Compliance

Institutational Review Board

North End Center, Suite 4120, Virginia Tech

300 Turner Street NW Blacksburg, Virginia 24061 540/231-4606 Fax 540/231-0959

email irb@vt.edu

website http://www.irb.vt.edu

MEMORANDUM

DATE: February 17, 2014

TO: Randolph Carlos Marchany, Joseph G Tront, Kimberly Ann Zeitz

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires April 25, 2018)

PROTOCOL TITLE: VTGeoAlerts

IRB NUMBER: 14-184

Effective February 17, 2014, the Virginia Tech Institution Review Board (IRB) Chair, David M Moore, approved the New Application request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

http://www.irb.vt.edu/pages/responsibilities.htm

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As: Exempt, under 45 CFR 46.110 category(ies) 2

Protocol Approval Date: February 17, 2014

Protocol Expiration Date: N/A
Continuing Review Due Date*: N/A

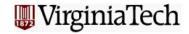
*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

A.4 IRB Research Protocol



Institutional Review Board Research Protocol

| Once complete, upload this form as a Word doo | cument to the IRB Protocol Management System: https://secure.research.vt.edu/irb |
|---|---|
| Section 1: General Information | on |
| 1.1 DO ANY OF THE INVESTIGAT OF INTEREST? _ttp irb _t ec | TORS OF THIS PROJECT HAVE A REPORTABLE CONFLICT |
| NoYes, explain: | |
| 1.2 WILL THIS RESEARCH INVOI | LVE COLLABORATION WITH ANOTHER INSTITUTION? |
| No, go to question 1.3☐ Yes, answer questions within table ——— | |
| | IF YES |
| Provide the name of the i | nstitution [for institutions located overseas, please also provide name of country]: |
| ☐ Pending approval ☐ Approved | es not have a human subject protections review board |
| | stitution(s) be engaged in the research? po ic en a e tm |
| | review all human subject research activities involved with this project? ne of the primary institution: |
| Note: primary institution = | primary recipient of the grant or main coordinating center |
| 1.3 IS THIS RESEARCH FUNDED? | |
| No, go to question 1.4Yes, answer questions within table ——— | |
| Provide the name of the s | IF YES sponsor [if NIH, specify department]: |
| Is this project receiving fo | ederal funds? |
| If ves | |

Examples of inclusion/exclusion criteria - gender, age, health status, ethnicity

Examples of existing records - directories, class roster, university records, educational records

The subject pool will include Virginia Tech affiliated people of any gender, age, health status, and ethnicity. This shall include undergraduates, graduates, faculty, and staff. We hope that our short survey will reach hundreds of participants, and aim to get as many as we can.

3.2 WILL EXISTING RECORDS BE USED TO IDENTIFY AND CONTACT / RECRUIT SUBJECTS?

| No, go to ques Yes, answer q | stion 3.3 questions within table — |
|------------------------------|---|
| | IF YES Are these records private or public? Public Private, describe the researcher's privilege to the records: |
| | Will student, faculty, and/or staff records or contact information be requested from the University? No Yes, visit the following link for further information: http://www.policies.vt.edu/index.php (policy no. 2010) |

3.3 DESCRIBE RECRUITMENT METHODS, INCLUDING HOW THE STUDY WILL BE ADVERTISED OR INTRODUCED TO SUBJECTS:

The recruitment methods will be through approved postings via the Virginia Tech emailing lists, the SONA System, as well as through word of mouth from the researchers.

3.4 PROVIDE AN EXPLANATION FOR CHOOSING THIS POPULATION:

Note: the IRB must ensure that the risks and benefits of participating in a study are distributed equitably among the general population and that a specific population is not targeted because of ease of recruitment.

The population has been chosen as Virginia Tech affiliated undergraduates, graduates, faculty, and staff as the target audience for the model system being implemented. We hope to gain insights into the usage habits and other usability data from people representative of a campus population.

Section 4: Consent Process

For more information about consent process and consent forms visit the following link: http://www.irb.vt.edu/pages/consent.htm

If feasible, researchers are advised and may be required to obtain signed consent from each participant unless obtaining signatures leads to an increase of risk (e.g., the only record linking the subject and the research would be the consent document and the principal risk would be potential harm resulting in a breach of confidentiality). Signed consent is typically not required for low risk questionnaires (consent is implied) unless audio/video recording or an in-person interview is involved. If researchers will not be obtaining signed consent, participants must, in most cases, be supplied with consent information in a different format (e.g., in recruitment document, at the beginning of survey instrument, read to participant over the phone, information sheet physically or verbally provided to participant).

4.1 CHECK ALL OF THE FOLLOWING THAT APPLY TO THIS STUDY'S CONSENT PROCESS:

| | Verbal consent will be obtained from participants |
|--------|---|
| | Written/signed consent will be obtained from participants |
| \geq | Consent will be implied from the return of completed questionnaire. Note: The IRB recommends providing consent information |
| | in a recruitment document or at the beginning of the questionnaire (if the study only involves implied consent, skip to Section 5 |
| | below) |

| ☐ Other, describe: |
|--|
| 4.2 PROVIDE A GENERAL DESCRIPTION OF THE PROCESS THE RESEARCH TEAM WILL USE TO OBTAIN AND MAINTAIN INFORMED CONSENT: |
| |
| 4.3 WHO, FROM THE RESEARCH TEAM, WILL BE OVERSEEING THE PROCESS AND OBTAINING CONSENT FROM SUBJECTS? |
| |
| 4.4 WHERE WILL THE CONSENT PROCESS TAKE PLACE? |
| |
| 4.5 DURING WHAT POINT IN THE STUDY PROCESS WILL CONSENTING OCCUR? Note: unless waived by the IRB, participants must be consented before completing any study procedure, including screening questionnaires. |
| |
| 4.6 IF APPLICABLE, DESCRIBE HOW THE RESEARCHERS WILL GIVE SUBJECTS AMPLE TIME TO REVIEW THE CONSENT DOCUMENT BEFORE SIGNING: Note: typically applicable for complex studies, studies involving more than one session, or studies involving more of a risk to subjects. |
| Not applicable Not applicable |
| Section 5: Procedures 5.1 PROVIDE A STEP-BY-STEP THOROUGH EXPLANATION OF ALL STUDY PROCEDURES EXPECTED FROM STUDY PARTICIPANTS, INCLUDING TIME COMMITMENT & LOCATION: This research will include a short electronic survey to be completed by participants at their desired location. |
| This research will include a short electronic survey to be completed by participants at their desired location and on their own device. The survey is considered to have a time commitment estimated to be less than fifteen minutes with around 15 questions. |
| 5.2 DESCRIBE HOW DATA WILL BE COLLECTED AND RECORDED: |
| The data will be collected electronically through the VT Surveys system to include answer selection and optional further descriptions provided. Participants will be anonymized. |
| 5.3 DOES THE PROJECT INVOLVE ONLINE RESEARCH ACTIVITES (INCLUDES ENROLLMENT, RECRUITMENT, SURVEYS)? View the "Policy for Online Research Data Collection Activities Involving Human Subjects" at http://www.irb.vt.edu/documents/onlinepolicy.pdf \[\textbf{No.} \text{ so to question 6.1} |
| Yes, answer questions within table |

| | Identify the service / program that will be used: | |
|---|--|--|
| | www.survey.vt.edu, go to question 6.1 Blackboard, go to question 6.1 | |
| | Center for Survey Research, go to question 6.1 | |
| | Other | |
| | VI OTVIND | |
| | IF OTHER: Name of service / program: | |
| | URL: | |
| | This service is | |
| | Included on the list found at: http://www.irb.vt.edu/pages/validated.htm | |
| | ☐ Approved by VT IT Security ☐ An external service with proper SSL or similar encryption (https://) on the login (if | |
| | applicable) and all other data collection pages. | |
| | None of the above (note: only permissible if this is a collaborative project in which | |
| | VT individuals are only responsible for data analysis, consulting, or recruitment) | |
| L | | |
| | | |
| Section 6: R | Risks and Benefits | |
| occion o. i | tions and benefits | |
| 6.1 WHAT AR | E THE POTENTIAL RISKS (E.G., EMOTIONAL, PHYSICAL, SOCIAL, LEGAL, | |
| | C, OR DIGNITY) TO STUDY PARTICIPANTS? | |
| LCONONI | e, or bioliti) to stobi i imiteli mats. | |
| | xt to no risk from participation. Questions will refer to device usage and application download | |
| habits inclu | ding user thoughts on downlaoding a campus safety application. | |
| (2 EVDI AINIT | THE CTUDY'S EFFORTS TO DEDUCE DOTENTIAL DISKS TO SUBJECTS. | |
| 6.2 EXPLAIN | THE STUDY'S EFFORTS TO REDUCE POTENTIAL RISKS TO SUBJECTS: | |
| The study w | vill anonymize participants and does not prompt for any highly emotional responses of campus | |
| | nly focuses on device and download usage. | |
| | • | |
| 6.3 WHAT ARE THE DIRECT OR INDIRECT ANTICIPATED BENEFITS TO STUDY | | |
| PARTICIPA | ANTS AND/OR SOCIETY? | |
| Data and an | | |
| | ted during this study will allow for an assessment of mobile device usage to aid in the design, nt, and analysis of a campus notification system. Findings will be published and utilized for | |
| | med at optimizing and enhancing the performance of crisis notification systems. | |
| 100001011011 | and at optimizing and officially the portormance of office formation of stories | |
| | | |
| | | |
| Section 7: F | ull Board Assessment | |
| | | |
| | RESEARCH INVOLVE MICROWAVES/X-RAYS, OR GENERAL ANESTHESIA OR | |
| SEDATION | 1? | |
| ⊠ No | | |
| Yes | | |
| | | |
| 7.2 DO RESEA | RCH ACTIVITIES INVOLVE PRISONERS, PREGNANT WOMEN, FETUSES, | |
| HUMAN IN | VITRO FERTILIZATION, OR MENTALLY DISABLED PERSONS? | |
| - - | | |
| No, go to que | | |
| ⊥ res, answer q | questions within table — | |
| | ▼ | |
| | IF YES | |
| | - Bo | |

| This research involves: Prisoners Pregnant women Fetuses Human in vitro fertilization Mentally disabled persons | | |
|---|---|--|
| 7.3 DOES THIS STUDY INVOLVE MORE THAN MINIMAL RISK TO STUDY PARTICIPANTS? Minimal risk means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily activities or during the performance of routine physical or psychological examinations or tests. Examples of research involving greater than minimal risk include collecting data about abuse or illegal activities. Note: if the project qualifies for Exempt review (http://www.irb.vt.edu/pages/categories.htm), it will not need to go to the Full Board. | ! | |
| ⊠ No □ Yes | | |
| IF YOU ANSWERED "YES" TO <i>ANY ONE</i> OF THE ABOVE QUESTIONS, 7.1, 7.2, OR 7.3, THE BOARD MAY REVIEW THE PROJECT'S APPLICATION MATERIALS AT ITS MONTHLY MEETING. VIEW THE FOLLOWING LINK FOR DEADLINES AND ADDITIONAL INFORMATION: http://www.irb.vt.edu/pages/deadlines.htm | | |
| | | |
| Section 8: Confidentiality / Anonymity | | |
| For more information about confidentiality and anonymity visit the following link: http://www.irb.vt.edu/pages/confidentiality.htm | | |
| 8.1 WILL PERSONALLY IDENTIFYING STUDY RESULTS OR DATA BE RELEASED TO ANYONE OUTSIDE OF THE RESEARCH TEAM? For example – to the funding agency or outside data analyst, or participants identified in publications with individual consent | | |
| NoYes, to whom will identifying data be released? | | |
| 8.2 WILL ANY STUDY FILES CONTAIN PARTICIPANT IDENTIFYING INFORMATION (E.G., NAME, CONTACT INFORMATION, VIDEO/AUDIO RECORDINGS)? Note: if collecting signatures on a consent form, select "Yes." | | |
| No, go to question 8.3 ☐ Yes, answer questions within table ———————————————————————————————————— | | |
| IF YES | | |
| Describe if/how the study will utilize study codes: | | |
| If applicable, where will the key [i.e., linked code and identifying information document (for instance, John Doe = study ID 001)] be stored and who will have access? | ; | |
| Note: the key should be stored separately from subjects' completed data documents and accessibility should be limited. | | |
| The IRB strongly suggests and may require that all data documents (e.g., questionnaire responses, interview responses, etc.) do not include or request identifying information (e.g., name, contact information, etc.) from participants. If you need to link subjects' identifying information to subjects' data documents, use a study ID/code on all data documents. | • | |

| Examples of data - questionnaire, interview responses, | downloaded | online survey | data, observation | recordings, | biological |
|--|------------|---------------|-------------------|-------------|------------|
| samples | | | | | |

Downloaded online survey data will be stored in a secure place, such that only research team members have access.

8.4 WHO WILL HAVE ACCESS TO STUDY DATA?

The study investigators.

8.5 DESCRIBE THE PLANS FOR RETAINING OR DESTROYING THE STUDY DATA

The data will be stored for at most three years, at which time the investigator(s) will re-evaluate the plans for retaining or destroying data.

8.6 DOES THIS STUDY REQUEST INFORMATION FROM PARTICIPANTS REGARDING ILLEGAL BEHAVIOR?

| | No, go to question 9.1 | |
|---|--------------------------------------|---|
| Ш | Yes, answer questions within table — | |
| | | , |

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|----|---|-----|
| | | |

Does the study plan to obtain a Certificate of Confidentiality?

□ No

Yes (Note: participants must be fully informed of the conditions of the Certificate of Confidentiality within the consent process and form)

For more information about Certificates of Confidentiality, visit the following link: http://www.irb.vt.edu/pages/coc.htm

Section 9: Compensation

For more information about compensating subjects, visit the following link: http://www.irb.vt.edu/pages/compensation.htm

9.1 WILL SUBJECTS BE COMPENSATED FOR THEIR PARTICIPATION?

| No, go to question 10.1 | |
|---|---|
| Yes, answer questions within table | |
| | |
| | • |

IF YES

What is the amount of compensation? Some students may choose to receive credit for classes by participating.

Will compensation be prorated?

Yes, please describe:

☑ No, explain why and clarify whether subjects will receive full compensation if they withdraw from the study? Participants will receive full credit for attempting the study, even if they submit an incomplete survey.

Unless justified by the researcher, compensation should be prorated based on duration of study participation. Payment must <u>not</u> be contingent upon completion of study procedures. In other words, even if the subject decides to withdraw from the study, he/she should be compensated, at least partially, based on what study procedures he/she has completed.

| Section 10: Audio / Video Recording |
|---|
| or more information about audio/video recording participants, visit the following link: http://www.irb.vt.edu/pages/recordings.htm |
| 0.1 WILL YOUR STUDY INVOLVE VIDEO AND/OR AUDIO RECORDING? |
| No, go to question 11.1☐ Yes, answer questions within table |
| This project involves: Audio recordings only Video recordings only Both video and audio recordings Provide compelling justification for the use of audio/video recording: |
| How will data within the recordings be retrieved / transcribed? |
| How and where will recordings (e.g., tapes, digital data, data backups) be stored to ensure security? |
| Who will have access to the recordings? |
| Who will transcribe the recordings? |
| When will the recordings be erased / destroyed? |
| Section 11: Research Involving Students |
| 1.1 DOES THIS PROJECT INCLUDE STUDENTS AS PARTICIPANTS? |
| No, go to question 12.1Xes, answer questions within table |

Does this study involve conducting research with students of the researcher?

☐ No
☐ Yes, describe safeguards the study will implement to protect against coercion or undue influence for participation:

| | Note: if it is feasible to use students from a class of students not under the instruction of the researcher, the IRB recommends and may require doing so. | | |
|---------------------------|---|--|--|
| | Will the study need to access student records (e.g., SAT, GPA, or GRE scores)? ⊠ No □ Yes | | |
| 11.2 DOES TH | IS PROJECT INCLUDE <u>ELEMENTARY</u> , <u>JUNIOR</u> , OR <u>HIGH SCHOOL</u> STUDENTS? | | |
| No, go to que Yes, answer | estion 11.3 questions within table — | | |
| | IF YES | | |
| | Will study procedures be completed during school hours? ☐ No ☐ Yes | | |
| | If yes, | | |
| | Students not included in the study may view other students' involvement with the research during school time as unfair. Address this issue and how the study will reduce this outcome: | | |
| | Missing out on regular class time or seeing other students participate may influence a student's decision to participate. Address how the study will reduce this outcome: | | |
| | Is the school's approval letter(s) attached to this submission? Yes No, project involves Montgomery County Public Schools (MCPS) No, explain why: | | |
| | You will need to obtain school approval (if involving MCPS, click here: http://www.irb.vt.edu/pages/mcps.htm). Approval is typically granted by the superintendent, principal, and classroom teacher (in that order). Approval by an individual teacher is insufficient. School approval, in the form of a letter or a memorandum should accompany the approval request to the IRB. | | |
| 11.3 DOES TH | IS PROJECT INCLUDE <u>COLLEGE</u> STUDENTS? | | |
| No, go to que | | | |
| i es, answer | questions within table ———————————————————————————————————— | | |
| | IF YES | | |
| | Some college students might be minors. Indicate whether these minors will be included in the research or actively excluded: Included | | |
| | Will extra credit be offered to subjects? ☐ No ☑ Yes | | |
| | If yes, | | |

What will be offered to subjects as an equal alternative to receiving extra credit without participating in this study? Students receiving credit for the study have the option to choose which they participate in through the SONA System.

Include a description of the extra credit (e.g., amount) to be provided within question 9.1 ("IF YES" table)

Section 12: Research Involving Minors

in Section 4 (Consent Process) of this form.

12.1 DOES THIS PROJECT INVOLVE MINORS (UNDER THE AGE OF 18 IN VIRGINIA)?

Note: age constituting a minor may differ in other States. ☐ No, go to question 13.1
☐ Yes, answer questions within table No, go to question 13.1 Does the project reasonably pose a risk of reports of current threats of abuse and/or suicide? Yes, thoroughly explain how the study will react to such reports: Note: subjects and parents must be fully informed of the fact that researchers must report threats of suicide or suspected/reported abuse to the appropriate authorities within the Confidentiality section of the Consent, Assent, and/or Permission documents. Are you requesting a waiver of parental permission (i.e., parent uninformed of child's involvement)? No, **both** parents/guardians will provide their permission, if possible. No, **only one** parent/guardian will provide permission. Yes, describe below how your research meets <u>all</u> of the following criteria (A-D): Criteria A - The research involves no more than minimal risk to the subjects: The survey is a device usability survey and does not prompt for anything more than usage statistics. Criteria B - The waiver will not adversely affect the rights and welfare of the subjects: The survey is anonymized and does not ask for any PII and is based on device usage. Criteria C - The research could not practicably be carried out without the waiver: As an electronic survey, there is no way to regulate submission of students who are minors without excluding them by prompting for age. Criteria D - (Optional) Parents will be provided with additional pertinent information after participation: Study results will be published Is it possible that minor research participants will reach the legal age of consent (18 in Virginia) while enrolled in this study? Yes, will the investigators seek and obtain the legally effective informed consent (in place of the minors' previously provided assent and parents' permission) for the now-adult subjects for any ongoing interactions with the subjects, or analysis of subjects' data? If yes, explain how: For more information about minors reaching legal age during enrollment, visit the following link: http://www.irb.vt.edu/pages/assent.htm The procedure for obtaining assent from minors and permission from the minor's guardian(s) must be described

Section 13: Research Involving Deception

For more information about involving deception in research and for assistance with developing your debriefing form, visit our website at $\frac{http://www.irb.vt.edu/pages/deception.htm}{}$

| N I | Obscribe the deception: Why is the use of deception necessary for this project? Obscribe the debriefing process: Provide an explanation of how the study meets all the following criteria (A-D) for an alteration of consent: Criteria A - The research involves no more than minimal risk to the subjects: Criteria B - The alteration will not adversely affect the rights and welfare of the subjects: |
|-------------------|--|
| I | Describe the debriefing process: Provide an explanation of how the study meets <u>all</u> the following criteria (A-D) for an alteration of consent: Criteria A - The research involves no more than minimal risk to the subjects: Criteria B - The alteration will not adversely affect the rights and welfare of the subjects: |
| L | Provide an explanation of how the study meets <u>all</u> the following criteria (A-D) for an alteration of consent: Criteria A - The research involves no more than minimal risk to the subjects: Criteria B - The alteration will not adversely affect the rights and welfare of the subjects: |
| 1 | Criteria A - The research involves no more than minimal risk to the subjects: Criteria B - The alteration will not adversely affect the rights and welfare of the subjects: |
| | Criteria C - The research could not practicably be carried out without the alteration: Criteria D - (Optional) Subjects will be provided with additional pertinent information after participation (i.e., debriefing for studies involving deception): |
| C | by nature, studies involving deception cannot provide subjects with a complete description of the study during the consent process; therefore, the IRB must allow (by granting an alteration of consent) a consent process which oes not include, or which alters, some or all of the elements of informed consent. |
| t | The IRB requests that the researcher use the title "Information Sheet" instead of "Consent Form" on the comment used to obtain subjects' signatures to participate in the research. This will adequately reflect the fact that the subject cannot fully consent to the research without the researcher fully disclosing the true intent of the esearch. |
| THI DOO MEN | is not considered existing data if a researcher transfers to Virginia Tech from another institution and will be |
| re fini | a analysis of an on-going study. shed with the application estions within table |
| | IF YES |
| I | From where does the existing data originate? |

Is the source of the data public?

No, continue with the next question
Yes, you are finished with this application

| Will any individual associated with this project (internal or external) have access to or be provided with existing data containing information which would enable the identification of subjects: |
|--|
| Directly (e.g., by name, phone number, address, email address, social security number, student ID number), or |
| Indirectly through study codes even if the researcher or research team does not have access to the master list linking study codes to identifiable information such as name, student ID number, etc or |
| Indirectly through the use of information that could reasonably be used in combination to identify an individual (e.g., demographics) |
| No, collected/analyzed data will be completely de-identified Yes, |
| If yes, |
| Research will not qualify for exempt review; therefore, if feasible, written consent must be obtained from individuals whose data will be collected / analyzed, unless this requirement is waived by the IRB. |
| Will written/signed or verbal consent be obtained from participants prior to the analysis of collected data? -select one- |

This research protocol represents a contract between all research personnel associated with the project, the University, and federal government; therefore, must be followed accordingly and kept current.

Proposed modifications must be approved by the IRB prior to implementation except where necessary to eliminate apparent immediate hazards to the human subjects.

Do not begin human subjects activities until you receive an IRB approval letter via email.

It is the Principal Investigator's responsibility to ensure all members of the research team who interact with research subjects, or collect or handle human subjects data have completed human subjects protection training prior to interacting with subjects, or handling or collecting the data.



A.5 Survey Data

Nr;Date;;Please select your role at Virginia Tech:;Additional explanation or comments:;Please select your gender.; Additional explanation or comments:; Do you live on the Virginia Tech campus?; Additional explanation or comments:;What kind of mobile device(s) do you own?;Additional explanation or comments:;What OS does your mobile device(s) run?;Additional explanation or comments:;I have a mobile device with me at all times.; Additional explanation or comments:; I have a mobile device with me when I am on campus.; Additional explanation or comments:;I connect my mobile device(s) to the campus network.;Additional explanation or comments:;How many mobile device(s) do you connect to the campus network?;Additional explanation or comments:;I allow applications access to the location services of my mobile device(s).;Additional explanation or comments:;I would allow an application access to the location services of my mobile device(s) if the application does not store my location outside my device.; Additional explanation or comments:; I would download a free application for my mobile device(s) if the application was for campus safety alerts.; Additional explanation or comments:; I would allow an application access to the location services of my mobile device(s) if the application was for campus safety alerts.;Additional explanation or comments:;I would allow an application access to the location services of my mobile device(s) if the application was for communicating campus safety alerts to me as quickly as possible.;Additional explanation or comments:;I would allow an application access to the location services of my mobile device(s) if the application was for communicating campus safety alerts to me based on my proximity to a life threatening event.; Additional explanation or comments:;I would want an automatic message sent to my mobile device(s) for campus safety alerts.; Additional explanation or comments:

1;2014-02-19 13:33:26;;Undergraduate student;;Female;;Yes;;None;I just lost it.;;None;Disagree;;Disagree;;Never;;O devices;;Never;;Strongly Disagree;;Strongly Disagree;(To all of the answers I disagree with, I am speaking of when I DID have a phone. My phone didn't have the capability to connect to the internet.);Strongly Disagree;;Agree;;Agree;;Disagree;

2;2014-02-19 13:42:52;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

3;2014-02-19 13:49:01;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;Android, iOS;;Strongly Agree;;Strongly Agree;;Almost never;;0 devices;;Never;;Strongly Disagree;;Disagree;;Agree;;Agree;

4;2014-02-19 13:56:13;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

5;2014-02-19 13:58:39;;Undergraduate student;;Male;;No;;Standard mobile phone;;Other;Verizon flip phone (2008);Disagree;I read a study that cell phones can cause testicular cancer and lower testosterone. Plus the fact that it's only a flip phone, I have no reason to have it with me all the time.;Agree;In my backpack;Never;;O devices;;Never;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

17;2014-02-19 15:28:47;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;The Wifi here is spotty, and sometimes either refuses me a connection, or otherwise has slow response time.;2 devices;;Some of the time;;Agree;;Strongly Agree;;Agree;;Strongly Agree;;Strongly Agree;

18;2014-02-19 15:29:21;;Undergraduate student;;Female;;Yes;;Standard mobile phone;;Android;;Disagree;;Disagree;;Never;;1 device;;Almost never;only when I need maps;Agree;;Strongly Disagree;I can not trust that their software is invulnerable. I can get safety alerts via email.;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;

19;2014-02-19 15:32:55;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Neutral;

20;2014-02-19 15:33:17;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;All of the time;;1 device;;Most of the time;If I use the location services, such as maps, weather, or location-based searching, I will enable access. If an app doesn't logically require your location or is in some way using location for social reasons, I will disallow access.;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;;Neutral;

21;2014-02-19 15:38:37;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;;0 devices;;Some of the time;;Agree;;Neutral;;Agree;;Strongly Agree;;Strongly Agree;

22;2014-02-19 15:40:31;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

23;2014-02-19 15:41:51;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;;Android, Windows;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;;All of the time;;Disagree;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

24;2014-02-19 15:43:23;;Undergraduate student;;Male;;No;;Tablet;;Android;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;

25;2014-02-19 15:44:51;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

26;2014-02-19 15:49:32;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;Never;;0 devices;;Almost never;;Disagree;;Agree;;Agree;;Strongly Agree;;Agree;

27;2014-02-19 15:54:47;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Neutral;;Neutral;;Agree;;Strongly Agree;;Agree;

28;2014-02-19 15:59:38;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Almost never;;1 device;My laptop, if that counts. Other than that, almost 0 since I very rarely connect my phone.;All of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

29;2014-02-19 15:59:42;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

30;2014-02-19 15:59:58;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

31;2014-02-19 16:00:49;;Undergraduate student;;Male;;No;;Standard mobile phone, Tablet;;Android, iOS, Other;;Agree;;Agree;;All of the time;Except my (basic) cell phone.;3 devices;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

32;2014-02-19 16:02:14;;Graduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Neutral;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;

33;2014-02-19 16:03:41;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Agree;;Disagree;;Agree;;Strongly Agree;;Neutral;

34;2014-02-19 16:10:14;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Agree;Agree;Agree;Agree;Agree;Agree;Agree;Agree;Agree;Agree;Agree;Agree;Agree;Agree;Agree;Agree;Agree;Agree;Agree;

35;2014-02-19 16:14:50;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Agree;;Most of the time;;3 devices;;Almost never;;Disagree;;Neutral;;Neutral;;Neutral;;Agree;

36;2014-02-19 16:14:59;;Undergraduate student;;Male;;No;;Smartphone, Tablet;;Android, Windows;;Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Neutral;

37;2014-02-19 16:23:43;;Undergraduate student;;Male;;Yes;;Standard mobile phone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

38;2014-02-19 16:26:54;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Almost never;;1 device;;Never;;Neutral;;Agree;;Neutral;;Agree;;Agree;

39;2014-02-19 16:30:53;;Undergraduate student;;Male;;No;;Smartphone, Tablet;;Android, Windows, Other;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

40;2014-02-19 16:33:44;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;Some of the time;;2 devices;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

41;2014-02-19 16:42:28;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

42;2014-02-19 17:13:58;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Agree;;All of the time;;1 device;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

43;2014-02-19 17:32:41;;Undergraduate student;;Male;;No;;Smartphone, Tablet;;Android, iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Strongly Agree;;Agree;;Agree;

44;2014-02-19 17:42:10;;Undergraduate student;;Male;;No;off campus;Smartphone;;iOS;;Disagree;;Agree;;Most of the time;;1 device;;Almost never;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

45;2014-02-19 17:42:27;;Undergraduate student;;Male;;Yes;;Standard mobile phone;;Other;;Neutral;;Neutral;There are places off-campus?!;Never;it's a dumbphone, it doesn't get the internets;O devices;;Never;I can't really, since I use a dumbphone - answers to the following questions is assuming I could use apps;Disagree;;Neutral;;Disagree;;Neutral;;Neutral;

46;2014-02-19 17:49:45;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

47;2014-02-19 18:10:30;;Undergraduate student;;Male;;No;;Smartphone, Tablet;;iOS, Windows;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Agree;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

48;2014-02-19 18:14:04;;Undergraduate student;;Male;;No;;Smartphone, Tablet;;Android, iOS;;Neutral;;Strongly Agree;;All of the time;;2 devices;;All of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;

49;2014-02-19 18:14:12;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;1 device;;Almost never;;Neutral;;Agree;;Disagree;;Neutral;;Neutral;;Strongly Agree;

50;2014-02-19 18:32:59;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

51;2014-02-19 18:40:52;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

52;2014-02-19 18:46:08;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Almost never;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

53;2014-02-19 18:47:51;;Undergraduate student;;Male;;No;;Smartphone,
Tablet;;Android;;Agree;;Strongly Agree;;Almost never;;0 devices;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;

54;2014-02-19 18:57:08;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;;Android, iOS, Windows;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;;Some of the time;;Agree;;Neutral;only if it was in some way better than what i already get from alert texts;Neutral;;Agree;;Agree;;Agree;

55;2014-02-19 19:04:03;;Undergraduate student;;Male;;No;;Smartphone, Tablet;iPhone 4S, iPad, Surface Pro;iOS, Windows;Windows 8.1 on the Surface Pro;Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Agree;;Neutral;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

56;2014-02-19 19:15:18;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;

57;2014-02-19 19:17:19;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

58;2014-02-19 19:18:00;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

59;2014-02-19 19:22:28;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Strongly Agree;;Strongly Agree;;Agree;Came as before. It kills my battery which I dont need to happen on a day to day basis;Strongly Agree;

60;2014-02-19 19:38:39;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

61;2014-02-19 19:58:32;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;All of the time;;Strongly Agree;;Strongly Agree;

62;2014-02-19 20:30:15;;Undergraduate student;;Male;;No;;Standard mobile phone, Tablet;;iOS, Windows;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Neutral;;Agree;;Neutral;;Strongly Agree;;Agree;

63;2014-02-19 20:30:50;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

64;2014-02-19 20:59:25;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

65;2014-02-19 21:07:57;;Undergraduate student;Senior;Male;I have a penis;Yes;Payne Hall;Smartphone;Iphone4s;iOS;Version 5.0;Strongly Agree;In my left pocket;Strongly Agree;Even in the shower, my phone is somewhere close by.;Most of the time;VT-Wireless;1 device;Just my phone, unless you count my laptop too;Some of the time;Only if I think location is necessary to perform the apps duties.;Agree;Im paranoid;Agree;I like being safe. But whats wrong with VT alerts? ;Agree;Whats wrong with VTAlerts?;Agree;i like saftey;Agree;i like not being near a murderer.;Agree;i think this already happens

66;2014-02-19 21:14:47;;Undergraduate student;;Male;;Yes;West Ambler Johnston;Smartphone;Iphone;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;Phone and computer;Some of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

67;2014-02-19 22:12:10;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;All of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

68;2014-02-19 22:17:10;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

69;2014-02-19 22:22:04;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Strongly Agree;;Strongly Agree;;Agree;;Strongly Agree;

70;2014-02-19 22:31:00;;Undergraduate student;;Female;;No;;Smartphone;;Windows;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Almost never;;Neutral;;Disagree;;Agree;;Neutral;;Strongly Agree;;Agree;

71;2014-02-19 22:47:27;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;;All of the time;;1 device;;Some of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

72;2014-02-19 22:47:34;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

73;2014-02-19 23:02:58;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;2 devices;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

74;2014-02-19 23:07:31;;Undergraduate student;;Male;;No;;Standard mobile phone, Smartphone;;Android;;Neutral;;Strongly Agree;;Most of the time;;1 device;;Almost never;;Neutral;;Agree;;Disagree;;Neutral;;Agree;;Agree;

75;2014-02-19 23:08:33;;Undergraduate student;Sophomore;Female;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Neutral;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

76;2014-02-19 23:13:34;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;3 devices;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

77;2014-02-19 23:16:41;;;;Male;;No;;Smartphone, Tablet;;Android;;Disagree;;Neutral;;Some of the time;;2 devices;;Almost never;;Neutral;;Agree;;Neutral;;Agree;;Neutral;

78;2014-02-19 23:31:25;;Undergraduate student;;Prefer not to answer;;Yes;;Smartphone, Tablet;;Android, Windows;Android Smartphone and Windows Tablet;Agree;I almost always have my smartphone with me, but only occasionally have my tablet with me;Agree;;Some of the time;I never connect my smartphone to the network, but my tablet is always connected when I am not in my dorm;1 device;I only connect my tablet to the campus network;Some of the time;;Agree;;Disagree;I prefer to get alerts through text or email because safety alerts don't seem to occur frequently enough to justify dedicating storage space and memory specifically for that purpose.;Agree;;Strongly Agree;;Agree;

79;2014-02-20 00:21:04;;Undergraduate student;;Female;;No;;Smartphone;;Windows;;Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Neutral;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

80;2014-02-20 01:02:53;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;;1 device;;Almost never;;Neutral;;Disagree;I already get VT Alerts, I'm not sure what other alerts that 'safety alerts' cover?;Neutral;;Neutral;;Strongly Agree;However, I already have VT Alert.

81;2014-02-20 01:11:33;;Undergraduate student;;Male;;No;;Smartphone,
Tablet;;Android;;Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;

82;2014-02-20 08:01:53;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

83;2014-02-20 08:09:21;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS, Windows;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Almost never;;Strongly Disagree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

84;2014-02-20 08:54:39;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;Some of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

85;2014-02-20 09:26:06;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Never;;O devices;;Some of the time;;Neutral;;Strongly Agree;;Agree;

86;2014-02-20 09:33:57;;Undergraduate student;;Male;;Yes;;Smartphone;;Windows;Nokia Lumia 1520;Agree;;Agree;;Most of the time;;2 devices;Phone, and Laptop;Some of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;

87;2014-02-20 10:05:45;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Neutral;;Strongly Agree;;Agree;;Strongly Agree;;Strongly Agree;

88;2014-02-20 10:09:33;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Never;;O devices;;Most of the time;;Agree;;Disagree;;Disagree;;Neutral;;Strongly Agree;;Agree;

89;2014-02-20 10:28:53;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

90;2014-02-20 10:35:53;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Almost never;;Agree;;Agree;;Agree;;Agree;;Agree;

91;2014-02-20 11:26:12;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;

92;2014-02-20 11:43:17;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Almost never;;Neutral;;Agree;;Neutral;;Neutral;;Neutral;;Strongly Agree;

93;2014-02-20 11:58:56;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

94;2014-02-20 12:24:21;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

95;2014-02-20 12:45:29;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Neutral;;Strongly Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

96;2014-02-20 12:47:46;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Strongly Agree;;Agree;;Neutral;;Neutral;;Agree;

97;2014-02-20 12:48:28;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Strongly Agree;;Strongly Agree;;Neutral;;Disagree;;Strongly Agree;

98;2014-02-20 12:56:07;;Undergraduate student;;Male;;No;;Smartphone, Tablet;I also carry a 3DS with me.;Android, iOS;Phone runs Android, tablet runs iOS;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Strongly Agree;;Disagree;Texting and email is good enough for me.;Neutral;;Neutral;;Agree;

99;2014-02-20 13:08:16;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Strongly Agree;;Agree;;Strongly Agree;

100;2014-02-20 14:01:54;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

101;2014-02-20 14:22:40;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

102;2014-02-20 14:36:49;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;

103;2014-02-20 15:38:29;;Undergraduate student;Freshman;Female;;Yes;;Smartphone;iPhone 4;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

104;2014-02-20 16:35:41;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

105;2014-02-20 16:43:55;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Neutral;;Strongly Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

106;2014-02-20 17:19:43;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Agree;I don't have it when exercising;Strongly Agree;;Almost never;;0 devices;;Never;f*** the nsa;Neutral;;Neutral;;Neutral;;Agree;;Strongly Agree;

107;2014-02-20 17:49:15;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

108;2014-02-20 20:22:12;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

109;2014-02-20 22:14:53;;Undergraduate student;;Female;;Yes;west aj;Smartphone;;Android;;Agree;usually if I'm with my friends I don't really check it that often;Agree;unless im in the dorm, then i'll leave my phone in my room and study in the lounge;All of the time;;1 device;;Almost never;;Disagree;depends on what the application is;Strongly Agree;;Strongly Agree;This would be a really cool/smart idea. So I know what's going on relative to me.;Strongly Agree;;Strongly Agree;;Strongly Agree;

110;2014-02-20 22:34:59;;Undergraduate student;;Male;;No;;Standard mobile phone;;Other;;Strongly Agree;;Strongly Agree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;

111;2014-02-20 23:04:08;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Neutral;;Agree;;Some of the time;;1 device;;Never;;Disagree;;Agree;;Neutral;;Strongly Disagree;;Neutral;;Agree;

112;2014-02-21 09:46:32;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;my cell phone and my laptop;Some of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

113;2014-02-21 10:18:47;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Neutral;;Agree;;Neutral;;Neutral;Why would an application giving me a safety alert have to know my location? I would allow location services if it was necessary (like for map applications). I just don't understand why an alert app needs my location.;Agree;;Strongly Agree;

114;2014-02-21 10:29:49;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Agree;;Neutral;;Strongly Agree;;Agree;;Strongly Agree;

115;2014-02-21 10:36:10;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

116;2014-02-21 11:28:46;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Almost never;;Agree;;Agree;;Agree;;Agree;;Agree;

117;2014-02-21 11:44:10;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Strongly Agree;;Agree;;Strongly Agree;

118;2014-02-21 11:59:33;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Neutral;;Neutral;;Neutral;;Strongly Agree;;Agree;

119;2014-02-21 12:28:34;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

120;2014-02-21 12:42:48;;Undergraduate student;;Female;;No;;Smartphone;;Android;LG G2;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;Android phone and Kindle;Most of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

121;2014-02-21 12:52:13;;Undergraduate student;;Male;;No;;Smartphone, Tablet;;Android, iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

122;2014-02-21 13:59:40;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;1 device;;Most of the time;;Neutral;;Neutral;;Agree;;Agree;;Agree;;Agree;

123;2014-02-21 14:42:26;;Undergraduate student;;Prefer not to answer;;No;;Standard mobile phone, Smartphone, Tablet;;iOS, Windows, Other;;Strongly Agree;;Strongly Agree;;All of the time;;More than 3 devices;;Never;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;

124;2014-02-21 14:48:38;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Almost never;;Neutral;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

125;2014-02-21 15:52:00;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

126;2014-02-21 16:08:25;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;;Agree;;Strongly Agree;;Agree;;Neutral;;Strongly Agree;

127;2014-02-21 16:29:52;;Faculty member;Professional Faculty;Male;;No;;Smartphone, Tablet;;Android, iOS;;Strongly Agree;;Strongly Agree;;Almost never;;1 device;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

128;2014-02-21 16:49:12;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Almost never;;Neutral;;Agree;;Agree;;Agree;;Neutral;;Strongly Agree;

129;2014-02-21 17:32:13;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

130;2014-02-21 17:36:10;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;;All of the time;;2 devices;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

131;2014-02-21 18:29:48;;Undergraduate student;;;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Never;;O devices;;Some of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

132;2014-02-21 18:39:37;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;;Most of the time;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

133;2014-02-21 18:46:08;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Strongly Agree;;Agree;;Strongly Agree;;Strongly Agree;

134;2014-02-21 18:59:11;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

135;2014-02-21 19:36:55;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;Android, iOS, Windows;;Strongly Agree;;Strongly Agree;;Most of the time;;3 devices;;Some of the time;;Disagree;;Strongly Agree;;Agree;;Agree;;Agree;

136;2014-02-21 19:44:00;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS, Windows;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;

137;2014-02-22 14:25:39;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

138;2014-02-22 14:45:38;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;3 devices;;All of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

139;2014-02-22 15:56:46;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;2 devices;;Almost never;;Disagree;;Strongly Agree;;Agree;;Agree;;Strongly Agree;

140;2014-02-22 15:57:31;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Strongly Agree;;Agree;;Agree;;Agree;

141;2014-02-22 16:44:30;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Neutral;;Strongly Agree;;Agree;;Strongly Agree;;Strongly Agree;

142;2014-02-22 20:43:08;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Outral;;Strongly Agree;

143;2014-02-22 22:18:11;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

144;2014-02-22 22:23:27;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Agree;;Agree;;Neutral;;Agree;;Agree;

145;2014-02-23 14:12:00;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Agree;;Strongly Agree;;Never;;O devices;;Never;;Neutral;;Strongly Agree;;Agree;;Agree;;Agree;

146;2014-02-23 14:27:48;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;1 device;;Almost never;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

147;2014-02-23 14:42:54;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Some of the time;;2 devices;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;

148;2014-02-23 15:05:34;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Agree;;Strongly Agree;;Strongly Agree;;Agree;

149;2014-02-23 16:00:02;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;All of the time;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

150;2014-02-23 16:23:32;;Undergraduate student;;Female;;Yes;;Standard mobile phone;I also have an iPod touch that works as a smart device, but just doesn't have a cell phone plan attached to it.;Other;Apple iPod and nTelos for phone.;Agree;;Strongly Agree;;All of the time;;2 devices;;Never;;Disagree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

151;2014-02-23 16:25:00;;Undergraduate student;;Female;;No;I live off-campus.;Smartphone, Tablet;;iOS, Windows;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;;Agree;

152;2014-02-23 16:52:13;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;

153;2014-02-23 17:17:38;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS, Windows, Other;Kindle-Silk;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;;Almost never;;Disagree;;Strongly Agree;;Agree;;Agree;;Agree;

154;2014-02-23 17:21:26;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;2 devices;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

155;2014-02-23 18:04:17;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

156;2014-02-23 18:51:36;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Agree;;Alroof the time;;2 devices;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

157;2014-02-23 21:12:15;;Undergraduate student;;Male;;Yes;;Standard mobile phone;;Other;;Agree;;Strongly Agree;;Never;;1 device;;Never;;Neutral;;Strongly Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

158;2014-02-23 21:17:22;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;2 devices;;Some of the time;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

159;2014-02-23 21:18:33;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Almost never;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

160;2014-02-23 21:26:17;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Neutral;;Neutral;;Neutral;;Neutral;

161;2014-02-23 22:04:33;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

162;2014-02-23 22:28:57;;Undergraduate student;Sophomore;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

163;2014-02-23 22:34:06;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

164;2014-02-23 23:17:57;;Undergraduate student;;Female;;Yes;Oak Lane;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;lap top & smart phone;Some of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

165;2014-02-24 00:06:42;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

166;2014-02-24 00:07:41;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

167;2014-02-24 00:07:50;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Neutral;;Strongly Agree;

168;2014-02-24 00:16:10;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

169;2014-02-24 00:59:15;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;When I can, I use wifi!;1 device;;Some of the time;;Strongly

Agree;;Strongly Agree;Safety is important with the past history and the way the world is today!;Strongly Agree;;Strongly Agree;;Agree;

170;2014-02-24 01:10:30;;Undergraduate student;;Male;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;

171;2014-02-24 01:13:28;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Neutral;;Neutral;;Neutral;;Neutral;;Agree;

172;2014-02-24 07:16:24;;Undergraduate

student;Sophomore;Female;;Yes;;Smartphone;;Windows;Nokia Lumia 1020;Agree;;Agree;;Some of the time;;1 device;;Most of the time;;Neutral;;Agree;;Agree;;Agree;;Disagree;

173;2014-02-24 09:18:33;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Almost never;;Neutral;;Strongly Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

174;2014-02-24 09:56:22;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Agree;;All of the time;;2 devices;;All of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

175;2014-02-24 10:26:35;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Never;;Strongly Disagree;;Agree;;Agree;;Agree;;Strongly Agree;

176;2014-02-24 10:30:30;;Undergraduate student;;Female;;No;Collegiate Suites;Smartphone;Iphone 5;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

177;2014-02-24 10:45:16;;Undergraduate student;;Female;;No;off campus;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;2 devices;;Most of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;

178;2014-02-24 11:30:02;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;;Neutral;

179;2014-02-24 11:47:58;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;

180;2014-02-24 12:11:52;;Undergraduate

student;;Female;;Yes;;Smartphone;;Android;;Agree;;Agree;;Some of the time;;1 device;;Most of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;;Agree;

181;2014-02-24 12:18:07;;Undergraduate student;;Female;;Yes;;Standard mobile phone;;Other;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

182;2014-02-24 12:19:10;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

183;2014-02-24 13:38:44;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

184;2014-02-24 13:42:39;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

185;2014-02-24 13:59:39;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

186;2014-02-24 14:48:01;;Undergraduate student;;Female;;No;Apartment off-campus;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;Laptop;Some of the time;;Agree;;Strongly Agree;;Agree;;Agree;

187;2014-02-24 14:52:46;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

188;2014-02-24 15:22:15;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;

189;2014-02-24 15:38:02;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;Android;;Agree;;Agree;;Some of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

190;2014-02-24 15:56:16;;Undergraduate student;;Female;;No;;Standard mobile phone;;Other;;Agree;;Agree;;All of the time;;1 device;;Neutral;;Neutral;;Agree;;Neutral;;Agree;

191;2014-02-24 16:20:08;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

192;2014-02-24 17:19:11;;Undergraduate student;;Male;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

193;2014-02-24 18:15:21;;Graduate student;;Female;;No;;Smartphone;;Android;;Agree;;All of the time;;1 device;;Some of the time;;Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

194;2014-02-24 18:21:49;;Graduate student;;Female;;No;;Standard mobile phone;;Other;none. my phone isn't that fancy;Disagree;;Agree;yes, but it barely has signal in my builing;Never;;O devices;;Never;;Strongly Disagree;;Disagree;;Disagree;;Neutral;

195;2014-02-24 18:49:17;;Graduate student;;Male;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Strongly Agree;;Hourtal;;Strongly Agree;;Agree;;Agree;

196;2014-02-24 19:13:18;;Graduate student;;Male;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;;All of the time;;Strongly Agree;;Neutral;;Neutral;;Agree;;Agree;

197;2014-02-24 19:35:38;;Undergraduate student;;Male;;No;;Smartphone;;Windows;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Some of the time;;Agree;;Disagree;;Disagree;;Disagree;;Disagree;;Disagree;;Disagree;;Disagree;;Disagree;;Disagree;

198;2014-02-24 20:04:59;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

199;2014-02-24 20:19:43;;Graduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

200;2014-02-24 20:23:50;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS, Windows;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

201;2014-02-24 20:27:08;;Graduate student;;Female;;Yes;;Standard mobile phone;I own a basic cellphone from 2007.;;;Agree;;Strongly Agree;;Never;My phone doesn't go online.;0 devices;;Never;not applicable;Neutral;;Strongly Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

202;2014-02-24 21:25:01;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;All of the time;;Strongly Agree;;Agree;;Neutral;;Agree;;Agree;;Agree;

203;2014-02-24 21:33:58;;Graduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

204;2014-02-24 21:52:19;;Graduate student;Its not bad;Male;I was born like this;No;Its too expensive and I feel old on campus.;Smartphone;Droid;Android;Its currently the best os on the market.;Strongly Agree;But it dies a lot.;Strongly Agree;;All of the time;;1 device;;Some of the time;;Strongly Agree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Strongly Agree;

205;2014-02-24 22:14:45;;Graduate student;;Prefer not to answer;;No;;Standard mobile phone, Smartphone, Tablet;;iOS;;Agree;;Strongly Agree;;All of the time;It connects automatically;More than 3 devices;;Some of the time;;Agree;;Neutral;;Agree;;Neutral;;Agree;;Disagree;I would want relevant (distance, type,

206;2014-02-24 22:15:55;;Undergraduate student;junior;Male;;No;maple ridge;Smartphone;;iOS;;;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;

207;2014-02-24 22:16:39;;Undergraduate student;;Male;;No;;Smartphone;;Windows;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

208;2014-02-24 22:18:54;;Undergraduate student;;Male;;Yes;;Smartphone;MacBook Pro;Android;;Agree;;Agree;;Some of the time;;2 devices;;Almost never;;Agree;;Agree;;Agree;;Agree;;Agree;

209;2014-02-24 22:18:57;;Undergraduate student;;Male;;Yes;;Smartphone;15" MacBook Pro;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

210;2014-02-24 22:20:03;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;Sometimes it doesn't connect for some reason// takes a long time to connect to the VT wireless;1 device;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

211;2014-02-24 22:20:40;;Graduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

212;2014-02-24 22:23:15;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Strongly Agree;;Neutral;The text messages serve this purpose. You would have to demonstrate some extra use in order for me to download an app that does the same as a simple text.;Agree;Refer to your past question about storage of such information. I only agree based on this.;Agree;Refer to your past question about storage of such information. I only agree based on this.;Strongly Agree;Refer to your past question about storage of such information. I only agree based on this.;Agree;They already have this?

213;2014-02-24 22:36:59;;Faculty member;I am also taking classes as a graduate student;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some

of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

214;2014-02-24 22:43:30;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

215;2014-02-24 22:45:10;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;All of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

216;2014-02-24 22:48:57;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;;;;;;2 devices;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

217;2014-02-24 22:51:02;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

218;2014-02-24 23:28:47;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;All of the time;;Strongly Agree;;Strongly Agree;;Agree;;Neutral;

219;2014-02-24 23:28:52;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

220;2014-02-24 23:34:14;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;;All of the time;;1 device;;Some of the time;;;Strongly Agree;;Strongly Agree;;Strongly Agree;

221;2014-02-24 23:43:00;;Undergraduate student;;Male;;Yes;;Standard mobile phone;I also own an iPod touch in addition to a standard mobile phone;Other;;Strongly Agree;;Strongly Agree;;All of the time;I connect my iPod touch to the campus wifi.;1 device;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

222;2014-02-24 23:46:01;;Undergraduate

student;;Male;;Yes;;Smartphone;;Android;;Agree;;Agree;;Most of the time;;2 devices;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

223;2014-02-25 00:28:22;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS, Windows;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Neutral;;Agree;;Strongly Agree;;Strongly Agree;

224;2014-02-25 00:40:53;;Graduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Neutral;

225;2014-02-25 00:45:43;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

226;2014-02-25 00:55:49;;Undergraduate student;;Female;;No;;Smartphone;Iphone 4s;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

227;2014-02-25 01:11:59;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

228;2014-02-25 01:28:01;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

229;2014-02-25 01:31:06;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Agree;;Agree;;All of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Neutral;;Disagree;;Disagree;

230;2014-02-25 01:32:05;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Agree;;Agree;;Strongly Agree;

231;2014-02-25 02:30:08;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;;0 devices;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;

232;2014-02-25 02:37:43;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Neutral;;Agree;;Agree;;Strongly Agree;;Agree;

233;2014-02-25 08:02:23;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

234;2014-02-25 08:32:58;;Staff member;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Never;;0 devices;;Some of the time;;Agree;;Strongly Agree;;Agree;;Strongly Agree;;Strongly Agree;

235;2014-02-25 09:15:20;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

236;2014-02-25 09:40:30;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

237;2014-02-25 09:56:49;;Staff member;;Male;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

238;2014-02-25 10:14:57;;Undergraduate student, Staff member;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Most of the time;;Strongly Agree;;Neutral;;Neutral;;Neutral;;Neutral;;Neutral;They already have this....

239;2014-02-25 10:35:45;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

240;2014-02-25 10:44:16;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

241;2014-02-25 10:49:23;;Graduate student;;Male;;No;;Smartphone, Tablet;;Windows;;Agree;;Agree;;Some of the time;;1 device;;Most of the time;;Agree;;Neutral;;Neutral;;Strongly Agree;;Agree;

242;2014-02-25 10:50:51;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;;2 devices;;Almost never;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;

243;2014-02-25 11:15:32;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

244;2014-02-25 11:48:54;;Graduate student;;Female;;No;;Smartphone;;Android;;Agree;;Agree;;All of the time;;1 device;;Some of the time;;Agree;;Neutral;;Agree;;Agree;;Agree;

245;2014-02-25 12:39:26;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Strongly Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

246;2014-02-25 12:42:03;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Neutral;;Strongly Agree;;Neutral;;Agree;;Strongly Agree;

247;2014-02-25 12:57:37;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;Almost never;;1 device;;Never;;Strongly Disagree;;Agree;;Neutral;;Agree;;Strongly Agree;

248;2014-02-25 13:03:38;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

249;2014-02-25 13:13:00;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;laptop kindle smartphone;Most of the time;;Agree;If the location services are required to run the application (e.g. Google maps);Strongly Agree;Absolutely!!;Strongly Agree;Sometimes when I'm walking back to my car I don't see any blue posts for emergencies. A mobile application would be great to have!;Strongly Agree;;Strongly Agree;

250;2014-02-25 13:14:43;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Neutral;;Strongly Agree;;Agree;;Agree;;Strongly Agree;

251;2014-02-25 13:24:04;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

252;2014-02-25 13:27:18;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

253;2014-02-25 13:56:24;;Graduate student;;Female;;No;;Smartphone;iPhone 5s;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;

254;2014-02-25 13:59:03;;Undergraduate student;;Female;;Yes;Oak Lane;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

255;2014-02-25 14:02:57;;Undergraduate student;sophomore;Female;;No;;Smartphone;iPhone 4s;iOS;;Strongly Agree;;Strongly Agree;;Almost never;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

256;2014-02-25 15:16:42;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

257;2014-02-25 15:34:41;;Graduate student;;Female;;No;;Standard mobile phone;;;verizon;Disagree;;Disagree;;Almost never;;1 device;;Never;;Neutral;;Agree;;Agree;;Agree;;Agree;;Agree;

258;2014-02-25 16:10:16;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;;Almost never;;Disagree;;Neutral;;Neutral;;Agree;;Agree;

259;2014-02-25 16:14:52;;Undergraduate student;;Male;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

260;2014-02-25 16:54:11;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;Android, iOS;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;;Most of the time;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

261;2014-02-25 17:06:01;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

262;2014-02-25 17:22:16;;Undergraduate student;Senior;Male;;No;Foxridge;Smartphone, Tablet;My tablet is terrible so I never use it though;Android;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;Smartphone, laptop and iPod;Some of the time;If it's a GPS, of course. Facebook, not so much.;Agree;;Strongly Agree;;Agree;I don't see how I could get campus safety alerts if they didn't know where I was or what campus I'm at.;Strongly Agree;;Strongly Agree;Obviously if something bad is near me I'd want to know!;Strongly Agree;

263;2014-02-25 17:30:02;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

264;2014-02-25 19:09:44;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Strongly Agree;;Neutral;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

265;2014-02-25 21:58:40;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Agree;;Neutral;;Neutral;;Neutral;;Agree;;Neutral;

266;2014-02-25 22:10:10;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Agree;;All of the time;;1 device;;Most of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

267;2014-02-25 22:11:14;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

268;2014-02-25 22:24:06;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;;1 device;;Almost never;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

269;2014-02-25 23:53:00;;Undergraduate student;;Male;;Yes;;Standard mobile phone;;Other;;Strongly Agree;;Never;;0 devices;;Almost never;;Agree;;Agree;;Agree;;Neutral;;Agree;;Agree;

270;2014-02-26 06:10:35;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;2 devices;;Never;Not sure what allowing applications access means.;Strongly Disagree;Not sure what allowing application access means.;Strongly Agree;;Agree;Not sure what allowing application access means.;Agree;Not sure what allowing application access means.;Agree;Not sure what allowing application access means.;Strongly Agree;

271;2014-02-26 06:11:27;;Faculty member;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;;Some of the time;;Neutral;don't care if it stores it;Agree;;Agree;;Strongly Agree;;Agree;

272;2014-02-26 06:46:26;;Faculty member;;Female;;No;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;More than 3 devices;;Most of the time;;Strongly Agree;;Agree;;Neutral;;Neutral;;Agree;

273;2014-02-26 07:45:10;;Faculty member;;Male;;No;;Smartphone, Tablet;;iOS, Other;;Strongly Agree;I forward my office telephone to my mobile telephone.;Strongly Agree;;All of the time;;3 devices;;Almost never;I want privacy.;Agree;But how would I know?;Disagree;SMS text message works just fine.;Neutral;I want privacy other than in an emergency.;Neutral;;Neutral;;Strongly Agree;I prefer SMS text messages because it bypassed the deluge of e-mail that I am getting all the time.

274;2014-02-26 08:19:29;;Faculty member;;Male;;No;;Smartphone;I know that it is no longer fashionable to consider laptops as mobile devices but for certain uses the above just don't cut it. I have two.;Android;Laptops: Debian Linux;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;Two are laptops.;Almost never;;Neutral;It really depends upon the application and my level of trust in the app and the developer.;Neutral;Maybe;Neutral;Maybe;Neutral;Possibly;Neutral;Possibly. Note: right now I get "Amber alerts" on my phone and I have to say that they are so annoying (for events too far away from too broad of categories and the alerts don't go away for weeks after the alert is issued).

275;2014-02-26 08:24:05;;Faculty member;;Male;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

276;2014-02-26 08:47:51;;Staff member;;Female;;No;;Standard mobile phone;;;Strongly Disagree;;Agree;;Never;;O devices;;Never;;Strongly Disagree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

277;2014-02-26 08:49:35;;Faculty member;;Male;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Strongly Agree;;Agree;;Neutral;;Agree;;Neutral;;Agree;

278;2014-02-26 08:52:44;;Staff member;I am a postdoc;Female;;No;;Smartphone, Tablet;Rarely use the tablet.;Android;;Agree;;Neutral;;Almost never;;0 devices;;Some of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

279;2014-02-26 09:10:29;;Faculty member;;Female;;No;;Smartphone, Tablet;;Android, iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

280;2014-02-26 09:13:56;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Agree;;Strongly Agree;;All of the time;;1 device;;Never;I worry about security from giving this information away.;Neutral;;Strongly Agree;I believe this is an absolute necessity;Strongly Agree;In this case, I would definitely allow it.;Strongly Agree;;Strongly Agree;

281;2014-02-26 09:24:37;;Faculty member;;Male;;No;;Smartphone, Tablet;Samsung smart phone and iPad mini;Android, iOS;;Strongly Agree;;Strongly Agree;;Never;;O devices;;Most of the time;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

282;2014-02-26 09:31:16;;Staff member;;Female;;No;;Standard mobile phone;;;none;Strongly Agree;;Never;;O devices;;Never;;Neutral;;Agree;;Agree;;Agree;;Agree;;Agree;

283;2014-02-26 09:31:21;;Graduate student;;Female;;No;;Standard mobile phone;;Other;No operating system;Disagree;;Disagree;;Never;;0 devices;;Never;;Neutral;;Neutral;;Neutral;;Neutral;;Neutral;

284;2014-02-26 09:35:51;;Faculty member;;Male;;No;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;1 device;;Most of the time;;Agree;;Strongly Agree;;Agree;;Agree;;Agree;

285;2014-02-26 09:39:58;;Graduate student;;;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

286;2014-02-26 09:42:00;;Graduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Some of the time;;2 devices;;Almost never;;Neutral;;Agree;;Neutral;;Agree;;Agree;

287;2014-02-26 09:49:47;;Graduate student, Staff member;;Female;;No;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;Some of the time;;2 devices;;Some of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

288;2014-02-26 09:51:12;;Graduate student;;Female;;No;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;Almost never;;Disagree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

289;2014-02-26 09:53:43;;Graduate student;;Female;;No;;Standard mobile phone;;Other;;Neutral;;Neutral;;Never;;O devices;;Never;N/A for anyone without a smartphone;Strongly Disagree;;Disagree;;Disagree;;Agree;;Agree;

290;2014-02-26 09:54:35;;Graduate student;;Female;;No;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Almost never;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Strongly Agree;

291;2014-02-26 10:00:12;;Graduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

292;2014-02-26 10:00:48;;Graduate student;;Male;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

293;2014-02-26 10:16:39;;Graduate student;;Prefer not to answer;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;

294;2014-02-26 10:17:12;;Graduate student;;Female;;No;;Standard mobile phone;;Other;;Agree;;Agree;;Never;;1 device;;Never;;Strongly Disagree;;Disagree;;Disagree;;Disagree;;

295;2014-02-26 10:18:44;;Graduate student;Mechanical Engineering, PhD Student;Male;;No;;Standard mobile phone;Verizon flip phone, pay-as-you go ;;It's a basic flip-phone, not a smart phone. ;Agree;;Strongly Agree;;Never;It's a flip phone, not a smart phone.;O devices;I do connect my iPod, which isn't a phone. ;Some of the time;Flip phone internet I think allows it sometimes. ;Strongly Disagree;Let's not make things too easy for the NSA. ;Strongly Disagree;Flip phone ;Strongly Disagree;Flip phone, and I'm not into letting people always know where I'm at, on campus or off ;Strongly Disagree;Flip phone ;Strongly Disagree;Flip phone, How long would it really take between letting those "in proximity" know and those not "in proximity"? ;Strongly Disagree;Email is fine by me. I choose not to get the text messages already.

296;2014-02-26 10:20:32;;Faculty member;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;;1 device;;Almost never;;Disagree;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

297;2014-02-26 10:29:34;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Agree;;Neutral;;Agree;

298;2014-02-26 10:42:11;;Graduate student;;Male;;Yes;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Agree;;Agree;;Agree;;Strongly Agree;

299;2014-02-26 10:48:54;;Graduate student;;Male;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;As long as I immediately want something that's location based, or expect a location based service from the app in future;Neutral;I cannot know whether or not someone else will keep a location that i've given them. i don't trust that they'd "not keep it";Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

300;2014-02-26 10:49:12;;Faculty member;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Never;;0 devices;Laptop only;Most of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;;Agree;

301;2014-02-26 10:55:06;;Graduate student;;Male;;No;;Smartphone;;iOS;;;;Strongly Agree;;;1 device;;;Agree;;Agree;;Neutral;;Disagree;;Neutral;;Strongly Agree;

302;2014-02-26 10:56:21;;Faculty member;;Female;;No;;Smartphone;;iOS;;Agree;;Agree;;All of the time;;2 devices;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

303;2014-02-26 11:00:10;;Graduate student;;Male;;No;;Standard mobile phone;;Other;My phone is a flip-phone.;Agree;;Strongly Agree;;Never;My phone has no wifi capability;O devices;Two laptops, no phones. Don't believe you are counting laptops in this survey;Never;N/A;Agree;;Agree;;Neutral;;Neutral;;Agree;

304;2014-02-26 11:05:04;;Graduate student;;Male;;No;;Smartphone;;Other;Symbian OS (9.1) (for Nokia N-80);Agree;;Strongly Agree;;Some of the time;;1 device;;Some of the time;;Disagree;;Neutral;VT alert is fine with me;Neutral;;Neutral;;Agree;;Agree;

305;2014-02-26 11:05:06;;Faculty member;;Male;;No;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

306;2014-02-26 11:12:13;;Graduate student;;Male;;No;I live just off campus. Walking distance.;Smartphone;HTC DNA;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;Laptop;Some of the time;Whenever I feel ok about the application's intentions.;;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;I am concerned with the wording of this question in that it suggests people who are far away from a life threatening event will not be informed.;Strongly Agree;

307;2014-02-26 11:17:37;;Undergraduate student;;Female;;No;I live in an apartment off campus.;Smartphone;Iphone 4;iOS;;Agree;;Strongly Agree;;Some of the time;;1 device;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

308;2014-02-26 11:37:53;;Faculty member;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

309;2014-02-26 12:35:20;;;AP faculty;Female;;No;;Standard mobile phone, Smartphone;;Android;;Agree;;Agree;;Most of the time;;1 device;;Never;;Neutral;;Neutral;;Agree;;Strongly Agree;;Agree;

310;2014-02-26 12:43:06;;Graduate student;;Female;;No;I did for 4 years during undergrad, but have been off campus all 3 years of graduate school.;Standard mobile phone;;Other;Not sure what OS it has, but it doesn't have a touch screen if that gives you any clues.;Strongly Agree;;Strongly Agree;;Never;;1 device;Laptop;All of the time;My phone (not a smartphone) has tracking capability to help 911 responders find me. When I use google on my laptop it knows where I am.;Agree;;Strongly Agree;;Agree;;Neutral;I don't see the connection between my location and the speed with which alerts reach me.;Strongly Agree;;Strongly Agree;

311;2014-02-26 12:51:08;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

312;2014-02-26 13:00:06;;Undergraduate

student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Never;;1 device;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;

313;2014-02-26 13:25:13;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

314;2014-02-26 13:29:27;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

316;2014-02-26 13:31:32;;Faculty member;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

317;2014-02-26 13:42:01;;Graduate student;Research assistant in the ME dept;Male;;No;South Main, libery lane.;Smartphone;samsung galaxy s3;Android;;Agree;sometimes i forget it at home or leave it to charge. it is off while i sleep too.;Agree;;Never;I never did set that up....;1 device;my computer;All of the

time;Its not like someone couldn't find out where you are anyway if you have location services off.;Strongly Agree;;Disagree;I already get vt alerts sent to my phone i don't need another app for it.;Agree;;Agree;;Agree;If i was allowed to carry on campus it wouldn't be a problem.;Strongly Agree;I already have this service:)

318;2014-02-26 14:10:14;;Graduate student;;Male;;;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

319;2014-02-26 14:10:56;;Undergraduate student;;Female;;Yes;Greek Community at Oak Lane;Smartphone;iPhone;iOS;;Agree;;Strongly Agree;;Some of the time;;1 device;;All of the time;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

320;2014-02-26 14:12:22;;Undergraduate student;;Prefer not to answer;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;Phone + laptop;Some of the time;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

321;2014-02-26 14:15:10;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;3 devices;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

322;2014-02-26 14:32:44;;Faculty member;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

323;2014-02-26 15:07:16;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

324;2014-02-26 15:53:27;;Undergraduate student;;Female;;Yes;I live in Pritchard.;Smartphone, Tablet;Iphone 4s and a Nexus 7 tablet.;Android, iOS;;Strongly Agree;;Agree;When getting "to go" food from the dining halls, I tend to leave my phone in the dorm room.;All of the time;When available. There is neither service nor wifi in Pritchard.;2 devices;;Some of the time;Location services for maps, weather, and running applications only.;Neutral;;Agree;;Agree;If the location services was utilized for the alert function.;Strongly Agree;;Strongly Agree;;Strongly Agree;Currently I rarely receive text alerts because of the poor reception on campus with AT&T.

325;2014-02-26 16:20:07;;Faculty member;;Female;;No;;Smartphone, Tablet;;Android, iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

326;2014-02-26 16:49:37;;Graduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

327;2014-02-26 17:04:55;;Faculty member;;Male;;No;;Smartphone;;Android;;Agree;;Agree;;All of the time;;1 device;;Most of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

328;2014-02-26 17:44:04;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;Android, iOS;My phone is an andriod but I also have and Ipad;Strongly Agree;;Agree;;All of the time;;2 devices;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;

329;2014-02-26 17:47:27;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;Never;;0 devices;;Never;;Disagree;;Disagree;;Disagree;;Disagree;;Agree;

330;2014-02-26 18:28:36;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;There is a required download in order to get on the campus wifi.;1 device;Computer;All of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

331;2014-02-26 19:24:50;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

332;2014-02-26 19:48:12;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

333;2014-02-26 21:18:24;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;3 devices;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;;Agree;

334;2014-02-26 21:36:19;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

335;2014-02-26 21:37:14;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

336;2014-02-26 22:14:14;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;2 devices;;Some of the time;;Neutral;;Neutral;;Neutral;;Neutral;

337;2014-02-26 23:22:15;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

338;2014-02-26 23:35:46;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;All of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

339;2014-02-27 07:58:57;;Graduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Almost never;;Neutral;;Strongly Agree;;Agree;;Agree;;Agree;;Neutral;We already have the text alert feature that doesn't require a 3rd-party app.

340;2014-02-27 08:10:56;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Neutral;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;

341;2014-02-27 08:26:11;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

342;2014-02-27 08:43:36;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Neutral;;Neutral;;Strongly Agree;

343;2014-02-27 09:24:38;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

344;2014-02-27 10:54:57;;Graduate student;;Male;;No;;Smartphone, Tablet;;Android, Windows;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;

345;2014-02-27 11:38:07;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;;Almost never;;Disagree;;Strongly Agree;;Disagree;;Neutral;;Agree;;Strongly Agree;

346;2014-02-27 11:52:00;;Undergraduate student;;Male;;No;Off campus apartment;Standard mobile phone;;Android;;Strongly Agree;Like 95 percent of the time this true;Strongly Agree;;Some of the time;My service provider is AT&T, and it's hit or miss out here, so I do that sometimes but not often.;1 device;;Almost never;When I see programs, apps or whatever asking to use my phone's location, I usually say no.;Neutral;Maybe. I tend to shy away from that though, if I can anyway.;Agree;;Disagree;I again, I don't know, probably not, especially if there's ANY other form of alert possible without my location.;Disagree;Not unless it was the only alternative;Neutral;Depends, if i'm ever close enough to a life threatening situation, i would hope i'd be able to figure that out without an update from an app.;Agree;If it's not using my location than by all means, yeah.

347;2014-02-27 11:56:17;;Faculty member;;Male;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

348;2014-02-27 12:31:58;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

349;2014-02-27 12:35:06;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;iPhone and Tablet/PC;All of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

350;2014-02-27 12:57:30;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

351;2014-02-27 13:01:38;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

352;2014-02-27 13:02:36;;Undergraduate student;;Female;;Yes;;Smartphone;;;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Agree;;Neutral;;Strongly Disagree;;Agree;
Disagree;;Agree;

353;2014-02-27 13:04:52;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;1 device;;Almost never;;Neutral;;Neutral;;Agree;;Agree;;Strongly Agree;

354;2014-02-27 13:11:00;;Graduate student;;Male;;No;;Smartphone;;iOS;;Disagree;;Strongly Agree;;All of the time;;I device;I would like to consider my laptop a mobile device, but I guess I will not, considering it was not listed above. So the one mobile device I connect to the campus network is my phone.;Most of the time;I allow most applications to access my location, but I would prefer that facebook does not access my location.;Strongly Agree;We may not be aware that a company is storing our location outside of our device though.;Strongly Agree;;Strongly Agree;Yes, but I would want to make sure that I was informed of the alert even if the application was not running. And I wouldn't want the application to drain my battery. Receiving a text message about the alert would be useful. However I typically have my phone on silent mode when I am on campus, so I would not be aware of this text message if it was sent to me. However, I would look up at the display screen at the front of the room if it was flashing.;Strongly Agree;;Strongly Agree;

355;2014-02-27 14:14:51;;Undergraduate student;;Female;;Yes;Special Purpose Housing in Oak Lane;Smartphone;;iOS;;Agree;;Agree;;Some of the time;;2 devices;Computer and phone, mostly computer;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

356;2014-02-27 14:16:54;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

357;2014-02-27 14:22:58;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

358;2014-02-27 15:25:28;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Agree;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

359;2014-02-27 15:54:34;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Neutral;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;

360;2014-02-27 17:27:03;;Undergraduate student;;Female;;Yes;;Standard mobile phone;;Other;;Strongly Agree;;Strongly Agree;;Never;;1 device;;Never;;Disagree;;Agree;;Agree;;Agree;;Agree;;Agree;

361;2014-02-27 18:47:13;;Undergraduate student;Freshman;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

362;2014-02-27 18:59:42;;Undergraduate student;Sophomore;Female;;No;;Smartphone;iphone 5s;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Neutral;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

363;2014-02-27 19:01:18;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

364;2014-02-27 19:03:48;;Undergraduate student;;Female;;No;;Standard mobile phone;;iOS;;Strongly Agree;;;Almost never;;1 device;;Some of the time;;Neutral;;Agree;;Agree;;Strongly Agree;;Agree;

365;2014-02-27 22:33:24;;Graduate student;;Male;;No;;Standard mobile phone;;Other;;Strongly Agree;;Strongly Agree;;Never;;O devices;;Never;;Strongly Disagree;;Neutral;;Neutral;;Neutral;;Neutral;

366;2014-02-27 22:33:38;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Almost never;;1 device;;Almost never;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

367;2014-02-27 23:57:55;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;;All of the time;;2 devices;;All of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

368;2014-02-28 00:24:47;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Agree;;Strongly Agree;;Almost never;;1 device;;Some of the time;;Neutral;;Strongly Agree;;Neutral;;Disagree;;Strongly Agree;

369;2014-02-28 02:36:38;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

370;2014-02-28 08:36:32;;Faculty member;;Female;;No;;Smartphone, Tablet;;Android, iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

371;2014-02-28 12:44:15;;Undergraduate student;;Female;;Yes;Oak Lane;Smartphone;iPhone 5;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

372;2014-02-28 13:05:03;;Graduate student;Currently on my first semester on leave of absence;Male;;No;;Smartphone;;Android;;Strongly Agree;It's my personal assistant;Strongly Agree;;All of the time;Especially because I have T-Mobile and their wi-fi access allows me the same capabilities as having service elsewhere sin wi-fi;1 device;;Some of the time;It usually depends for what app I use, weather, yes, The Post, no;Agree;;Neutral;I'm fine with texts and emails, no need to waste space on my internal hard drive for such an app;Agree;;Neutral;;Neutral;;Strongly Agree;I assume this is a text/email version

373;2014-02-28 17:02:57;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;;Strongly Agree;

374;2014-02-28 17:23:41;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Strongly Agree;;Neutral;;Neutral;;Agree;;Neutral;

375;2014-02-28 17:45:15;;Faculty member;;Male;;No;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Most of the time;;Neutral;;Strongly Disagree;Already have VT alerts.;Neutral;;Disagree;;Disagree;;Neutral;

376;2014-02-28 20:37:08;;Undergraduate student;;Female;;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;

377;2014-02-28 21:11:25;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;1 device;;All of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

378;2014-02-28 21:29:43;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

379;2014-03-01 11:15:44;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

380;2014-03-01 11:47:29;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

381;2014-03-01 12:08:14;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;;iOS, Windows;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;

382;2014-03-01 12:40:17;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;Agree;;Agree;;All of the time;;2 devices;;Almost never;;Neutral;;Agree;;Agree;;Agree;;Agree;

383;2014-03-01 13:29:22;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

384;2014-03-01 13:32:12;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

385;2014-03-01 13:53:58;;Undergraduate student;;Female;;Yes;;Smartphone;;Windows;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

386;2014-03-01 15:00:04;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

387;2014-03-01 15:28:02;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

388;2014-03-01 16:36:44;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;1 device;;All of the time;;Agree;;Neutral;;Agree;;Agree;;Strongly Agree;
Agree;

389;2014-03-02 09:16:57;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Almost never;;Neutral;;Agree;;Strongly Agree;;Strongly Agree;

390;2014-03-02 11:23:27;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;;0 devices;;Some of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

391;2014-03-02 11:57:49;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Strongly Agree;;Neutral;Do we not already get campus alerts through texts/emails?;Agree;;Strongly Agree;;Strongly Agree;

392;2014-03-02 12:22:39;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Neutral;;Neutral;;Neutral;;Agree;;Agree;

393;2014-03-02 12:36:18;;Graduate student;;Male;;No;;Smartphone;;Windows;;Strongly Agree;;Strongly Agree;;All of the time;Phone is set to connect to campus Wi-Fi where available.;1 device;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

394;2014-03-02 14:29:09;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

395;2014-03-02 14:59:57;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

396;2014-03-02 15:18:53;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Strongly Agree;;Agree;;Agree;;Strongly Agree;

397;2014-03-02 15:21:08;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

398;2014-03-02 15:27:17;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;3 devices;;Almost never;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

399;2014-03-02 15:45:44;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Some of the time;;2 devices;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;

400;2014-03-02 18:22:38;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS, Windows;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;All of the time;;Agree;;Strongly Agree;;Strongly Agree;

401;2014-03-02 19:17:08;;Undergraduate student;I am a transfer student from Radford University.;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;It is too hard and I have no idea how to log in. If I knew how to do it I would do this all of the time.;0 devices;;Some of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

402;2014-03-02 20:04:47;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

403;2014-03-02 20:11:04;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

404;2014-03-02 20:41:10;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;;Android, iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Almost never;;Strongly Disagree;;Agree;;Strongly Agree;;Strongly Agree;

405;2014-03-02 20:54:15;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;my phone and my macbook;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

406;2014-03-02 21:40:58;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;

407;2014-03-02 22:12:12;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

408;2014-03-02 22:12:23;;Undergraduate student;;Female;;Yes;;Standard mobile phone;;Other;;Agree;;Never;;O devices;;Never;;Strongly Disagree;;Neutral;;Disagree;;Neutral;;Strongly Agree;

409;2014-03-02 23:17:57;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

410;2014-03-03 09:20:30;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

411;2014-03-03 10:11:47;;Undergraduate

student;;Male;;Yes;;Smartphone;;Android;;Agree;;Agree;;Some of the time;;1 device;;Almost never;;Neutral;;Neutral;;Agree;;Agree;;Agree;

412;2014-03-03 10:39:57;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;Almost never;;O devices;;Almost never;;Disagree;;Agree;;Agree;;Agree;;Agree;

413;2014-03-03 11:12:20;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS, Other;iphone, samsung tablet;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

414;2014-03-03 11:19:28;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

415;2014-03-03 11:25:10;;Undergraduate student;;Female;;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Neutral;;Disagree;;Disagree;;Agree;;Agree;;Disagree;

416;2014-03-03 11:26:56;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Almost never;;Agree;;Strongly Agree;;Neutral;;Agree;;Agree;;Strongly Agree;

417;2014-03-03 11:29:18;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

418;2014-03-03 11:31:45;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Neutral;Didn't have a phone for more than 4 months. Just got my new phone a few weeks ago. I keep this phone with me at all times.;Agree;;Never;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

419;2014-03-03 11:37:27;;Undergraduate student;;Female;;Yes;;Smartphone;Galaxy S3;Android;;Agree;;Almost never;It does not work well on my phone.;0 devices;;Some of the time;;Agree;;Disagree;;Neutral;;Agree;;Agree;

420;2014-03-03 11:45:15;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Neutral;;Agree;;Agree;;Neutral;;Agree;;Strongly Agree;

421;2014-03-03 12:02:22;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

422;2014-03-03 12:05:43;;Graduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

423;2014-03-03 12:07:39;;Graduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;All of the time while on campus.;1 device;;Some of the time;;Disagree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

424;2014-03-03 12:08:45;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

425;2014-03-03 12:24:42;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;;1 device;;All of the time;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

426;2014-03-03 12:33:15;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Some of the time;;2 devices;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

427;2014-03-03 12:39:13;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

428;2014-03-03 12:39:32;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

429;2014-03-03 12:44:34;;Graduate student;;Female;;Yes;;Smartphone, Tablet;Glaxy S4 and Ipad;Android, iOS;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Never;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;if it does not store my data or access any other information which will end up as adverts on my facebook wall

430;2014-03-03 13:02:35;;Graduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Never;;0 devices;;Some of the time;;Neutral;;Strongly Disagree;;Disagree;;Disagree;;Neutral;;Agree;

431;2014-03-03 13:15:41;;Graduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

432;2014-03-03 13:20:07;;Graduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Agree;;Almost never;;0 devices;;All of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

433;2014-03-03 13:34:05;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

434;2014-03-03 13:35:20;;Undergraduate student;;Female;;No;Off-campus;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

435;2014-03-03 14:22:04;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Agree;

436;2014-03-03 14:41:34;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

437;2014-03-03 14:45:14;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

438;2014-03-03 14:47:08;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

439;2014-03-03 15:24:14;;Graduate student;;Male;;No;;Standard mobile phone,
Smartphone;;Android;;Disagree;;Disagree;;Some of the time;;1 device;;Almost
never;;Disagree;;Agree;;Disagree;;Disagree;;Disagree;The benefit of the greater good for some cases
does not justify the risk for dis-benefit of other cases. Please think wider when you are developing this
app. I know that immediate goal of development is to make people safer. And you have started with a
noble goal so I recognize your good intentions. But remember - a way to hell is paved with good
intentions. If you consider the long term effects, this app can be made in many different ways. So you
need to think about the long term effect ON PEOPLE from this app. For example, what if people do not
even bother learning what buildings are around them? What if they do not even bother learning how to
use the emergency exit? Or fire extinguisher? Or to think solely about their own safety? So they all end
up running in the same direction, and push each other down the stairs? Think how the app can develop
cooperative behavior instead of behavior like game-theoretic zero-sum. Because, after all, smart
technology was never intended to create dump people. So lets keep it that way. Keep up the good
work. ;Agree;

440;2014-03-03 17:17:14;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Agree;;Neutral;;Disagree;;Disagree;;Neutral;;Strongly Agree;

441;2014-03-03 17:29:16;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;

442;2014-03-03 17:29:42;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;

443;2014-03-03 17:40:15;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

444;2014-03-03 17:53:29;;Undergraduate student;;Female;;Yes;;Standard mobile phone;;Other;;Agree;;Agree;;Never;;O devices;;Never;;Neutral;;Agree;;Agree;;Agree;;Agree;

445;2014-03-03 18:17:08;;Undergraduate student;;Female;;No;;Standard mobile phone;Also itouch 5 that I get apps on.;iOS;;Neutral;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Strongly Agree;;Agree;;Strongly Agree;

446;2014-03-03 18:41:25;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

447;2014-03-03 21:28:07;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;Android, iOS;;Agree;;Strongly Agree;;Most of the time;;2 devices;;Almost never;I do not like it when places say where I am all the time. This is creepy and I would not want someone to rob my apartment or home or for someone to stalk me if they wanted to.;Agree;;Strongly Agree;;Agree;;Agree;;Strongly Agree;

448;2014-03-03 23:56:31;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

449;2014-03-04 00:18:35;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

450;2014-03-04 11:02:18;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

451;2014-03-04 11:12:43;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;

452;2014-03-04 12:47:44;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

453;2014-03-04 12:51:41;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;3 devices;;Almost never;;Agree;;Agree;;Agree;;Neutral;;Strongly Agree;;Agree;

454;2014-03-04 13:19:13;;Undergraduate student;;Female;;;;Smartphone;;Android;;Agree;;Strongly Agree;;Some of the time;;1 device;;Almost never;;Disagree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

455;2014-03-04 13:44:54;;Undergraduate student;;Female;;No;;;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Almost never;;Neutral;;Agree;Agree

456;2014-03-04 13:49:54;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

457;2014-03-04 14:07:55;;Undergraduate student;;Female;;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;2 devices;;Never;;Strongly Disagree;;Agree;;Neutral;;Neutral;;Strongly Agree;;Agree;

458;2014-03-04 16:30:36;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Strongly Agree;;Agree;;Agree;;Strongly Agree;

459;2014-03-04 17:07:46;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

460;2014-03-04 17:12:26;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

461;2014-03-04 18:05:25;;Undergraduate student;I am a freshman accounting major;Male;.....;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Never;;0 devices;;Some of the time;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;

462;2014-03-04 18:33:01;;Undergraduate student;Junior;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

463;2014-03-04 19:13:23;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Neutral;;Strongly Agree;;Agree;;Strongly Agree;;Strongly Agree;

464;2014-03-04 19:55:24;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

465;2014-03-04 20:04:05;;Undergraduate student;;Female;;No;;Standard mobile phone;;Other;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Never;;Disagree;;Agree;;Agree;;Agree;;Agree;

466;2014-03-04 20:10:08;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

467;2014-03-04 23:03:09;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

468;2014-03-04 23:18:28;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

469;2014-03-05 09:54:49;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Strongly Agree;;Agree;;Agree;;Agree;;Neutral;

470;2014-03-05 10:22:08;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

471;2014-03-05 11:28:39;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

472;2014-03-05 13:50:43;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

473;2014-03-05 14:33:30;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

474;2014-03-05 15:33:01;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;;Most of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

475;2014-03-05 16:20:52;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

476;2014-03-05 22:49:37;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;3 devices;;Some of the time;;Neutral;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

477;2014-03-05 23:25:21;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

478;2014-03-06 02:01:22;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Disagree;;Neutral;;All of the time;;2 devices;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

479;2014-03-06 08:11:01;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

480;2014-03-06 11:14:34;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

481;2014-03-06 12:33:47;;Undergraduate student;;Female;;Yes;;Smartphone,
Tablet;;iOS;;Agree;;Agree;;Most of the time;I use a router in my dorm because I don't get wifi there;1
device;;Some of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

482;2014-03-06 12:39:21;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

483;2014-03-06 12:40:32;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

484;2014-03-06 14:25:40;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

485;2014-03-06 14:30:15;;Undergraduate student;;Male;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

486;2014-03-06 14:38:12;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;Almost always;Strongly Agree;;All of the time;;1 device;;Almost never;;Neutral;;Strongly Agree;;Agree;;Strongly Agree;;Strongly Agree;

487;2014-03-06 17:25:34;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

488;2014-03-06 18:11:05;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

489;2014-03-06 20:15:48;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

490;2014-03-07 05:50:50;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Almost never;;1 device;;Almost never;;Neutral;Dependent on the provider of the application;Strongly Agree;;Strongly Agree;;Strongly Agree;

491;2014-03-07 12:45:07;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

492;2014-03-07 15:11:59;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

493;2014-03-08 01:33:04;;Undergraduate student;;Female;;No;;Standard mobile phone, Tablet;;Windows;For my tablet. I am not sure about my phone since it is not a smart phone.;Agree;;Agree;;All of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

494;2014-03-08 11:47:22;;Graduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

495;2014-03-08 14:13:11;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

496;2014-03-08 23:37:24;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;All of the time;;3 devices;;Most of the time;;Agree;;Strongly Agree;;Neutral;;Agree;;Strongly Agree;
Agree;

497;2014-03-09 18:02:58;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Neutral;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

498;2014-03-09 22:35:21;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

499;2014-03-09 23:49:47;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Some of the time;;2 devices;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

500;2014-03-10 11:36:39;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

501;2014-03-10 11:39:29;;Graduate student;;Male;;No;;Smartphone, Tablet;;Android, iOS;;Agree;;All of the time;;3 devices;;Some of the time;;Neutral;;Disagree;This service is already provided by Virginia Tech via SMS and e-mail. The existing service is adequate in that it concisely communicates alerts to students.;Neutral;Perhaps, this question is too vague for me to agree or disagree. For example, would first responders have access to student locations? Knowing who would have access to location information and how the information could be used (and not used) are an important criteria for answering this question accurately.;Neutral;;Neutral;Why would proximity to a life-threatning event be used to discriminate who receives a warning? This could be construed as inadequate alerts being sent people on campus, and could reduce faith in the alert system as many users may want to be notified of any/all alerts so that they can avoid going to campus of an emergency situation is unfolding.;Agree;This service is already provided via SMS and e-mail through VT alerts.

502;2014-03-10 11:52:18;;Staff member;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

503;2014-03-10 12:50:39;;Undergraduate student;;Male;;No;Off-campus apartment.;Smartphone;iPhone;iOS;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

504;2014-03-10 14:19:47;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Some of the time;;2 devices;iPhone and Mac;Most of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

505;2014-03-10 16:41:07;;Staff member;;Female;;No;;Smartphone, Tablet;;Android, iOS;;Strongly Agree;;Strongly Agree;;Almost never;;1 device;I will connect my work/office iPad on occasion. Never my

personal devices.;Almost never;;Neutral;;Agree;;Agree;;Agree;;Agree;;Agree;This already happens with VT Alerts...

506;2014-03-10 17:39:38;;Graduate student;;Female;;No;;Smartphone;;iOS;;Agree;I occasionally forget it, but the only time I intentionally don't have it with me is when I go dancing.;Strongly Agree;;All of the time;;1 device;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

507;2014-03-10 17:40:13;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

508;2014-03-10 21:56:51;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Strongly Agree;;Neutral;i don't like having a lot of apps, i nobly download those i actually use.;Neutral;;Neutral;i don't want a tracking device on my phone but perhaps it could be useful.;Neutral;this is nice but shouldn't the whole campus just be alerted anyway? ;Agree;i think all students and faculty should be sent alerts.

509;2014-03-10 22:58:38;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

510;2014-03-12 10:22:49;;Graduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;;0 devices;;Some of the time;;Agree;;Disagree;;Neutral;;Agree;;Disagree;

511;2014-03-12 13:06:16;;Graduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Neutral;;Agree;;Neutral;;Neutral;;Agree;

512;2014-03-12 14:00:30;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;iPhone 5 iPad 2 Driod 2;Android, iOS;;Strongly Agree;;Strongly Agree;;All of the time;;More than 3 devices;;Most of the time;Use when needing directions or searching for things near me. Selectively grant permission.;Neutral;I do not pay attention to which applications store location information outside of my device so i assume all do it anyway,;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;Sounds like a great idea;Strongly Agree;

513;2014-03-12 20:29:12;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Never;;1 device;My macbook.;Most of the time;;Neutral;;Strongly Agree;;Agree;;Strongly Agree;;Strongly Agree;

514;2014-03-12 21:21:13;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

515;2014-03-13 20:03:54;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;;Strongly Agree;

516;2014-03-13 21:14:12;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Almost never;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

517;2014-03-13 23:30:04;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

518;2014-03-14 14:55:28;;Undergraduate student;;Male;;Yes;;Standard mobile phone;;Other;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

519;2014-03-14 18:40:08;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;All of the time;;1 device;;All of the time;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;

520;2014-03-14 22:36:19;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Never;;Strongly Disagree;;Neutral;VT Alerts already texts and emails me... why would I need another app that is third party?;Strongly Disagree;HAHAHA. That's a joke. I would never allow a openly allow a third party app to collect my location data even if it helped fight poverty.;Strongly Disagree;Again, never.;Strongly Disagree;;Strongly Disagree;If it is third party, I really couldn't care less. If gunshots are audible, then I know I'm in danger and can protect myself. If gunshots are not audible, then I'm not in danger. Besides, what the fuck is an app going to do to protect me? Nothing.

521;2014-03-15 23:09:49;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

522;2014-03-16 12:22:06;;Undergraduate student;;Female;;Yes;Sorority House;Smartphone, Tablet;;iOS;iOS on my tablet and smart phone;Strongly Agree;;Strongly Agree;;All of the time;;More than 3 devices;computer, tablet, nook, phone;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

523;2014-03-16 14:48:11;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;2 devices;;Almost never;;Disagree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

524;2014-03-16 17:41:06;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

525;2014-03-16 20:49:56;;Undergraduate student;;Female;;No;;Standard mobile phone;;Other;none;Disagree;I leave it at home often.;Agree;I have it with me sometimes, not always.;Never;;O devices;;Never;;Strongly Disagree;;Neutral;;Neutral;;Neutral;;Agree;

526;2014-03-16 22:41:17;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Agree;;All of the time;;1 device;;All of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

527;2014-03-17 10:17:54;;Undergraduate student;;Female;;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

528;2014-03-17 10:46:34;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Agree;;Strongly Agree;;Some of the time;;1 device;;Most of the time;;Agree;;Strongly Agree;;Agree;;Neutral;;Strongly Agree;;Agree;

529;2014-03-17 11:08:19;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Agree;;All of the time;;2 devices;;Some of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

530;2014-03-17 11:20:18;;Undergraduate student;;Female;;Yes;;Standard mobile phone;;Windows;;Agree;;Agree;;Never;;0 devices;;Almost never;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;

531;2014-03-17 11:24:10;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

532;2014-03-17 11:35:52;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

533;2014-03-17 11:36:27;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Neutral;

534;2014-03-17 12:07:23;;Undergraduate

student;;Male;;No;;Smartphone;iPhone;iOS;;Agree;;Agree;;Some of the time;;2 devices;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

535;2014-03-17 14:51:56;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

536;2014-03-17 17:17:14;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

537;2014-03-17 18:50:55;;Undergraduate student;;Male;;Yes;;Smartphone;Iphone 5s;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

538;2014-03-17 20:29:40;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;;Android, iOS;;Strongly Agree;;Some of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

539;2014-03-17 20:55:29;;Undergraduate

student;;Female;;Yes;;Smartphone;;Android;;Neutral;;Neutral;;Most of the time;;2 devices;;Some of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;

540;2014-03-17 21:01:09;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS, Windows;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

541;2014-03-18 09:46:32;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Strongly Agree;

542;2014-03-18 10:30:46;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;

543;2014-03-18 11:50:20;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

544;2014-03-18 12:43:52;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

545;2014-03-18 12:49:23;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Agree;;Agree;;Most of the time;;2 devices;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

546;2014-03-18 13:10:15;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

547;2014-03-18 14:10:07;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Some of the time;;2 devices;;Almost never;;Neutral;;Strongly Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

548;2014-03-18 14:15:45;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;;Agree;

549;2014-03-18 14:45:15;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Most of the time;;Agree;;Neutral;;Agree;;Neutral;;Neutral;;Neutral;

550;2014-03-18 16:07:38;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Neutral;;Agree;;Most of the time;;2 devices;;Almost never;;Agree;;Agree;;Agree;;Agree;;Agree;

551;2014-03-18 16:26:05;;Undergraduate student;;Female;;No;;Smartphone;;Windows;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

552;2014-03-18 18:14:19;;Undergraduate student;;Female;;Yes;;Standard mobile phone;I use my phone only for texting or calling others. I don't use any apps, send email, surf the web, etc. I check my phone maybe 1-2 times a day.;Other;Not a smart phone.;Agree;;Strongly Agree;;Never;;1 device;iPod Touch;Never;;Strongly Disagree;;Strongly Agree;;Neutral;;Agree;;Strongly Agree;

553;2014-03-18 18:20:08;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

554;2014-03-18 21:27:52;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;The second being my laptop in class or somewhere else on campus rather than my dorm room;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

555;2014-03-18 22:09:56;;Undergraduate student;;Female;;Yes;;Standard mobile phone;;Other;;Strongly Agree;;Strongly Agree;;Never;;O devices;;Almost never;;Agree;;Strongly Agree;;Neutral;;Agree;;Agree;;Strongly Agree;

556;2014-03-18 23:42:35;;Undergraduate student;;Male;;No;;Standard mobile phone, Tablet;;Android, Windows;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;All of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

557;2014-03-19 11:58:24;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

558;2014-03-19 12:42:36;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

559;2014-03-19 15:01:56;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Disagree;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;

560;2014-03-19 15:02:41;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

561;2014-03-19 19:40:59;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

562;2014-03-19 21:51:21;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

563;2014-03-20 10:16:13;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

564;2014-03-20 10:53:50;;Undergraduate student;;Female;;Yes;I live in a sorority house on Oak Lane;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

565;2014-03-20 11:52:54;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

566;2014-03-20 12:33:57;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

567;2014-03-20 13:55:16;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

568;2014-03-20 15:49:34;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

569;2014-03-20 20:06:37;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;Cannot function if I don't have it on me or know where it is!;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

570;2014-03-20 21:06:53;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

571;2014-03-20 22:09:25;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

572;2014-03-20 22:30:55;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Agree;;All of the time;;1 device;;Some of the time;;Agree;Agree;Agr

573;2014-03-21 10:08:14;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;1 device;;All of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;
Agree;

574;2014-03-21 16:17:32;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

575;2014-03-23 11:41:46;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

576;2014-03-23 17:30:33;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

577;2014-03-23 17:44:31;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

578;2014-03-23 19:38:09;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

579;2014-03-23 20:35:35;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;

580;2014-03-23 21:15:08;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

581;2014-03-23 21:21:29;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Almost never;;Neutral;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

582;2014-03-23 22:59:42;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;Android, iOS;iPhone uses iOS, Kindle uses Android;Strongly Agree;;Strongly Agree;;Most of the time;Sometimes the campus wifi sucks and 3G is better;1 device;I don't usually connect my Kindle;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

583;2014-03-23 23:51:28;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

584;2014-03-24 00:09:35;;Undergraduate student;;Female;;Yes;;Smartphone;iPhone 4S;iOS;;Agree;;Agree;;Most of the time;;2 devices;phone and laptop;Some of the time;;Neutral;;Neutral;;Neutral;;Agree;

585;2014-03-24 00:35:20;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

586;2014-03-24 09:17:15;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;Except at work;Strongly Agree;Except while I am working;All of the time;;3 devices;;Almost never;;Strongly Disagree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

587;2014-03-24 11:57:15;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

588;2014-03-24 12:43:59;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

589;2014-03-24 12:49:59;;Undergraduate student;Freshman;Female;;Yes;;Smartphone;iPhone 4s;iOS;iOS 6;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;I don't always like to but some apps require it.;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

590;2014-03-24 13:24:35;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;

591;2014-03-24 16:29:58;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;Almost never;;Agree;;Agree;;Agree;;Agree;;Disagree;

592;2014-03-24 17:02:14;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Almost never;;Agree;;Neutral;;Neutral;;Agree;;Agree;

593;2014-03-24 18:31:04;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Never;;O devices;;Almost never;;Disagree;;Agree;;Disagree;;Disagree;;Agree;

594;2014-03-24 19:15:53;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

595;2014-03-24 21:47:32;;Undergraduate student;;Female;;No;;Smartphone,
Tablet;;iOS;;Agree;;Strongly Agree;;Most of the time;;2 devices;;Almost never;;Disagree;;Strongly Agree;;Neutral;;Agree;;Agree;;Strongly Agree;

596;2014-03-24 22:04:03;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

597;2014-03-24 23:12:53;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;
Agree;

598;2014-03-25 00:07:51;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Neutral;;Strongly Agree;;Agree;;Strongly Agree;;Agree;

599;2014-03-25 01:35:15;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;2 devices;;Some of the time;;Disagree;;Strongly Agree;;Neutral;;Strongly Agree;;Agree;

600;2014-03-25 09:54:47;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

601;2014-03-25 11:28:29;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

602;2014-03-25 11:45:24;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

603;2014-03-25 11:54:12;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;3 devices;;Most of the time;;Strongly Agree;;Strongly Agree;;Agree;

604;2014-03-25 14:22:57;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Neutral;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

605;2014-03-25 16:28:39;;Undergraduate

student;;Female;;No;;Smartphone;;iOS;;Disagree;;Agree;;Some of the time;;1 device;;Almost never;Only when I'm using Google Maps;Disagree;;Strongly Agree;;Neutral;;Neutral;;Strongly Agree;

606;2014-03-25 18:14:58;;Undergraduate

student;;Female;;Yes;;Smartphone;;Android;;Agree;;Agree;;Some of the time;;1 device;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;;Agree;

607;2014-03-25 18:32:56;;Undergraduate student;;Female;;Yes;;Smartphone;Galaxy S3;Android;;Strongly Agree;;Strongly Agree;;Almost never;4G;1 device;Laptop;Never;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

608;2014-03-25 23:24:06;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;2 devices;;Almost never;;Strongly Disagree;;Neutral;;Strongly Disagree;;Strongly Agree;

609;2014-03-26 01:12:30;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

610;2014-03-26 09:17:30;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

611;2014-03-26 10:15:05;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

612;2014-03-26 12:41:44;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;1 device;;Almost never;;Neutral;;Neutral;;Agree;;Strongly Agree;;Agree;

613;2014-03-26 14:03:13;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

614;2014-03-26 14:40:56;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

615;2014-03-26 19:10:45;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

616;2014-03-26 20:53:15;;Undergraduate student;;Male;;No;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Almost never;;Disagree;;Strongly Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

617;2014-03-26 23:11:51;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

618;2014-03-27 00:10:42;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

619;2014-03-27 09:04:23;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

620;2014-03-27 09:55:38;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

621;2014-03-27 10:43:17;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Agree;;Agree;;All of the time;;1 device;;;Disagree;;Strongly Agree;;Agree;;Strongly Agree;;Agree;

622;2014-03-27 11:24:36;;Undergraduate student;;Female;;Yes;;Standard mobile phone;;Other;I have a dumb phone.;Strongly Agree;;Strongly Agree;;Never;I don't get internet.;O devices;;Never;;Neutral;;Neutral;;Neutral;;Neutral;;Strongly Agree;

623;2014-03-27 11:35:32;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;;Agree;

624;2014-03-27 11:52:56;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Agree;;Agree;;Disagree;;Agree;;Strongly Agree;;Agree;

625;2014-03-27 11:56:35;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;;1 device;Computer;Almost never;;Disagree;;Strongly Agree;;Neutral;;Neutral;;Strongly Agree;

626;2014-03-27 13:13:25;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

627;2014-03-27 14:31:35;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

628;2014-03-27 15:10:31;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

629;2014-03-27 15:11:39;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Some of the time;;2 devices;;Almost never;;Disagree;;Agree;;Neutral;;Neutral;;Agree;;Agree;

630;2014-03-27 15:55:48;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;;Disagree;;Agree;;Neutral;;Agree;;Strongly Agree;;Agree;

631;2014-03-27 16:34:58;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;

632;2014-03-27 16:37:13;;Undergraduate student;;Female;;No;I live off campus;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Disagree;;Agree;;Agree;;Agree;;Strongly Agree;

633;2014-03-27 22:22:49;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

634;2014-03-28 00:00:19;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Almost never;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;

635;2014-03-28 15:01:55;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Never;;Disagree;;Agree;;Agree;;Agree;;Strongly Agree;

636;2014-03-28 15:06:27;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

637;2014-03-28 15:06:41;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;3 devices;;Most of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

638;2014-03-28 17:19:56;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Agree;;Some of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

639;2014-03-30 12:12:40;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

640;2014-03-30 16:07:16;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

641;2014-03-30 22:14:51;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;2 devices;;All of the time;;Neutral;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;

642;2014-03-30 22:23:39;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Agree;;Agree;;Strongly Disagree;;Strongly Disagree;;Strongly Agree;

643;2014-03-30 22:35:28;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

644;2014-03-30 23:50:19;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

645;2014-03-31 02:35:43;;Undergraduate

student;Freshman;Female;;Yes;;Smartphone;iPhone;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;Only my phone because my laptop doesn't always connect.;Almost never;Only when I need a GPS.;Neutral;;Strongly Agree;;Neutral;;Strongly Agree;;Strongly Agree;

646;2014-03-31 11:41:29;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

647;2014-03-31 11:44:23;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

648;2014-03-31 13:26:28;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

649;2014-03-31 13:42:10;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

650;2014-03-31 13:43:06;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

651;2014-03-31 14:36:05;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Almost never;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

652;2014-03-31 14:59:04;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;All of the time;;1 device;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

653;2014-03-31 15:00:14;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

654;2014-03-31 15:05:21;;Undergraduate student;;Female;;No;;Standard mobile phone;;Other;I do not have a smart phone;Disagree;;Strongly Agree;;Never;;O devices;;Never;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

655;2014-03-31 15:18:54;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

656;2014-03-31 15:43:10;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

657;2014-03-31 17:40:35;;Undergraduate student;Freshman;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

658;2014-03-31 18:23:33;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

659;2014-03-31 18:48:39;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Atrongly Agree;;All of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

660;2014-03-31 20:10:26;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

661;2014-03-31 20:26:45;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;Android, iOS;;Agree;;Agree;;Most of the time;;2 devices;;Almost never;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

662;2014-03-31 20:53:41;;Undergraduate student;;Male;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

663;2014-03-31 22:33:29;;Undergraduate student;;Female;;No;;Standard mobile phone;;Other;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

664;2014-04-01 08:51:11;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;Android;;Strongly Agree;Prior to having my son I rarely carried my phone with me.;Strongly Agree;;Most of the time;;2 devices;Cell phone and laptop to wireless network.;Most of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

665;2014-04-01 10:20:50;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

666;2014-04-01 10:28:32;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;Android, iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;All of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

667;2014-04-01 11:20:14;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;All of the time;;1 device;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;

668;2014-04-01 11:23:21;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

669;2014-04-01 11:31:57;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

670;2014-04-01 11:35:41;;Undergraduate student;second year;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

671;2014-04-01 12:06:58;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

672;2014-04-02 01:10:31;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

673;2014-04-02 09:28:23;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

674;2014-04-02 10:14:10;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

675;2014-04-02 10:15:34;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

676;2014-04-02 10:40:09;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

677;2014-04-02 10:53:51;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;

678;2014-04-02 11:14:11;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;;Most of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;

679;2014-04-02 11:18:12;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

680;2014-04-02 11:31:15;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;1 phone, 1 laptop;All of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

681;2014-04-02 11:37:42;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Almost never;;Agree;;Agree;;Neutral;;Neutral;;Agree;;Agree;

682;2014-04-02 11:39:02;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;;Agree;

683;2014-04-02 11:41:48;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

684;2014-04-02 12:59:53;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

685;2014-04-02 15:58:48;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

686;2014-04-02 18:07:24;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Neutral;;Neutral;we already have a good alert system... with text messages...;Neutral;see above.;Disagree;it shouldn't need this except for specific cases...;Disagree;oh, these specific cases...;Agree;this already happens.

687;2014-04-02 18:24:45;;Undergraduate student;;Male;;Yes;;Smartphone;;;Agree;;Agree;;Most of the time;;2 devices;;Some of the time;;Agree;;Neutral;;Agree;;Agree;;Strongly Agree;;Agree;

688;2014-04-02 20:42:06;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

689;2014-04-03 09:20:22;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

690;2014-04-03 10:05:36;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

691;2014-04-03 11:45:25;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

692;2014-04-03 11:47:14;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

693;2014-04-03 11:55:41;;Undergraduate student;;Male;;No;;Smartphone;iPhone 5c;iOS;;Agree;;Strongly Agree;;Almost never;I used to but VT changed how you connect to wifi and I never took the time to figure it out.;1 device;My laptop?;Some of the time;I am selective in which applications have access to location services;Strongly Agree;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

694;2014-04-03 12:00:07;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

695;2014-04-03 12:23:49;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Never;;0 devices;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

696;2014-04-03 12:25:52;;Graduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

697;2014-04-03 12:33:29;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Some of the time;;1 device;;Almost never;;Neutral;;Agree;;Agree;;Agree;;Agree;;Agree;

698;2014-04-03 12:38:30;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

699;2014-04-03 13:56:04;;Undergraduate student;Junior;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Agree;;Neutral;;Neutral;;Neutral;;Disagree;

700;2014-04-03 14:15:13;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

701;2014-04-03 16:15:25;;Undergraduate student;;Female;;No;I live off-campus;Smartphone;;Windows;;Agree;;Almost never;;2 devices;;Some of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

702;2014-04-03 16:36:18;;Undergraduate student;;Male;;Yes;;;;iOS;;Agree;;Strongly Agree;;Some of the time;;2 devices;phone and computer;Some of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

703;2014-04-04 00:35:49;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

704;2014-04-04 09:22:01;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Agree;;Strongly Agree;;Almost never;;1 device;;Almost never;;Neutral;;Agree;;Agree;;Agree;;Agree;;Agree;

705;2014-04-04 10:54:19;;Undergraduate student;;Female;;No;I used to but not anymore;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

706;2014-04-04 18:12:01;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Some of the time;;Neutral;;Agree;;Neutral;;Agree;;Agree;

707;2014-04-05 20:46:21;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;

708;2014-04-05 21:01:12;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;All of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

709;2014-04-05 23:20:15;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Almost never;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

710;2014-04-06 00:42:14;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;2 devices;;Almost never;;Neutral;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

711;2014-04-06 01:53:17;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

712;2014-04-06 11:04:14;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Almost never;;1 device;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

713;2014-04-06 12:08:05;;Undergraduate student;Senior graduating in May;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;All of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

714;2014-04-06 13:13:58;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

715;2014-04-06 13:45:00;;Undergraduate student;;Female;;No;;;iPhone;iOS;;Strongly Agree;;Strongly Agree;;Never;;0 devices;;All of the time;;Agree;;Agree;;Strongly Agree;;Strongly Agree;;Agree;;Strongly Agree;

716;2014-04-06 15:12:05;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

717;2014-04-06 17:15:10;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;Some of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Neutral;

718;2014-04-06 18:59:38;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

719;2014-04-06 19:12:47;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Agree;;Agree;;Agree;;Agree;

720;2014-04-06 20:54:48;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

721;2014-04-06 22:18:03;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

722;2014-04-06 22:59:04;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

723;2014-04-06 23:35:27;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;;Agree;

724;2014-04-07 00:55:41;;Undergraduate student;;Female;;No;I live in an apartment off-campus.;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Strongly Agree;

725;2014-04-07 08:43:55;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

726;2014-04-07 11:36:49;;Undergraduate student;Junior;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

727;2014-04-07 13:04:43;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Neutral;;Strongly Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

728;2014-04-07 14:03:08;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Disagree;;Agree;;All of the time;;2 devices;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

729;2014-04-07 14:51:49;;Graduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

730;2014-04-07 15:17:28;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

731;2014-04-07 17:53:38;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;Android, iOS;;Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Agree;;Disagree;;Agree;;Agree;;Strongly Agree;

732;2014-04-07 17:54:23;;Undergraduate

student;;Male;;No;;Smartphone;;Android;;Agree;;Agree;;Some of the time;;1 device;;Never;;Strongly Disagree;;Disagree;;Disagree;;Disagree;;Agree;

733;2014-04-07 17:55:43;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;Windows;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;All of the time;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;

734;2014-04-07 17:58:50;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Neutral;;Agree;;Never;;1 device;;All of the time;;Agree;;Agree;;Agree;;Agree;

735;2014-04-07 18:16:26;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

736;2014-04-07 20:37:51;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;Laptop and smart phone;Most of the time;;Strongly Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

737;2014-04-07 21:03:58;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Agree;;Never;;0 devices;;Never;;Neutral;;Agree;;Disagree;;Disagree;;Neutral;;Agree;

738;2014-04-07 22:03:29;;Undergraduate student;biochemistry major;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

739;2014-04-08 00:26:48;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

740;2014-04-08 09:27:32;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Some of the time;;2 devices;;Some of the time;;Neutral;;Agree;;Neutral;;Agree;;Agree;

741;2014-04-08 09:45:14;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Neutral;;Strongly Agree;;Agree;;Strongly Agree;;Agree;

742;2014-04-08 10:11:59;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

743;2014-04-08 12:19:54;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

744;2014-04-08 13:46:45;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

745;2014-04-08 13:56:53;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;my iphone and my macbook computer ;Some of the time;;Agree;;Neutral;not necessarily, because I already get campus alerts sent to my phone through email;Agree;;Agree;;Agree;;Agree;

746;2014-04-08 14:06:46;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Strongly Agree;;Disagree;;Neutral;;Agree;;Agree;

747;2014-04-08 14:31:42;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Agree;;Strongly Agree;;Most of the time;;1 device;;Almost never;;Neutral;;Agree;;Neutral;;Agree;;Agree;

748;2014-04-08 15:52:09;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Never;;Strongly Disagree;;Agree;;Agree;;Agree;;Agree;

749;2014-04-08 16:28:19;;Undergraduate student;Psychology Research with CABS.;Male;Bisexual.;Yes;Honors Residential College (East AJ).;Standard mobile phone;;Other;I don't know.;Strongly Agree;;;All of the time;;1 device;;Some of the time;;Strongly Disagree;;Strongly Agree;;Strongly Agree;

750;2014-04-08 16:47:45;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

751;2014-04-08 18:35:27;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

752;2014-04-08 19:43:07;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;3 devices;;Some of the time;;Neutral;;Strongly Agree;;Agree;;Strongly Agree;;Strongly Agree;

753;2014-04-08 22:14:24;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

754;2014-04-08 22:17:54;;Undergraduate student, Faculty member;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

755;2014-04-08 22:44:41;;Undergraduate student;;Female;;Yes;;Smartphone;iPhone 5s;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;Sometimes I don't get service when connected to wifi.;2 devices;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

756;2014-04-08 23:50:12;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Neutral;;Agree;;Neutral;;Agree;;Agree;;Agree;

757;2014-04-09 10:21:34;;Undergraduate student;;Male;;No;;Standard mobile phone;;Other;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

758;2014-04-09 11:11:44;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

759;2014-04-09 12:20:52;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

760;2014-04-09 12:31:19;;Undergraduate student;;Female;;No;off campus apartment;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

761;2014-04-09 13:39:13;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Almost never;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

762;2014-04-09 13:45:14;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

763;2014-04-09 13:50:19;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;Never;;0 devices;;Most of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

764;2014-04-09 14:16:44;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;All of the time;;Disagree;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

765;2014-04-09 14:40:37;;Undergraduate student;;Female;;Yes;;Smartphone;;Windows;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

766;2014-04-09 14:46:23;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;2 devices;;Almost never;;Neutral;;Agree;;Neutral;;Neutral;;Agree;;Agree;

767;2014-04-09 14:56:28;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;More than 3 devices;;Almost never;;Neutral;;Neutral;;Neutral;;Disagree;;Strongly Agree;

768;2014-04-09 15:21:40;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;

769;2014-04-09 15:49:53;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

770;2014-04-09 15:51:34;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;Laptop and smartphone;Some of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

771;2014-04-09 16:21:39;;Undergraduate student;;Male;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

772;2014-04-09 16:39:26;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Almost never;;Disagree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

773;2014-04-09 16:39:57;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;I sometimes struggle to connect my Ipad but connect my phone all the time;2 devices;;Almost never;;Disagree;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

774;2014-04-09 16:52:59;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

775;2014-04-09 17:04:12;;Undergraduate student;;Male;;Yes;;Smartphone;iPhone 5s;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Neutral;It depends.;Disagree;I probably wouldn't care enough.;Agree;;Agree;;Strongly Agree;;Neutral;

776;2014-04-09 17:08:59;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

777;2014-04-09 17:26:44;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;

778;2014-04-09 17:41:23;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;3 devices;;Most of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

779;2014-04-09 17:41:51;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;;Neutral;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

780;2014-04-09 17:44:23;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;Safety;Strongly Agree;;All of the time;Android has Wifi calling, and I have T-Mobile;1 device;not computer and iPad (which I rarely use, so I didn't count it);Almost never;government, ahhhh!!!;Agree;maybe;Agree;if it were written by a trustworthy programmer/company;Strongly Disagree;why would it matter within the square-mile that the campus sits on? If back home, I'd just turn it off.;Strongly Disagree;again, Blacksburg and the campus aren't that large of an area. Why would it matter? If there's a safety alert, it should go out to everyone who has the app and has the app active.;;What difference does it make that there's danger in PY or in Owens? I should get the message REGARDLESS;Strongly Agree;only Amber, bomb threats, gas leaks, or people with weapons who may be/are of harm

781;2014-04-09 17:52:27;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

782;2014-04-09 19:03:03;;Undergraduate student;HNFE Major. Sophomore.;Female;;No;Off campus apartment complex.;Standard mobile phone;;Other;it's a slider phone with a full keyboard...woo hooo..;Agree;;Agree;i don't get service in any of the buildings on campus so i physically have it with me, but i can't use it...;Never;i can't.....it doesn't have the internet.;1 device;my laptop? does that count.;Never;;Agree;;Strongly Agree;;Agree;;Strongly Agree;

783;2014-04-09 19:33:29;;Graduate student, Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Agree;;Strongly Agree;;Agree;;Agree;;Strongly Agree;;Agree;

784;2014-04-09 20:40:28;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;

785;2014-04-09 21:13:35;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;1 device;;All of the time;;Strongly Agree;;Neutral;;Agree;;Agree;;Agree;;Neutral;

786;2014-04-09 21:53:48;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Never;;Disagree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

787;2014-04-09 22:07:42;;Undergraduate student;I am a freshman majoring in HNFE.;Male;;Yes;I live in Slusher Tower;Smartphone;I have an iPhone 5;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;If Laptops count it would be 2. But if not i only connect my phone to the network.;All of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

788;2014-04-09 22:35:37;;Undergraduate student;;Female;;Yes;;Smartphone,
Tablet;;Windows;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;All of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

789;2014-04-10 09:15:03;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;Some of the time;;1 device;;Almost never;;Disagree;;Agree;;Agree;;Agree;;Agree;

790;2014-04-10 10:02:42;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;Almost never;;0 devices;;Some of the time;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

791;2014-04-10 10:06:36;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

792;2014-04-10 10:18:32;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;;1 device;;Never;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

793;2014-04-10 10:21:13;;Undergraduate student;;Female;;Yes;sorority house;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

794;2014-04-10 10:48:05;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;Android;;Agree;;Strongly Agree;;Some of the time;;1 device;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

795;2014-04-10 11:34:01;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

796;2014-04-10 11:51:08;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

797;2014-04-10 12:27:59;;Undergraduate student;;Female;;Yes;;Standard mobile phone;;Windows;;Disagree;;Agree;;Never;;0 devices;;Never;;Neutral;;Agree;;Neutral;;Strongly Agree;;Agree;

798;2014-04-10 12:37:54;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;

799;2014-04-10 12:52:41;;Undergraduate student;I am a Junior;Male;;No;;Smartphone;iPhone 4s;iOS;;Strongly Agree;Except at the gym;Strongly Agree;;All of the time;Saves data charges;2 devices;cellphone and laptop;Some of the time;Depends on how important it is, weather app, Facebook, Google Maps, and Evil Apples.;Strongly Agree;;Agree;VT text alerts works pretty well without using data.;Strongly Agree;It would be relevant!;Strongly Agree;;Strongly Agree;I think it should be broadcast to any area of campus not just how close you are.;Agree;

800;2014-04-10 12:53:29;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

801;2014-04-10 13:09:33;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Almost never;;Agree;;Strongly Agree;;Disagree;;Neutral;;Agree;;Strongly Agree;

802;2014-04-10 13:10:55;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

803;2014-04-10 14:58:58;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Almost never;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

804;2014-04-10 16:20:36;;Undergraduate student;;Female;;No;;Standard mobile phone;;Other;;Strongly Agree;;Strongly Agree;;Never;;Neutral;;Strongly Agree;;Neutral;;Agree;;Strongly Agree;

805;2014-04-10 18:15:54;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;1 device;;Some of the time;;Neutral;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

806;2014-04-10 19:23:39;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Agree;;Agree;;All of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

807;2014-04-10 19:50:02;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

808;2014-04-10 20:15:54;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

809;2014-04-10 22:15:42;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Disagree;;Strongly Agree;;Almost never;;1 device;;Most of the time;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

810;2014-04-10 23:18:21;;Undergraduate student;;Female;;Yes;;Smartphone;iPhone 5;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;Phone and computer?;Some of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;And what to do if we aren't in a building please!!!;Strongly Agree;

811;2014-04-10 23:22:32;;Undergraduate student;;Female;;Yes;O'Shag;Smartphone;IPhone 5;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;All of the time;;Agree;;Strongly Agree;;Agree;

812;2014-04-11 00:00:47;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

813;2014-04-11 00:31:15;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Almost never;;Agree;;Agree;;Agree;;Agree;;Agree;

814;2014-04-11 10:39:45;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Agree;;Some of the time;;1 device;;Almost never;;Neutral;;Agree;;Neutral;;Agree;;Agree;

815;2014-04-11 10:43:27;;Undergraduate student;;Female;;No;;Smartphone,

Tablet;;iOS;;Agree;Sometimes I'm running late and leave my phone at my house.;Strongly Agree;;All of the time;;2 devices;Phone and laptop automatically connect.;Most of the time;I keep it on unless my battery is running low and only for certain apps.;Strongly Agree;;Strongly Agree;;Neutral;I would worry about my privacy.;Agree;;Strongly Agree;;Strongly Agree;Yes, but I already get text messages tom VT alerts.

816;2014-04-11 11:05:14;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

817;2014-04-11 11:26:28;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;2 devices;;Most of the time;;Neutral;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;

818;2014-04-11 11:35:22;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Agree;;Strongly Agree;;Almost never;;1 device;;Some of the time;;Neutral;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

819;2014-04-11 12:58:13;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

820;2014-04-11 14:08:02;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

821;2014-04-14 09:21:23;;Undergraduate student;;Female;;No;;Standard mobile phone;;Other;;Agree;;Agree;;Never;;O devices;;Never;;Agree;;Agree;;Agree;;Strongly Agree;

822;2014-04-14 22:29:09;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

823;2014-04-14 22:50:51;;Undergraduate student;;Male;;Yes;;Standard mobile phone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;

824;2014-04-15 01:11:26;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;2 devices;Computer and cell phone;Some of the time;;Agree;;Agree;;Agree;;Agree;;Disagree;

825;2014-04-15 01:50:35;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Never;;0 devices;;Some of the time;;Strongly Agree;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

826;2014-04-15 11:14:48;;Undergraduate student;;Female;;Yes;I live in Oak Lane.;Smartphone;;iOS;;Agree;;Agree;;All of the time;;1 device;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

827;2014-04-15 12:02:04;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

828;2014-04-15 12:34:39;;Undergraduate student;;Female;;Yes;;Smartphone;;Windows;;Agree;;Strongly Agree;;Some of the time;;1 device;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;;Neutral;

829;2014-04-15 12:34:44;;Undergraduate student;freshman in the engineering college;Male;;Yes;;Smartphone;;iOS;;Agree;;Agree;;All of the time;;2 devices;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

830;2014-04-15 12:46:55;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

831;2014-04-15 14:31:20;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;Almost never;;1 device;;Never;;Strongly Disagree;;Neutral;;Agree;;Strongly Agree;;Strongly Agree;

832;2014-04-15 14:34:53;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Never;;O devices;;Almost never;;Neutral;;Strongly Agree;;Agree;;Strongly Agree;

833;2014-04-15 14:38:03;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

834;2014-04-15 14:42:36;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

835;2014-04-15 15:33:42;;Undergraduate student;;Female;;Yes;In my sorority house in Oak Lane;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;I often connect my iPod touch as well as my cell phone.;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

836;2014-04-15 15:40:37;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

837;2014-04-15 15:58:21;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

838;2014-04-15 15:59:33;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Agree;;Agree;;Agree;;Agree;

839;2014-04-15 16:13:01;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

840;2014-04-15 16:30:52;;Undergraduate

student;;Female;;Yes;;Smartphone;iPhone!!!!!;iOS;;Agree;;Strongly Agree;;All of the time;;2 devices;my phone and my laptop;Most of the time;;Neutral;;Agree;;Neutral;;Agree;;Strongly Agree;;Agree;

841;2014-04-15 18:36:44;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

842;2014-04-15 18:56:26;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

843;2014-04-15 19:38:11;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;My iPad and my iPhone;Some of the time;I don't particularly like applications to have access to location services.;Agree;I would like information about my location to be personal if possible.;Disagree;I am not a very cautious or weary person. I don't like having

a cluttered phone with apps I will not use and I have almost no room left on my phone.;Disagree;;Disagree;;Disagree;;Strongly Agree;I think this would be the best method.

844;2014-04-15 20:10:29;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

845;2014-04-15 20:11:48;;Undergraduate student;;Female;;No;;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

846;2014-04-15 20:14:59;;Undergraduate

student;;Female;;No;;Smartphone;;iOS;;Agree;;Agree;;Never;;O devices;;Some of the time;;Neutral;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

847;2014-04-15 22:23:58;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Almost never;;1 device;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;;Neutral;

848;2014-04-15 23:14:50;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

849;2014-04-16 01:07:41;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;All of the time;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

850;2014-04-16 09:24:40;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

851;2014-04-16 09:39:57;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Strongly Agree;;Disagree;;Neutral;;Agree;;Strongly Agree;

852;2014-04-16 10:26:52;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Some of the time;;2 devices;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;;Agree;

853;2014-04-16 10:28:51;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;1 device;;Almost never;;Neutral;;Agree;;Neutral;;Agree;;Agree;;Strongly Agree;

854;2014-04-16 11:02:32;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

855;2014-04-16 11:36:47;;Undergraduate student;;Male;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Almost never;;1 device;;Almost never;;Disagree;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

856;2014-04-16 12:16:11;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

857;2014-04-16 12:46:26;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

858;2014-04-16 13:28:19;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

859;2014-04-16 13:55:49;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

860;2014-04-16 14:37:34;;Undergraduate student;;Male;;No;;Smartphone, Tablet;;iOS, Windows;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

861;2014-04-16 15:20:49;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

862;2014-04-16 16:10:09;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

863;2014-04-16 16:13:47;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;iPhone 5;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

864;2014-04-17 08:36:50;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS, Windows;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

865;2014-04-17 09:49:43;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

866;2014-04-17 10:49:29;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Neutral;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;

867;2014-04-17 12:25:30;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;

868;2014-04-17 13:09:17;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;Some of the time;;1 device;;Some of the time;;Agree;;Agree;only if I won't still get the texts and emails;Disagree;;Disagree;;Strongly Agree;

869;2014-04-17 17:40:26;;Undergraduate student;;Female;;No;;Standard mobile phone;;Other;;Agree;;Agree;;Never;;1 device;;Some of the time;;Agree;;Strongly Agree;;Agree;;Agree;;Strongly Agree;

870;2014-04-17 17:43:08;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

871;2014-04-17 17:45:13;;Undergraduate student;;Female;;Yes;;Standard mobile phone;;Other;;Agree;;Agree;;Some of the time;;3 devices;;Never;;Neutral;;Neutral;I would, but I cannot download apps on my phone.;Strongly Agree;;Strongly Agree;;Strongly Agree;

872;2014-04-17 17:57:48;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;2 devices;;Some of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

873;2014-04-17 18:39:53;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

874;2014-04-17 19:07:33;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

875;2014-04-17 19:14:02;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

876;2014-04-17 19:39:57;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Almost never;;Disagree;;Agree;;Disagree;;Agree;;Agree;

877;2014-04-17 20:13:35;;Undergraduate student;;Male;;No;;Smartphone;IPhone;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Agree;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

878;2014-04-18 02:11:45;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

879;2014-04-18 11:11:55;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Never;The wifi does not work on my phone, otherwise I would.;0 devices;The wifi does not work on my phone, otherwise I would have 1.;Almost never;;Strongly Disagree;;Disagree;;Disagree;;Agree;;Neutral;

880;2014-04-18 12:16:50;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

881;2014-04-18 13:20:37;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

882;2014-04-18 13:36:48;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

883;2014-04-18 15:19:15;;Undergraduate student;;Male;;Yes;;Smartphone;;Windows;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

884;2014-04-18 16:52:27;;Undergraduate student;In corps of cadets;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;

885;2014-04-18 21:02:07;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;;Android, iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;

886;2014-04-19 13:54:16;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

887;2014-04-19 14:54:38;;Undergraduate student;;Female;;No;Collegiate Court;Standard mobile phone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

888;2014-04-19 16:36:01;;Undergraduate

student;Freshman;Female;;Yes;;Smartphone;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Agree;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;

889;2014-04-19 17:26:22;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;;O devices;;Almost never;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Agree;

890;2014-04-19 18:34:49;;Undergraduate student;;Male;;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

891;2014-04-19 19:02:35;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

892;2014-04-20 12:18:25;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;;Some of the time;;Disagree;;Agree;;Neutral;;Neutral;;Agree;

893;2014-04-20 12:47:09;;Undergraduate student;;Male;;No;;Standard mobile phone;;Other;;Strongly Agree;;Strongly Agree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Strongly Disagree;;Agree;;Strongly Agree;

894;2014-04-20 14:22:16;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;phone and laptop;Most of the time;when it is needed for that app. Not always because it seems unsafe to me.;Agree;yes, because the only reason I do not sometimes, because it seems unsafe;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

895;2014-04-20 17:18:50;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Almost never;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

896;2014-04-20 22:33:48;;Undergraduate student;;Male;;Yes;;Standard mobile phone;;Other;;Agree;;Strongly Agree;;Never;;1 device;;Almost never;;Disagree;;Disagree;;Neutral;;Neutral;;Neutral;

897;2014-04-21 01:14:34;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;only in google maps;Neutral;;Agree;;Agree;;Agree;;Agree;;Agree;

898;2014-04-21 02:23:27;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Agree;;All of the time;;2 devices;My computer and my smartphone;Almost never;;Strongly Disagree;;Agree;;Agree;;Agree;;Agree;

899;2014-04-21 09:48:27;;Graduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

900;2014-04-21 09:52:29;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

901;2014-04-21 10:24:07;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

902;2014-04-21 11:10:05;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

903;2014-04-21 11:15:55;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Neutral;;Neutral;;Neutral;

904;2014-04-21 11:20:08;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;Agree;;Neutral;;Agree;Agree;Ag

905;2014-04-21 11:35:14;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Most of the time;;Neutral;;Strongly Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

906;2014-04-21 13:48:15;;Undergraduate student;;Female;;No;;Smartphone;;Other;i have an iphone;Agree;;Strongly Agree;;Most of the time;;2 devices;my computer and my iphone;Most of the time;;Agree;;Neutral;;Neutral;;Agree;;Agree;

907;2014-04-21 15:30:07;;Undergraduate student;;Prefer not to answer;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Almost never;;Disagree;;Agree;;Agree;;Agree;;Agree;;Agree;

908;2014-04-21 15:56:32;;Undergraduate student;senior;Male;;No;;Standard mobile phone;;Other;none its basic;Agree;;Agree;;Never;cannot;O devices;;Never;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;just mandate it! when phrased like that its a no brainer, for me at least;Strongly Agree;

909;2014-04-21 16:56:08;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS;;Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Agree;;Neutral;;Agree;;Strongly Agree;;Strongly Agree;

910;2014-04-21 17:41:12;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

911;2014-04-21 18:17:41;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

912;2014-04-21 19:49:11;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

913;2014-04-21 21:10:00;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Almost never;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;

914;2014-04-21 21:32:29;;Undergraduate student;;Male;;Yes;;Standard mobile phone,
Tablet;;iOS;;Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Neutral;;Strongly Agree;;Agree;;Strongly Agree;;Strongly Agree;

915;2014-04-21 21:41:41;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;

916;2014-04-21 21:56:30;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS, Windows;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Neutral;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

917;2014-04-21 22:53:38;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Agree;;Strongly Agree;;Agree;;Agree;;Agree;

918;2014-04-21 22:54:32;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Agree;;Neutral;;Disagree;;Neutral;;Agree;;Agree;

919;2014-04-22 02:27:08;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

920;2014-04-22 09:42:57;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;phone and computer;Some of the time;;Neutral;;Agree;;Neutral;;Agree;;Agree;

921;2014-04-22 09:54:25;;Undergraduate

student;;Male;;Yes;;Smartphone;;Android;;Agree;;Agree;;Some of the time;;1 device;;Almost never;;Neutral;;Agree;;Agree;;Agree;;Agree;

922;2014-04-22 10:08:44;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;I also always have my laptop connected;Almost never;;Neutral;;Strongly Agree;;Agree;;Strongly Agree;;Strongly Agree;

923;2014-04-22 10:29:42;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

924;2014-04-22 11:36:00;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

925;2014-04-22 12:34:22;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

926;2014-04-22 13:08:23;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;for classes that need me to take notes on my computer;1 device;Just my laptop;Almost never;;Disagree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

927;2014-04-22 14:05:38;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;;All of the time;;2 devices;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;;Agree;

928;2014-04-22 14:53:04;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;All of the time;;Neutral;;Strongly Agree;;Agree;;Agree;;Strongly Agree;

929;2014-04-22 16:11:32;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

930;2014-04-22 16:43:52;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

931;2014-04-22 17:31:58;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Neutral;;Agree;;Strongly Agree;;Strongly Agree;

932;2014-04-23 00:40:04;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Disagree;;Strongly Disagree;;Strongly Agree;;Neutral;;Neutral;;Strongly Agree;;Strongly Agree;

933;2014-04-23 02:49:38;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Never;;2 devices;;Most of the time;;Agree;;Neutral;;Strongly Agree;;Strongly Agree;

934;2014-04-23 08:07:29;;Undergraduate student;I am a freshman;Male;;;;Smartphone, Tablet;;iOS;;Disagree;;Strongly Agree;;All of the time;;3 devices;;Some of the time;;Neutral;;Agree;;Strongly Agree;;Strongly Agree;;Agree;

935;2014-04-23 10:14:39;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

936;2014-04-23 13:39:56;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Disagree;;Agree;;Strongly Agree;

937;2014-04-23 13:40:13;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

938;2014-04-23 14:53:28;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Almost never;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

939;2014-04-23 16:01:30;;Undergraduate student;;Female;;Yes;;Smartphone,
Tablet;;Android;;Agree;;Agree;;Most of the time;;2 devices;;Some of the time;;Agree;;Strongly Agree;;Agree;

940;2014-04-23 20:08:11;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Agree;

941;2014-04-23 20:12:11;;Undergraduate student;;Female;;Yes;Slusher Tower;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

942;2014-04-23 22:40:01;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

943;2014-04-23 22:48:56;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

944;2014-04-23 23:48:33;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Almost never;;Neutral;;Strongly Agree;;Disagree;;Neutral;;Strongly Agree;;Agree;

945;2014-04-24 01:21:50;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

946;2014-04-24 02:08:14;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Strongly Agree;;Agree;;Strongly Agree;;Agree;

947;2014-04-24 05:47:27;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Neutral;;Neutral;;Agree;;Agree;;Agree;

948;2014-04-24 08:54:44;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

949;2014-04-24 09:59:47;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

950;2014-04-24 11:20:09;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

951;2014-04-24 13:08:26;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

952;2014-04-24 13:28:41;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

953;2014-04-24 14:18:35;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

954;2014-04-24 14:49:45;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

955;2014-04-24 16:08:28;;Undergraduate student;Senior;Female;;No;Off-campus - Maple Ridge;Smartphone;iPhone 4s;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;iPhone, Computer, iPad;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

956;2014-04-24 17:56:40;;Undergraduate

student;;Female;;Yes;;Smartphone;;Android;;Agree;;Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Strongly Agree;;Disagree;;Disagree;;Strongly Agree;

957;2014-04-24 21:22:11;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Agree;

958;2014-04-25 12:28:07;;Undergraduate student;Senior level computer science major;;;No;Apartment (The Mill); Standard mobile phone; Use standard phone, but iTouch for handheld gaming and internet (outside of laptop).;iOS;;Strongly Agree;It is literally ALWAYS on my person, or placed within reach.; Strongly Agree;; All of the time; Auto-connect to VT Wireless. Sometimes will connect to nonsecure VT network if VT Wireless is slow (e.g. in library, too many people around);1 device;Just iTouch;Almost never;Only if I both HAVE to have the application, and HAVE to allow location services. It's because of a paranoid insecurity that it is dangerous for others' to know my location.; Strongly Agree; This would actually be an important condition for me to participate. Although the application may be secure, I would prefer to not present my current location to anyone.; Agree; I would prefer to not go out of my way to implement the system, but downloading is not a BIG problem.; Strongly Agree; This already happened on my personal phone.; Agree; This already happens, and although the usefulness has been low for me, I do see the possibility of it helping in the future. It only would have to be effective once for me, for me to consider it useful.; Strongly Agree; Safety alerts already work on my phone (without personal effort), but many have been unnecessary. However, detecting whether users are 'near' the threat (maybe even anyone actually on campus) seems much more effective.; Agree; I already have campus safety alerts sent to my phone, and although they haven't necessarily helped me, I definitely see how they COULD help at certain times.

959;2014-04-25 13:46:35;;Undergraduate student;;Female;;Yes;;Smartphone;iPhone 4s;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;3 devices;iphone, ipad, and macbook;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

960;2014-04-25 13:52:52;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

961;2014-04-25 16:10:21;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Strongly Disagree;;Agree;;Agree;;Agree;;Agree;

962;2014-04-25 16:30:43;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;;;All of the time;;2 devices;;Some of the time;;Disagree;;;;Strongly Disagree;;Neutral;;Disagree;

963;2014-04-25 18:51:50;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

964;2014-04-25 20:55:11;;Undergraduate student;;Male;;No;Off-campus housing;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;Sometimes, the connection doesn't work so I switch to data - 4G/LTE wireless;1 device;;Almost never;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

965;2014-04-26 13:52:02;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;Windows;;Strongly Agree;;Strongly Agree;;Most of the time;;2 devices;;Most of the time;;Agree;;Strongly Agree;;Strongly Agree;

966;2014-04-26 17:13:54;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

967;2014-04-26 18:06:24;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

968;2014-04-26 23:25:12;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

969;2014-04-27 12:34:04;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Neutral;;Strongly Agree;;Agree;;Agree;;Agree;

970;2014-04-27 13:41:56;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;More than 3 devices;;Some of the time;;Agree;;Strongly Agree;;Agree;;Strongly Agree;

971;2014-04-27 14:10:23;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;Never;;0 devices;;Almost never;;Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

972;2014-04-27 14:17:18;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Never;I have issues with campus network coming and going from buildings. I just

use my network.;1 device;Laptop when in class.;Almost never;;Neutral;;Neutral;;Neutral;;Agree;;Agree;;Strongly Agree;

973;2014-04-27 14:50:23;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Disagree;Must have some benefit over text message alerts.;Strongly Agree;;Strongly Agree;;Strongly Agree;

974;2014-04-27 16:30:06;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

975;2014-04-27 23:11:52;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

976;2014-04-28 00:04:44;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

977;2014-04-28 10:14:04;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

978;2014-04-28 10:53:28;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

979;2014-04-28 10:56:16;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

980;2014-04-28 11:01:10;;Undergraduate student;;Male;;No;;Smartphone, Tablet;;Android, Windows;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Disagree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

981;2014-04-28 11:16:03;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Agree;;Neutral;;Agree;;Neutral;

982;2014-04-28 11:29:05;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

983;2014-04-28 12:26:02;;Undergraduate student;;Female;;Yes;I live in the Oak Lane Community;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

984;2014-04-28 12:35:44;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS, Windows;;Strongly Agree;;Strongly Agree;;Most of the time;;3 devices;;Almost never;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

985;2014-04-28 13:37:20;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Neutral;;Agree;;Some of the time;;1 device;;Most of the time;;Neutral;;Neutral;;Agree;;Agree;;Agree;;Agree;

986;2014-04-28 14:00:12;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

987;2014-04-28 14:56:53;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

988;2014-04-28 14:57:47;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;

989;2014-04-28 15:11:21;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

990;2014-04-28 15:20:55;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

991;2014-04-28 15:30:12;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

992;2014-04-28 16:14:11;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

993;2014-04-28 16:20:08;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;1 device;;Almost never;;Disagree;;Agree;;Agree;;Agree;;Agree;

994;2014-04-28 18:45:10;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;Android, Other;Smartphone: Android Other: Kindle tablet;Agree;;Agree;;All of the time;;1 device;;Almost never;;Disagree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

995;2014-04-28 19:15:20;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;Cellphone Laptop;Some of the time;;Agree;;Agree;;Agree;;Agree;;Agree;;Agree;

996;2014-04-28 19:41:05;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

997;2014-04-28 19:51:54;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

998;2014-04-28 20:40:44;;Undergraduate

student;;Male;;No;;Smartphone;;Android;;Agree;;Agree;;Some of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Neutral;;Strongly Agree;;Agree;

999;2014-04-28 21:15:06;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

1000;2014-04-28 21:44:42;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1001;2014-04-28 22:21:14;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;3 devices;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;;Agree;

1002;2014-04-28 22:54:28;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Neutral;;Agree;;Neutral;;Strongly Agree;;Agree;

1003;2014-04-28 23:32:16;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Almost never;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1004;2014-04-29 00:17:38;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1005;2014-04-29 09:48:00;;Undergraduate student;Junior;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Neutral;;Strongly Agree;;Agree;;Strongly Agree;;Strongly Agree;

1006;2014-04-29 11:42:39;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Agree;;All of the time;;1 device;;Most of the time;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;

1007;2014-04-29 11:45:03;;Undergraduate student;;Female;;No;;Smartphone;;iOS, Windows;;Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1008;2014-04-29 13:16:59;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1009;2014-04-29 13:20:36;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;Most of the time;;3 devices;;Most of the time;;Neutral;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1010;2014-04-29 13:26:50;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1011;2014-04-29 13:27:47;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1012;2014-04-29 14:07:19;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1013;2014-04-29 14:24:55;;Undergraduate student;Athlete;Male;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Some of the time;;2 devices;;Some of the time;;Neutral;;Neutral;;Agree;Neutral;;Agree;

1014;2014-04-29 15:17:12;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;

1015;2014-04-29 16:47:20;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1016;2014-04-29 16:57:12;;Undergraduate student;;Male;;No;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1017;2014-04-29 18:16:27;;Undergraduate student;;Female;;No;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1018;2014-04-29 18:44:46;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1019;2014-04-29 19:19:33;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1020;2014-04-29 19:56:30;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1021;2014-04-29 20:32:42;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;;1 device;;Some of the time;Only for apps like the weather app, yelp, maps, etc. Things that require a location.;Disagree;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

1022;2014-04-29 21:10:01;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;All of the time;;1 device;;Most of the time;;Strongly Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;

1023;2014-04-29 21:30:54;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;iOS, Windows;;Agree;;Strongly Agree;;All of the time;;2 devices;;Almost never;;Neutral;;Strongly Agree;;Neutral;;Agree;;Agree;;Strongly Agree;

1024;2014-04-29 21:32:06;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Agree;;Strongly Agree;;Most of the time;;1 device;;Some of the time;;Neutral;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1025;2014-04-29 21:38:47;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Neutral;;Agree;;Neutral;;Agree;;Agree;

1026;2014-04-29 21:44:34;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1027;2014-04-29 23:00:20;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

1028;2014-04-29 23:29:54;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1029;2014-04-30 11:22:29;;Undergraduate student;;Male;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Almost never;;1 device;;Almost never;;Agree;;Agree;;Agree;;Agree;

1030;2014-04-30 11:23:18;;Undergraduate student;;Female;;No;;Smartphone, Tablet;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1031;2014-04-30 11:27:36;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1032;2014-04-30 11:43:32;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Agree;;Agree;

1033;2014-04-30 12:44:46;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Some of the time;;Agree;;Agree;;Agree;;Agree;

1034;2014-04-30 12:46:32;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Agree;;Agree;;Agree;;Most of the time;;2 devices;;Some of the time;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;
Agree;

1035;2014-04-30 12:50:58;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1036;2014-04-30 13:39:21;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Agree;

1037;2014-04-30 14:00:32;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1038;2014-04-30 14:16:43;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1039;2014-04-30 14:36:33;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;

1040;2014-04-30 14:42:40;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1041;2014-04-30 14:44:23;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1042;2014-04-30 14:47:50;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Agree;;Strongly Agree;;Almost never;;1 device;;Most of the time;;Agree;Agree;A

1043;2014-04-30 14:48:13;;Undergraduate student;I am in the accelerated Masters program and will have already completed a semester of graduate work by the time I graduate with my Bachelors degree this May.;Female;;No;;Smartphone, Tablet;;iOS, Windows;;Strongly Agree;I sleep with my phone;Strongly Agree;;All of the time;;2 devices;Lap top and Iphone;Some of the time;I do not allow social media tracking or location services;Agree;Sometimes I still do not allow location services to run.;Strongly Agree;I am a 4th year senior and lived on campus for 2 years. I have personally experienced several, isolated occasions in which VT alerts were greatly delayed during an emergency.;Strongly Agree;Especially if it was Virginia Tech sponsored or development.;Strongly Agree;Absolutely.;Strongly Agree;

1044;2014-04-30 14:59:51;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1045;2014-04-30 15:06:16;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Some of the time;;1 device;;Almost never;;Agree;;Disagree;;Agree;;Disagree;;Agree;

1046;2014-04-30 16:32:31;;Undergraduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1047;2014-04-30 16:57:43;;Undergraduate student;;Male;;Yes;;Smartphone;;Android;;Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;;Neutral;;Agree;;Agree;;Agree;;Strongly Agree;;Agree;

1048;2014-04-30 17:09:12;;Undergraduate student;;Female;;Yes;;Smartphone, Tablet;;iOS;;Strongly Agree;;All of the time;;2 devices;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Strongly Agree;

1049;2014-04-30 18:33:16;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;All of the time;;1 device;;Some of the time;;Agree;;Strongly Agree;;Neutral;;Agree;;Agree;;Strongly Agree;

1050;2014-04-30 19:46:03;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1051;2014-04-30 20:12:01;;Graduate student;;Female;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1052;2014-04-30 20:13:41;;Undergraduate student;;Female;;Yes;;Smartphone;;Android;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1053;2014-04-30 21:00:08;;Undergraduate student;;Female;;No;;Smartphone;;Other;iPhone;Strongly Agree;;Strongly Agree;;All of the time;;2 devices;;All of the time;;Neutral;;Agree;;Strongly Agree;;Strongly Agree;

1054;2014-04-30 23:38:42;;Undergraduate student;;Male;;Yes;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Strongly Agree;;Agree;;Agree;;Agree;;Strongly Agree;;Strongly Agree;;Agree;

1055;2014-05-01 10:50:58;;Undergraduate student;;Male;;No;;Smartphone;;Android;;Agree;;Strongly Agree;;Most of the time;;2 devices;;Some of the time;I only allow access when I want to ride a bus;Agree;;Strongly Agree;;Agree;;Agree;;Strongly Agree;

1056;2014-05-01 15:27:52;;Undergraduate student;;Female;;No;;Smartphone;;iOS;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;

1057;2014-05-01 22:12:08;;Undergraduate student;;Male;;No;;Smartphone;;iOS;;Strongly Agree;;Most of the time;;1 device;;Most of the time;;Agree;;Agree;;Agree;;Agree;;Agree;

Appendix B Usability Interview

B.1 Recruitment Announcement

Interview Recruitment

Virginia Polytechnic Institute and State University

e o

am a computer science raduate student researc in and protot pin optimi ations or t e erts s stem am as in or a under raduates raduates acu t and sta at ir inia ec to p ease consider participatin in an appro ed inter ie to discuss erts and to e a uate an inter ace protot pe e inter ie s ou d ta e ess t an appro imate minutes ou i be as ed to comp ete a pre uestionnaire as in basic demo rap ic and bac round in ormation ou i t en be inter ie ed about erts and t en as ed more uestions and to e aborate on o ou ou d comp ete i en tas s i en a paper inter ace protot pe ter ou i be as ed to comp ete a post uestionnaire on our e perience our participation i pro ide a uab e insi ts or m current researc pro ect P ease emai an uestions or in uiries to a eit t edu

P ease si n up or an inter ie at t e o o in t is in ttps dood e com r it i pct

e sure to inc ude our name and a contact emai nter ie s i be e d in t e sabi it ab in c r de

cross rom room

an ou Sincere imber

B.2 Consent Form

Informed Consent

Virginia Polytechnic Institute and State University

Project: n Optimi ed ert S stem ased on Geospatia ocation Data

Experiment Time: ppro imate minutes

Investigators: imber eit a eit t edu

and arc an marc an t edu
Dr osep ront tront cs t edu

Data co ected durin t is stud i contribute no ed e in t e common understandin o t e erts s stem as e as pro ide eedbac or a mobi e app ication inter ace protot pe data i be con identia On uni ue sub ect identi iers not persona identi iab e in ormation i be used in ana sis and reports

ou i be as ed to comp ete a pre uestionnaire as in basic demo rap ic and bac round in ormation ou i t en be inter ie ed about erts and t en as ed more uestions and to e aborate on o ou ou d comp ete i en tas s usin a paper inter ace protot pe ter ou i be as ed to comp ete a post uestionnaire on our e perience

ere are no more ris s associated it t is stud t an e er da tas in and con ersation o e er i ou ee unab e to comp ete t e stud ou ma it dra at an time and ou i sti recei e u credit i si ned up or participation t rou t e Ps c o o SON or ot er researc participation s stem

is researc as been appro ed b t e nstitutiona e ie oard or pro ects in o in uman sub ects at ir inia Po tec nic nstitute and State ni ersit and t e Department o Computer Science

acceptin t is ac no ed et at am ears o a e or o der and o untari a ree to participate in t is stud a e read and understand t e in ormed consent and conditions o t is researc a e ad an uestions about t is orm or t e stud a e as ed t em and recei ed ans ers and or c ari ication ereb ac no ed et e abo e and i e m o untar consent or participation in t is pro ect a ree to abide b t e ru es o t is pro ect

| C C | O | O | CC P | <u>C</u> | C | O | O D | C N | |
|-------|---|---|------|----------|----------|--------|-----|-----|--|
| ccept | | | | De | ec ine | | | | |
| | | | | | | | | | |
| Name | | | | n | nai addı | ress O | P O | N | |

B.3 Pre-Questionnaire

Pre-questionnaire

Virginia Polytechnic Institute and State University

ID Number:

P ease se ect our ro e at ir inia ec

- o Graduate student
- o nder raduate student
- o acu t member
- o Sta member

dditiona e p anation or comments

P ease se ect our ender

- o a e
- o ema e
- o Pre er not to ans er

dditiona e p anation or comments

am ami iar it t e erts s stem

- o Stron ree
- o ree
- o Neutra
- o Disa ree
- o Stron Disa ree

dditiona e p anation or comments

B.4 Interview Transcript

Interview Questions

Virginia Polytechnic Institute and State University

ID Number:

Hello. As you have read in the consent form, this study is to gather information on the VT Alerts system and to test a new application interface prototype. If you are ready to begin we will start with a few questions on the current system.

```
at t pe o t e o untar noti ications do ou recei e? P one ca s or te ts?

o man p one numbers do ou a e re istered?

re a o t e p one numbers ours?

o man o t e re istered numbers are smartp ones?

ou recei e a te t a ert do ou rep to t e messa e?

Do ou a a s rep es?

Do ou no at t e "yes" verification is for?

re ou satis ied it erts? P ease e p ain
```

The current VT Alerts system utilizes phone calls and text messaging as voluntary alert notification methods. There are over 50,000 users with multiple contact methods. Text messages are processed first. The order in which the messages are sent is randomized to prevent overwhelming single cell towers and carriers. When an alert text message is responded to with a "yes" the system attempts to pull all other contact numbers for this user from the queue. This does not always happen in time, so a user may receive the notification on all of their registered numbers.

ere ou pre ious a are t at t e a ert noti ications ma not o to a o our re istered numbers?

o on ou d ou predict it ta es to reac a re istered users it an a ert?

is screen simu ates a $\ oom\ out\ and\ ap\ ie\ button\ action\ Do\ ou\ ind\ t$ ese options use u ?

SCREEN 4: MAP (Two alerts)

What do you think differentiates the "My Alert" and the "All Alerts" button views?

a erts i disp a a erts is i inc ude t ose ar a a rom our ocation Do ou ind t is option use u?

s ou mo e t e s stem i update our re e ant a erts Can ou p ease point to our current ocation on t is screen?

P ease indicate on t e screen o ou ou d ie t e detai s o an a ert

SCREEN 5: Alert Details (Fire Evacuation)

o man a erts can ou ie rom t is screen?

B.5 Post-Questionnaire

Post-Questionnaire

Virginia Polytechnic Institute and State University

ID Number:

am content it t e erts s stem as is

- o Stron ree
- o ree
- o Neutra
- o Disa ree
- o Stron Disa ree

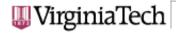
dditiona e p anation or comments

ou d ant a ne mobi e app ication or use it t e erts s stem

- o Stron ree
- o ree
- o Neutra
- o Disa ree
- o Stron Disa ree

dditiona e p anation or comments

B.6 IRB Approval Letter



Office of Research Compliance

Institutational Review Board

North End Center, Suite 4120, Virginia Tech

300 Turner Street NW Blacksburg, Virginia 24061 540/231-4606 Fax 540/231-0959

email irb@vt.edu

website http://www.irb.vt.edu

MEMORANDUM

DATE: April 21, 2014

TO: Randolph Carlos Marchany, Joseph G Tront, Kimberly Ann Zeitz

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires April 25, 2018)

PROTOCOL TITLE: VTGeoAlerts

IRB NUMBER: 14-184

Effective April 21, 2014, the Virginia Tech Institution Review Board (IRB) Chair, David M Moore, approved the Amendment request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

http://www.irb.vt.edu/pages/responsibilities.htm

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As: Exempt, under 45 CFR 46.110 category(ies) 2

Protocol Approval Date: February 17, 2014

Protocol Expiration Date: N/A
Continuing Review Due Date*: N/A

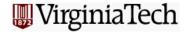
*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

B.7 IRB Research Protocol



Institutional Review Board Research Protocol

| Once complete, upload this f | form as a Word document to the IRB Protocol Management System: https://secure.research.vt.edu/irb |
|--|--|
| Section 1: Genera | al Information |
| | INVESTIGATORS OF THIS PROJECT HAVE A REPORTABLE CONFLICT ttp irb t edu pa es researc ers tm con ict |
| Yes, explain: | |
| 1.2 WILL THIS RESE | ARCH INVOLVE COLLABORATION WITH ANOTHER INSTITUTION? |
| No, go to question 1.3Yes, answer questions | within table |
| | IF YES |
| Provide | the name of the institution [for institutions located overseas, please also provide name of country]: |
| □ P ₁ □ A □ O | e the status of this research project with the other institution's IRB: ending approval pproved ther institution does not have a human subject protections review board ther, explain: |
| Will the (_ttp N | |
| | reginia Tech's IRB review all human subject research activities involved with this project? o, provide the name of the primary institution: es |
| Note: pr | imary institution = primary recipient of the grant or main coordinating center |
| 1.3 IS THIS RESEARC | CH FUNDED? |
| No, go to question 1.4 ☐ Yes, answer questions | within table |
| | IF YES |
| Provide | the name of the sponsor [if NIH, specify department]: |
| □N | roject receiving federal funds? o es |
| 10 | |

3.1 DESCRIBE THE SUBJECT POOL, INCLUDING INCLUSION AND EXCLUSION CRITERIA AND NUMBER OF SUBJECTS:

Examples of inclusion/exclusion criteria - gender, age, health status, ethnicity

The subject pool will include Virginia Tech affiliated people of any gender, age, health status, and ethnicity. This shall include undergraduates, graduates, faculty, and staff. We hope that our short survey will reach hundreds of participants, and aim to get as many as we can.

3.2 WILL EXISTING RECORDS BE USED TO IDENTIFY AND CONTACT / RECRUIT SUBJECTS?

Examples of existing records - directories, class roster, university records, educational records

No, go to question 3.3

Yes, answer questions within table

IF YES

Are these records private or public?

Public

Private, describe the researcher's privilege to the records:

Will student, faculty, and/or staff records or contact information be requested from the University?

No

Yes, visit the following link for further information: http://www.policies.vt.edu/index.php (policy no. 2010)

3.3 DESCRIBE RECRUITMENT METHODS, INCLUDING HOW THE STUDY WILL BE ADVERTISED OR INTRODUCED TO SUBJECTS:

The recruitment methods will be through approved postings via the Virginia Tech emailing lists, the SONA System, as well as through word of mouth from the researchers.

3.4 PROVIDE AN EXPLANATION FOR CHOOSING THIS POPULATION:

Note: the IRB must ensure that the risks and benefits of participating in a study are distributed equitably among the general population and that a specific population is not targeted because of ease of recruitment.

The population has been chosen as Virginia Tech affiliated undergraduates, graduates, faculty, and staff as the target audience for the model system being implemented. We hope to gain insights into the usage habits and other usability data from people representative of a campus population.

Section 4: Consent Process

For more information about consent process and consent forms visit the following link: http://www.irb.vt.edu/pages/consent.htm

If feasible, researchers are advised and may be required to obtain signed consent from each participant unless obtaining signatures leads to an increase of risk (e.g., the only record linking the subject and the research would be the consent document and the principal risk would be potential harm resulting in a breach of confidentiality). Signed consent is typically not required for low risk questionnaires (consent is implied) unless audio/video recording or an in-person interview is involved. If researchers will not be obtaining signed consent, participants must, in most cases, be supplied with consent information in a different format (e.g., in recruitment document, at the beginning of survey instrument, read to participant over the phone, information sheet physically or verbally provided to participant).

4.1 CHECK ALL OF THE FOLLOWING THAT APPLY TO THIS STUDY'S CONSENT PROCESS:

| | Verbal consent will be obtained from participants | |
|-------------|--|------|
| \boxtimes | Written/signed consent will be obtained from participate | ants |

| .2] | PROVIDE A GENERAL DESCRIPTION OF THE PROCESS THE RESEARCH TEAM WILL USI |
|-----|--|
| | below) Other, describe: |
| _ | Consent will be implied from the return of completed questionnaire. Note: The IRB recommends providing consent information in a recruitment document or at the beginning of the questionnaire (if the study only involves implied consent, skip to Section 5 |

7.2 PROVIDE A GENERAL DESCRIPTION OF THE PROCESS THE RESEARCH TEAM WILL USE TO OBTAIN AND MAINTAIN INFORMED CONSENT:

A consent form will be presented at the start of the interview and the contestent will be given plenty of time to read through the document and sign consent.

4.3 WHO, FROM THE RESEARCH TEAM, WILL BE OVERSEEING THE PROCESS AND OBTAINING CONSENT FROM SUBJECTS?

Kimberly Zeitz will be overseeing the interviews in person. Dr. Tront and Randy Marchany are also investigators who will be informed.

4.4 WHERE WILL THE CONSENT PROCESS TAKE PLACE?

The consent process will take place in a reserved conference room before the study begins.

4.5 DURING WHAT POINT IN THE STUDY PROCESS WILL CONSENTING OCCUR?

Note: unless waived by the IRB, participants must be consented before completing any study procedure, including screening questionnaires.

Consent will be given before the pre-questionnaire, interview, and post-questionnaire.

4.6 IF APPLICABLE, DESCRIBE HOW THE RESEARCHERS WILL GIVE SUBJECTS AMPLE TIME TO REVIEW THE CONSENT DOCUMENT BEFORE SIGNING:

Note: typically applicable for complex studies, studies involving more than one session, or studies involving more of a risk to subjects.

Time will be a lot to allow for time before the study begins.

Not applicable

Section 5: Procedures

5.1 PROVIDE A STEP-BY-STEP THOROUGH EXPLANATION OF ALL STUDY PROCEDURES EXPECTED FROM STUDY PARTICIPANTS, INCLUDING TIME COMMITMENT & LOCATION:

This research will include a short electronic survey to be completed by participants at their desired location and on their own device. The survey is considered to have a time commitment estimated to be less than fifteen minutes with around 15 questions. Further, participants will be recruited to sign-up for an interview. This study will involve time for filling out a consent form first followed by a pre-questionnaire, interview, and post-questionnaire.

5.2 DESCRIBE HOW DATA WILL BE COLLECTED AND RECORDED:

The data will be collected electronically through the VT Surveys system to include answer selection and optional further descriptions provided. Participants will be anonymized.

5.3 DOES THE PROJECT INVOLVE ONLINE RESEARCH ACTIVITES (INCLUDES ENROLLMENT, RECRUITMENT, SURVEYS)?

| No, go to question 6.1 Yes, answer questions within table |
|---|
| Identify the service / program that will be used: |
| Identify the service / program that will be used: |
| Section 6: Risks and Benefits |
| Name of service / program: URL: This service is Included on the list found at: http://www.irb.vt.edu/pages/validated.htm Approved by VT IT Security An external service with proper SSL or similar encryption (https://) on the login (if applicable) and all other data collection pages. None of the above (note: only permissible if this is a collaborative project in which VT individuals are only responsible for data analysis, consulting, or recruitment) Section 6: Risks and Benefits 6.1 WHAT ARE THE POTENTIAL RISKS (E.G., EMOTIONAL, PHYSICAL, SOCIAL, LEGAL, ECONOMIC, OR DIGNITY) TO STUDY PARTICIPANTS? There is next to no risk from participation. Questions will refer to device usage and application download habits including user thoughts on downloading a campus safety application. The interview questions involve VTAlerts and looking at a paper interface prototype. 6.2 EXPLAIN THE STUDY'S EFFORTS TO REDUCE POTENTIAL RISKS TO SUBJECTS: The study will anonymize participants and does not prompt for any highly emotional responses of campus |
| Included on the list found at: http://www.irb.vt.edu/pages/validated.htm Approved by VT IT Security An external service with proper SSL or similar encryption (https://) on the login (if applicable) and all other data collection pages. None of the above (note: only permissible if this is a collaborative project in which VT individuals are only responsible for data analysis, consulting, or recruitment) Section 6: Risks and Benefits 6.1 WHAT ARE THE POTENTIAL RISKS (E.G., EMOTIONAL, PHYSICAL, SOCIAL, LEGAL, ECONOMIC, OR DIGNITY) TO STUDY PARTICIPANTS? There is next to no risk from participation. Questions will refer to device usage and application download habits including user thoughts on downloading a campus safety application. The interview questions involve VTAlerts and looking at a paper interface prototype. 6.2 EXPLAIN THE STUDY'S EFFORTS TO REDUCE POTENTIAL RISKS TO SUBJECTS: The study will anonymize participants and does not prompt for any highly emotional responses of campus |
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| The study will anonymize participants and does not prompt for any highly emotional responses of campus |
| |
| |
| 6.3 WHAT ARE THE DIRECT OR INDIRECT ANTICIPATED BENEFITS TO STUDY PARTICIPANTS AND/OR SOCIETY? |
| Data collected during this study will allow for an assessment of mobile device usage to aid in the design, development, and analysis of a campus notification system. Findings will be published and utilized for research aimed at optimizing and enhancing the performance of crisis notification systems. |
| Section 7: Full Board Assessment 7.1 DOES THE RESEARCH INVOLVE MICROWAVES/X-RAYS, OR GENERAL ANESTHESIA OR |
| SEDATION? No |

7.2 DO RESEARCH ACTIVITIES INVOLVE PRISONERS, PREGNANT WOMEN, FETUSES, HUMAN IN VITRO FERTILIZATION, OR MENTALLY DISABLED PERSONS?

| Yes, answer questions within table |
|---|
| * |
| IF YES |
| This research involves: |
| Prisoners Pregnant women Fetuses Human in vitro fertilization |
| Mentally disabled persons |
| |
| 7.3 DOES THIS STUDY INVOLVE MORE THAN MINIMAL RISK TO STUDY PARTICIPANTS? Minimal risk means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily activities or during the performance of routine physical or psychological examinations or tests. Examples of research involving greater than minimal risk include collecting data about abuse or illegal activities. Note: if the project qualifies for Exempt review (http://www.irb.vt.edu/pages/categories.htm), it will not need to go to the Full Board. |
| ⊠ No □ Yes |
| IF YOU ANSWERED "YES" TO <i>ANY ONE</i> OF THE ABOVE QUESTIONS, 7.1, 7.2, OR 7.3, THE BOARD MAY REVIEW THE PROJECT'S APPLICATION MATERIALS AT ITS MONTHLY MEETING. VIEW THE FOLLOWING LINK FOR DEADLINES AND ADDITIONAL INFORMATION: http://www.irb.vt.edu/pages/deadlines.htm |
| |
| |
| Section 8: Confidentiality / Anonymity |
| For more information about confidentiality and anonymity visit the following link: http://www.irb.vt.edu/pages/confidentiality.htm |
| 8.1 WILL PERSONALLY IDENTIFYING STUDY RESULTS OR DATA BE RELEASED TO ANYONE OUTSIDE OF THE RESEARCH TEAM? For example – to the funding agency or outside data analyst, or participants identified in publications with individual consent |
| NoYes, to whom will identifying data be released? |
| 8.2 WILL ANY STUDY FILES CONTAIN PARTICIPANT IDENTIFYING INFORMATION (E.G., NAME, CONTACT INFORMATION, VIDEO/AUDIO RECORDINGS)? Note: if collecting signatures on a consent form, select "Yes." |
| No, go to question 8.3Yes, answer questions within table |
| ♦ |
| IF YES |
| Describe if/how the study will utilize study codes: |
| If applicable, where will the key [i.e., linked code and identifying information document (for instance, John Doe = study ID 001)] be stored and who will have access? |
| Note: the key should be stored separately from subjects' completed data documents and accessibility should be limited. |
| |

The IRB strongly suggests and may require that all data documents (e.g., questionnaire responses, interview responses, etc.) do not include or request identifying information (e.g., name, contact information, etc.) from participants. If you need to link subjects' identifying information to subjects' data documents, use a study ID/code on all data documents.

8.3 WHERE WILL DATA BE STORED?

Examples of data - questionnaire, interview responses, downloaded online survey data, observation recordings, biological samples

Downloaded online survey data will be stored in a secure place, such that only research team members have access.

8.4 WHO WILL HAVE ACCESS TO STUDY DATA?

The study investigators.

8.5 DESCRIBE THE PLANS FOR RETAINING OR DESTROYING THE STUDY DATA

The data will be stored for at most three years, at which time the investigator(s) will re-evaluate the plans for retaining or destroying data.

8.6 DOES THIS STUDY REQUEST INFORMATION FROM PARTICIPANTS REGARDING ILLEGAL BEHAVIOR?

| ∑ No, go to question 9.1 | |
|------------------------------------|---|
| Yes, answer questions within table | |
| | |
| | • |

| IF YES |
|---|
| Does the study plan to obtain a Certificate of Confidentiality? |
| □No |
| Yes (Note: participants must be fully informed of the conditions of the Certificate of Confidentiality within |
| the consent process and form) |
| |
| For more information about Certificates of Confidentiality, visit the following link: |
| http://www.irb.vt.edu/pages/coc.htm |

Section 9: Compensation

For more information about compensating subjects, visit the following link: http://www.irb.vt.edu/pages/compensation.htm

9.1 WILL SUBJECTS BE COMPENSATED FOR THEIR PARTICIPATION?

| No, go to question 10.1 | |
|-------------------------|--|
| | |
| | |
| | |

IF YES

What is the amount of compensation? Some students may choose to receive credit for classes by participating.

| | Yes, please describe: No, explain why and clarify whether subjects will receive full compensation if they withdraw from the study? Participants will receive full credit for attempting the study, even if they submit an incomplete survey. |
|---|---|
| | Unless justified by the researcher, compensation should be prorated based on duration of study participation. Payment must <u>not</u> be contingent upon completion of study procedures. In other words, even if the subject decides to withdraw from the study, he/she should be compensated, at least partially, based on what study procedures he/she has completed. |
| ! | |
| Section 10: | Audio / Video Recording |
| For more informati | on about audio/video recording participants, visit the following link: http://www.irb.vt.edu/pages/recordings.htm |
| 10.1 WILL YO | OUR STUDY INVOLVE VIDEO AND/OR AUDIO RECORDING? |
| No, go to que | estion 11.1 questions within table ———————————————————————————————————— |
| 1 cs, answer | questions within table |
| | IF YES |
| | This project involves: Audio recordings only Video recordings only Both video and audio recordings |
| | Provide compelling justification for the use of audio/video recording: |
| | How will data within the recordings be retrieved / transcribed? |
| | How and where will recordings (e.g., tapes, digital data, data backups) be stored to ensure security? |
| | Who will have access to the recordings? |
| | Who will transcribe the recordings? |
| | When will the recordings be erased / destroyed? |
| | |
| Section 11: | Research Involving Students |
| 11.1 DOES TH | IS PROJECT INCLUDE STUDENTS AS PARTICIPANTS? |
| No, go to que Yes , answer of | estion 12.1 questions within table ———————————————————————————————————— |
| | IF YES Does this study involve conducting research with students of the researcher? |
| | No ☐ Yes, describe safeguards the study will implement to protect against coercion or undue influence for |
| | |

| | participation: |
|------------------------------|---|
| | Note: if it is feasible to use students from a class of students not under the instruction of the researcher, the IRB recommends and may require doing so. |
| | Will the study need to access student records (e.g., SAT, GPA, or GRE scores)? □ No □ Yes |
| 11.2 DOES TH | IIS PROJECT INCLUDE <u>ELEMENTARY</u> , <u>JUNIOR</u> , OR <u>HIGH SCHOOL</u> STUDENTS? |
| No, go to que | estion 11.3 questions within table |
| | IF YES |
| | Will study procedures be completed during school hours? No Yes |
| | If yes, |
| | Students not included in the study may view other students' involvement with the research during school time as unfair. Address this issue and how the study will reduce this outcome: |
| | Missing out on regular class time or seeing other students participate may influence a student's decision to participate. Address how the study will reduce this outcome: |
| | Is the school's approval letter(s) attached to this submission? ☐ Yes ☐ No, project involves Montgomery County Public Schools (MCPS) ☐ No, explain why: |
| | You will need to obtain school approval (if involving MCPS, click here: http://www.irb.vt.edu/pages/mcps.htm). Approval is typically granted by the superintendent, principal, and classroom teacher (in that order). Approval by an individual teacher is insufficient. School approval, in the form of a letter or a memorandum should accompany the approval request to the IRB. |
| 11.3 DOES TH | IIS PROJECT INCLUDE <u>COLLEGE</u> STUDENTS? |
| No, go to que ✓ Yes, answer | estion 12.1 questions within table ———————————————————————————————————— |
| | IF YES |
| | Some college students might be minors. Indicate whether these minors will be included in the research or actively excluded: Included Actively excluded, describe how the study will ensure that minors will not be included: |
| | Will extra credit be offered to subjects? □ No □ Yes |
| | If yes |

What will be offered to subjects as an equal alternative to receiving extra credit without participating in this study? Students receiving credit for the study have the option to choose which they participate in through the SONA System.

Include a description of the extra credit (e.g., amount) to be provided within question 9.1 ("IF YES" table)

Section 12: Research Involving Minors

in Section 4 (Consent Process) of this form.

12.1 DOES THIS PROJECT INVOLVE MINORS (UNDER THE AGE OF 18 IN VIRGINIA)?

Note: age constituting a minor may differ in other States. No, go to question 13.1 ✓ Yes, answer questions within table – Does the project reasonably pose a risk of reports of current threats of abuse and/or suicide? ⊠ No Yes, thoroughly explain how the study will react to such reports: Note: subjects and parents must be fully informed of the fact that researchers must report threats of suicide or suspected/reported abuse to the appropriate authorities within the Confidentiality section of the Consent, Assent, and/or Permission documents. Are you requesting a waiver of parental permission (i.e., parent uninformed of child's involvement)? No, **both** parents/guardians will provide their permission, if possible. No, **only one** parent/guardian will provide permission. Yes, describe below how your research meets <u>all</u> of the following criteria (A-D): Criteria A - The research involves no more than minimal risk to the subjects: The survey is a device usability survey and does not prompt for anything more than usage statistics and the interview questions are kept with anonymized ids. Criteria B - The waiver will not adversely affect the rights and welfare of the subjects: The survey and interview is anonymized and does not ask for any PII and is based on device Criteria C - The research could not practicably be carried out without the waiver: As an electronic survey, there is no way to regulate submission of students who are minors without excluding them by prompting for age. Criteria D - (Optional) Parents will be provided with additional pertinent information after participation: Study results will be published Is it possible that minor research participants will reach the legal age of consent (18 in Virginia) while enrolled in this study? ⊠ No Yes, will the investigators seek and obtain the legally effective informed consent (in place of the minors' previously provided assent and parents' permission) for the now-adult subjects for any ongoing interactions with the subjects, or analysis of subjects' data? If yes, explain how: For more information about minors reaching legal age during enrollment, visit the following link: http://www.irb.vt.edu/pages/assent.htm The procedure for obtaining assent from minors and permission from the minor's guardian(s) must be described

Section 13: Research Involving Deception

For more information about involving deception in research and for assistance with developing your debriefing form, visit our website at http://www.irb.vt.edu/pages/deception.htm

13.1 DOES THIS PROJECT INVOLVE DECEPTION?

| No, go to que Yes, answe | uestion 14.1 r questions within table |
|--------------------------|--|
| | IF YES |
| | Describe the deception: |
| | Why is the use of deception necessary for this project? |
| | Describe the debriefing process: |
| | Provide an explanation of how the study meets <u>all</u> the following criteria (A-D) for an alteration of consent: Criteria A - The research involves no more than minimal risk to the subjects: Criteria B - The alteration will not adversely affect the rights and welfare of the subjects: Criteria C - The research could not practicably be carried out without the alteration: Criteria D - (Optional) Subjects will be provided with additional pertinent information after participation (i.e., debriefing for studies involving deception): |
| | By nature, studies involving deception cannot provide subjects with a complete description of the study during the consent process; therefore, the IRB must allow (by granting an alteration of consent) a consent process which does not include, or which alters, some or all of the elements of informed consent. |
| | The IRB requests that the researcher use the title "Information Sheet" instead of "Consent Form" on the document used to obtain subjects' signatures to participate in the research. This will adequately reflect the fact that the subject cannot fully consent to the research without the researcher fully disclosing the true intent of the research. |

Section 14: Research Involving Existing Data

14.1 WILL THIS PROJECT INVOLVE THE COLLECTION OR STUDY/ANALYSIS OF EXISTING DATA DOCUMENTS, RECORDS, PATHOLOGICAL SPECIMENS, OR DIAGNOSTIC SPECIMENS?

Please note: it is not considered existing data if a researcher transfers to Virginia Tech from another institution and will be conducting data analysis of an on-going study.

| nswer questions within table | | |
|-----------------------------------|--------------|--|
| | ↓ | |
| | IF YES | |
| From where does the existing data | a originate? | |

| Is the source of the data public? |
|--|
| No, continue with the next question |
| Yes, you are finished with this application |
| |
| Will any individual associated with this project (internal or external) have access to or be provided with |
| existing data containing information which would enable the identification of subjects: |
| Directly (e.g., by name, phone number, address, email address, social security number, student ID number), |
| or |
| Indirectly through study codes even if the researcher or research team does not have access to the master |
| list linking study codes to identifiable information such as name, student ID number, etc |
| or |
| Indirectly through the use of information that could reasonably be used in combination to identify an |
| individual (e.g., demographics) |
| muviduai (e.g., demographics) |
| No, collected/analyzed data will be completely de-identified |
| Yes. |
| in res, |
| W |
| If yes, |
| Described the second se |
| Research will not qualify for exempt review; therefore, if feasible, written consent must be obtained |
| from individuals whose data will be collected / analyzed, unless this requirement is waived by the |
| IRB. |
| |
| Will written/signed or verbal consent be obtained from participants prior to the analysis of |
| collected data? -select one- |
| |

This research protocol represents a contract between all research personnel associated with the project, the University, and federal government; therefore, must be followed accordingly and kept current.

Proposed modifications must be approved by the IRB prior to implementation except where necessary to eliminate apparent immediate hazards to the human subjects.

Do not begin human subjects activities until you receive an IRB approval letter via email.

It is the Principal Investigator's responsibility to ensure all members of the research team who interact with research subjects, or collect or handle human subjects data have completed human subjects protection training prior to interacting with subjects, or handling or collecting the data.



B.8 Interview Data

Nr;Date;;ID:;1. Please select your role at Virginia Tech:;Additional explanation or comments:;2. Please select your gender.;Additional explanation or comments:;3. I am familiar with the VT Alerts system.;Additional explanation or comments:;I am familiar with interactions on a mobile device.;Additional explanation or comments:;I am content with the VT Alerts system.;Additional explanation or comments:

1;2014-04-22 08:56:19;;1;Faculty member;AP faculty and adjunct instructor;Female;;Neutral;;Agree;;Neutral;

2;2014-04-22 10:12:48;;2;Graduate student;;Male;;Agree;;Strongly Agree;;Agree;

3;2014-04-22 13:58:58;;3;Graduate student;;Male;;Agree;;Strongly Agree;;Disagree;

4;2014-04-22 14:16:04;;4;Staff member;;Female;;Strongly Agree;;Strongly Agree;;Neutral;

5;2014-04-22 15:20:56;;5;Graduate student, Staff member;;Male;;Strongly Agree;;Strongly Agree;

6;2014-04-23 09:01:12;;6;Undergraduate student;;Female;;Agree;;Strongly Agree;;Agree;

7;2014-04-23 10:58:21;;7;Undergraduate student;;Female;;Neutral;;Agree;;Agree;

8;2014-04-23 13:01:15;;8;Undergraduate student;;Female;;Agree;;Strongly Agree;;Agree;

9;2014-04-23 15:33:59;;9;Undergraduate student;;Male;;Neutral;;Strongly Agree;;Agree;

10;2014-04-23 16:49:25;;10;Undergraduate student;;Female;;Neutral;;Agree;;Strongly Agree;

11;2014-04-24 15:46:01;;11;Staff member;;Male;;Agree;;Agree;

12;2014-04-25 11:27:32;;12;Faculty member;;Male;;Agree;;Strongly Agree;;Agree;

The red circle is the hazard area and boundaries of gas leak. Interpreting this to see I am ok but should not walk towards Torg.;;That would probably take me back to the original screen, which is confusing cause I would think same as back button.;All alerts I would think listing of history of alerts. Other screen has 1 listing.;Zoom in;Zoom out;WOuld take to previous screen;Looks like a button because I am in the map view. Maybe different map view of campus no google earthy.;;;Ok that is map view. For me I am not great at maps so earth view would be the best. It is easier for me to recognize land marks. If I was at CRC I may use map view, not on campus. I am not good at figuring out where CRC is related to campus and I would like seeing where I was located in relation the what was going on on campus.;;Looking at this screen it would make me think all alerts are things happening right now. Not a history but everything happening on campus. Torg and Lane stadium.;;So a my alert would only be things close to your location? Isn't that dangerous with people moving around. You could be headed towards gas leak and not be aware of it until you are in danger zone. Distinction between my alerts and all alerts makes me nervous.;Over in Torg. Did this correctly.;I would click on the little red pointer or pin.;;I can view just the one.

2;2014-04-22 10:28:33;;2;;Yes;Texts;Just one;Yes;All;No;Don't reply;No;;Yes;;;No;;15 minutes;;Yes;;Yes;What makes it so much faster than sending a text message to a user.;Yes;;N/A;;;This screen is giving information about an alert that has just happened. It is giving me a time sent, what it is about, and where it occurred. From here I can tell that I have the option to scroll through multiple. I can tap map which I imagine will show where the alert has occurred and possibly my location relative to it. There is a home button to home screen. Don't know what exactly would be there.; I know where torg is and where I am so I don't necessarily look at map. If I did not know I would possibly check the map. If I thought I was close enough where I may be in danger I would probably leave, such as exit Torg. If I am not at Torg or the place where the event is occurring I would exit the application.;;This is showing me Torg hall with an indicator on it where the event is taking place. I see a radius around it which I might interpret as the area being affected. I would wonder how app would know area of gas leak so I may not pay too much attention to that. I see the android logo, and assume my location, but I have n iphone so may be a little confusing. Not sure difference between my alert and all. My may be current and tap to bring back to previous page. All alerts may be listing of all alerts ever received.;;My may be current and tap to bring back to previous page.; All alerts may be listing of all alerts ever received.; zoom in; zoom out; Back to previous screen.; I am already looking at a map, but since this is aerial photography I can guess it is road map and labeled view without photgraphs.;;Yes;I find them useful. That functionality I expect in a map after using Google maps for so many years. I noticed that the radius of the area of effect has seemingly grown larger to overtake my avatar on the screen.;;Based on this I don't know. First I would have to understand which view I am looking at at the moment. I assume I am looking at multiple on the screen and my alert would be single. All alerts that not yet expired. Screen does not indicate which view you are looking at on the screen.; Yes;; My location is the android icon.; I would tap on the alert icon itself.;;Just one.

3;2014-04-22 14:10:04;;3;;Yes;Texts;One;Yes;All;No;No;No;Yes;It is fine. I just assume I get the alerts.;;No;;Probably 20 minutes;;Yes;;;Yes;If it does not save the location then I am fine with it and can give the permissions.;Yes;;N/A;;;So it is about a gas leak repair and it is giving the exact location at Torg.

I have a map button to use to map Torg hall. Expiration time is given.;If I am not there I would just ignore it.;;It is to show the exact location of Torg. hall.;;If I go to the my alert it should show mine.;All issued today or last few days;Zoom in (Many apps for maps do not have the + and - natural to use finger pinch. Save space.;Zoom out;First screen;Already in map view?;;Maybe;Oh it changes between earth view and map view. I never change my view of the map. Actually it is dependent on the user some people may want change it. It is small on smartphone to see satellite view.;;Oh so the my alert may be based on my current location. I was at Torg. Clicking on all alerts shows me all alerts on the campus now.;Yes;;Torg hall. Pointed to android man. I missed that in the first screen.;Clicked on the bubble.;;Just one. Because shows 1 of 1.

4;2014-04-22 14:38:21;;4;;Yes;Texts;1;Yes;All;Yes;Yes;Yes;It is a way of the system knowing it can stop notifying you. RSVP to the panic so it stops sending it over and over.;Yes;I suppose;;No;;10 minutes;;Yes;;Yes;Does it notify users based one location first?;No;;Yes;;;That would be probably more important overview information. With the headline being the tagline of the alert being described. The description is a little vague. The expires and sent..sent is when the system sent it out. Not entirely certain what expired means, could be resolved in 24 hours or that it is no longer valid. SO I would receive another if it still is. Short description what happened, classes cancelled, what to do. Location of leak. May be ambiguous to say where taking place..what if it is an ongoing burglary, could change location. I assume map button relevant to this info. Ordering is interesting. You would think that the sent and expire further down the page. STart with what I have to know.;If I was int he affected area I would leave. Depending on how close I was to Torg I might avoid sparking open flame. You could always use wet rag and put over your place. But finding a way to leave. My smartphone comes with a home button I usually just hit that. In the event is says classes postponed is this Torg or campus wide.;;The red circle is probably the affected area with a google map pin. (I know Torg and it says Torg). We have a little android fellow and I would guess that this is where I am currently. There appear to be filter buttons at the top. I don't know what to make of those. I would be curious is I have a VIP buddy list to display to see if I can alert them to danger.;;Everyone's alerts? I am not concerned about fire don't alert me about fire. I have no idea what the my alert button would do I assume preference menu.;Remove any preference filter.;Ah I didn't see. Zoom in;Zoom out;Take me to he alert detail page;I assume gets me a different map.;;Maybe;For this example maybe not. Now, I don't know if I can think of something when it would be useful. If alert was widespread fire maybe, but I would expect it to give me navigation of getting out. It seems to be just showing me where the alert is. I don't see myself using this particular view unless the alert bubble is over the entire campus. Then I would not need the alert map.;;Um. Some sort of preference list and I still think ultimately. This picture shows e I am right next to one alert and the other I am some distance from. So in the case of you need to evacuate really the all alert feature seems appropriate. You would not want to head towards where something is wrong. Some sort of filtering thing makes people feel safer depending on how many happen every day. Don't want map littered with red circles. It is strange that on this map you have two pins and no information beyond their location. I assume red circle means affected area but no here is burglary here is fire.;Yes;I don't know if the my alert is all that useful then. To a certain extent having the button is a bit comforting. I value myself highly I want to see things directly impact me. A bit misleading all will affect you but severity of impact.;The android man is right next to the top pin. It is a bit interesting that he is

just a giant icon floating above the earth and he moves as I do. A more precise location indicator might be useful such as a line off to him to scale the point.; I would probably guess back. That is ambiguous because based on the series Details to earth to map view.;; I can view one.

5;2014-04-22 15:34:49;;5;;Yes;Both;Two. One is phone and one is text.;Yes;One;Sometimes;Yes;Yes;It is basically used for reporting to see how many people get it. A confirmation receipt.;Yes;Sometimes I wish it was faster. Overall yes. The information typically gets there when I need it. I have never had to react immediately.;;No;;Depends on the vendor. Probably 10-15 minutes.;;Yes;;;No;;Yes;;N/A;;;It appears to display the details of the alert. What is going on, what it is, where it is.; After this particular one probably I would not do anything I am not at Torg. If I was in the vicinity I would look at the map for more details. If I didn't know Torg I would pull the map right away.;;This appears to be a map. I has a center dot I assume point of origin for the incident occurring and radius is affected area or have issues with. Guessing that the android guy is my current location, but I am not 100% sure about that.;;Maybe alerts that relate to me right now. I don't think I saw a favorites so probably my current geospatial location.; Will be everything.; Zoom in; Zoom out; Alerts details; Going to toggle between various views like satellite.;;Yes;I mean especially the zooming to see what areas are affected. The map view is nice I mean it de-clutters it. The buildings a lot of time make it hard to see what is going on. When I am on campus I am mostly on roads anyways. You can still see sidewalks to.;;Going with earlier, the android dude is me. My alert give alert related to Torg. All alerts give me both alerts.; Yes; It very well might. It depends on how far away is defined. May not need to see Northern VA campus. But good to know what is going on on campus, who knows there may be another shooter and they may be mobile.;The android man is me.; Based on the buttons I would either click on marker and see if it takes me there or my alert or all. I assume it would give me a view I could view the details from.;;It looks like 1.

6;2014-04-23 09:10:56;;6;;Yes;Texts;Just one;Yes;All;No;Don't reply;Maybe;More information?;Yes;;;No;;Within a 30 minute span;;Yes;;;No;;Yes;;N/A;;;It is telling you that there is a gas leak or repair in Torg. Temporarily closed and we will probably be notified again when it opens or the notification expires.;Avoid Torg and know that my classes were postponed in Torg. Home button to exit.;;To show you where the alert is taking place or the place to avoid.;;I guess would be specifically for you like if it knew your schedule.;Telling you everything that was on campus. Like if MCB but I don't go.;Zoom in (Didn't see);Zoom out (Didn't see);Main menu;View rest of map;;Yes;By zooming out you can see which ways to avoid by road. New students would have no idea what the building is.;;I think the my alert is specifically to you. All alerts is what is happening around. Like I have a class in Torg but somebody is injured in Lane Stadium.;Yes;;Pointed to the android man.;Would click on where the alert was.;;There is one on this screen.

7;2014-04-23 11:09:29;;7;;Yes;Texts;Just one.;Yes;All;No;Don't reply;No;;Yes;;;No;But had only one number registered.;Between 5 and 10 minutes;;Yes;;;Yes;Is it just like an app you download?;Yes;;N/A;;;To say that there is a gas leak that is being repaired and that I shouldn't go to Torg hall and if I did have class I don't have class.;If I had class within the time limit I wouldn't go. I would probably check my email. Home button to exit out of the application.;;For someone who did not know where Torg was. It give you an aerial view and shows you where the issue is.;;The alerts that apply to me personally.;Any alerts going on in the area.;Zoom in;Zoom out;Go back to main screen;Wouldn't be

as detailed. Like a map not like pictures.;;Yes;It is easier to see with the streets labelled to see Torg compared to where I would be. Also this would help a lot more if driving.;;I want to say now that the all alerts is any within the Blacksburg area and my alert is on campus. My alert is like applying to me as a student at VT.;Yes;;The android man the pointed to another blue street dot.;Would you click on the alert.;;Just one on the screen you can use the arrows if there is more than one.

9;2014-04-23 15:48:42;;9;;Yes;Texts;Two. But not sure. His and his mom's maybe.;No;All;other: When it asks for test otherwise did not know you could reply.;Yes;No;No idea.;Yes;;;No;;15 minutes.;;Yes;;Yes;Why would it need my location? The only issue would be battery life.;Yes;As long as it was a VT sponsored thing. If the school told me to get it.; N/A;;; Avoid Torg because of a gas leak between the times and don't go to class if you have it there.; If I was near Torg I would try to avoid it and take a different route. Try to avoid buildings around it. If I had class in Torg don't go.;;It seems to me that if you don't know where Torg is it tell you where it is to be able to avoid that general area. I would guess the droid symbol is me, which would be very helpful if I could not tell where this is.;;I would guess would bring you back to reason for map, such as gas leak; All alerts that I ever received or all active at the moment.;Zoom in;Zoom out;Back to the actual details alert;Which view I am in or a different view. This looks like map view.;;Yes;I think it would be helpful if I was driving or on my bike or coming to campus or on a bus. Anything not walking cause it is more GPS. Like if you are coming down near Torg or so I don't have to pass by. I see now what map view did.;;I am guessing all alerts is all on map where they are at the same time and my alert is the ones that affect me.; Yes; It is good if I am going away from Torg maybe towards where another alert is so I know not to do that.; The android man. Question: Do you need to have GPS function on? (Drain battery); Would go to the My Alert or all alerts.;; One.

compared to where I am. The all alerts is how it will affect the rest of campus.;Yes;Because then I can know how far away things are and people not near me can know about alerts as well.;Pointed to somewhere in the middle of the map.;All alerts to view details.;;One alert.

11;2014-04-24 16:02:16;;11;;Yes;Texts;Just one;Yes;All;No;Don't reply;No;;Yes;Sure;;No;Seeing as only have one;1 minute;;Yes;I would want to know how it works and the security applications. Privacy and if it is spying on me.;;Yes;Is this real?;Yes;Why?;N/A;;;It is telling me where and when an alert is and the type. Instructions on what to do.; I would be a little confused. Is it just Torg classes postponed and what does postponed mean. My class is McBryde. I find the description rather confusing. I would like a link with more detailed instructions. The what to do is the important thing and that is most confusing with this particular design.;;I would presume the red thing is the location of the alert. But it doesn't tell me what to do about it or what it is. I don't know what the funny green monster is. It tells me it is in Torg but the other had more information. I suppose it would be possible to misconstrue that as my own location. I don't know if it is. Normally I know where I am so that is not a big deal. (Sarcastic);;I have no idea; A list of all alerts; Couldn't find it. Did not see it cause it was on top of a grey building. Zoom control; Zoom control; Id don't know where I came from (Usually in the top on iOS with arrow); I am on a map;;Yes;I can't imagine why I would do that. Torg hall is enough for me to use it without map. If you had said a different hall then a map would be useful. There are probably some building names I don't know. I like the map street view rather than earth maps. Zooming it would be hard to imagine why zooming is needed it seems like the whole campus fits on the screen. I can't imagine that the alerts will be localized to a single room or something like that.;; I can imagine all alerts is a list. I don't know what my alert is.;Yes;Because you want to know where they are.;Torg. Hall. Did it by Torg not the green man.;I would click on the icon;;One at a time. Seems like I can go between multiple ones here.

12;2014-04-25 11:41:28;;12;;other: email only;Phone calls;Just the office phone;Yes;None;other: N/A;other: N/A;No;;Yes;Agree;;No;I assumed I would get them on everything;Probably 3 to 5 minutes;;Yes;Text messages are becoming a less and less way to communicate with me;;;I assume you are proposing all platforms?;;I don't have anything against them but I turn them off because ios 7 it is your battery. I have iphone5 and upgrade will be in Fall. So I turn them off I normally have them on.;Yes;;;Probably I was walking by Torg and it detected that I was in the area. The heading is confusing cause it say alert details and not just alert or gas leak. The timing sent and expires. I can see clear info about even and location. 1 of 1 I can't browse any further. I would click and see map.; Click on the map. That would be my first thing.;;It is me as I am in the vicinity of where the alert was.;;Will probably take me back to alert details.; Will take me to any other active alerts not expired if not in my neighborhood.;Zoom in;Zoom out;Take to where I came from alert details;That is confusing because I am already on the map. Maybe take away terrain.;;Yes;I think zoom out gives me more context. I have been here 10 years and there are still some building I don't know where located. I may have general idea but I can see context. Closest way to get to my car or go see my wife is.;;The two is all alerts. The all alerts is all active alerts not expired that might be happening in the area I see when I zoom out and not necessarily connected to by geolocation. Then I could click and see what is happening in lane stadium even though not there.;Yes;Absolutely. Just for general knowledge I may just go to app and see if there are any alerts even if they don't necessarily alert me.;I am the little android guy.;I would click on the little pointer to view.;;I can see only 1.

Nr;Date;;ID:;1. I am content with the VT Alerts system as is.;Additional explanation or comments:;2. I would want a new mobile application for use with the VT Alerts system.;Additional explanation or comments:;3. The prototype interface was intuitive to use.;Additional explanation or comments:;4. I would enjoy using an interface based on this prototype.;Additional explanation or comments:;5. Please add any additional comments here.

1;2014-04-22 09:20:43;;1;Disagree;I think the current system lacks the ability to give me an idea of my own individual threat level (i.e., how close I am to the area on campus);Agree;I like the integration of the campus map. There are many buildings on campus that I am not familiar with - or know what they look like, but not what their official name is. You may also consider using building nicknames.;Agree;;Neutral;;The distinction between My Alerts and Alerts is a little concerning since people tend to move about the campus a lot. I would think that the administration would be concerned that all alerts are really my alerts.

2;2014-04-22 10:31:56;;2;Agree;;Agree;;Agree;;Agree;;Being able to view multiple active alerts simultaneously is a good idea. In emergency situations, such as the shooting at VT, new incidents occurred around campus as the situation unfolded. Such an alert system would have been appreciated at the time.

3;2014-04-22 14:13:22;;3;Agree;;Neutral;;Agree;;Agree;;

4;2014-04-22 14:48:46;;4;Disagree;The alert system takes 20 mins to reach 80% of users. The system proposed to me would take less time and provide more information.;Agree;I would want to know if the features of the app would work without active data or wireless settings on my smartphone. I turn my data off to save money and sometimes forget to turn on the WiFI. The existing system works through SMS or calling, neither of which require wifi or data.;Agree;Some of the button functions are ambiguous. The app is still relatively easy to navigate.;Agree;I don't know if I would "enjoy" it. This system presents more information than the current SMS system, so I would prefer the prototype.;I'm not sure of the "My alert" vs. "All alert" features now, as anything I consider "my alert" I would want others to know about. "All alert" gives the most information about the state of the area, which could contain pertinent information for a user viewing only "my alerts". You wouldn't want to evacuate one side of campus from one alert to another alert. I would also like to see relevant travel information if the alert advised an evacuation.

5;2014-04-22 15:40:18;;5;Agree;It would be nice if delivery were faster;Strongly Agree;Knowing that delivery would be much faster with mobile applications, I would want this, yes. Also, then those not affiliated with the university can know when alerts have occurred, letting my parents rest a little easier or stay more in the loop when I may or may not be able to place an actual call during an emergency.;Agree;Overall, I felt the interface was pretty intuitive. I would consider renaming "My Alerts" to something like "Nearby Alerts", as I know many other systems refer to "My [fill in the blank]" as something I've starred, or favorited, etc.;Agree;I know it's a prototype, so the fonts and styling isn't finalized. But, it still gave me the information I needed to act. May want to make the buttons contrast a little more when against the map, as the map has a lot of browns in it.;Having the expiration date may

be a little confusing, as normally an alert is dismissed using an "All Clear", or something similar. And, at times, that expiration date can slide out without necessarily being an update to the other details of the alert. Might cause a little confusion.

6;2014-04-23 09:11:38;;6;Neutral;;Strongly Agree;;Strongly Agree;;

7;2014-04-23 11:11:02;;7;Agree;;Strongly Agree;;Agree;;Strongly Agree;;I phone users may think the blue dot would be the current location instead of the little android man (green robot looking thing)

8;2014-04-23 13:14:43;;8;Agree;;Strongly Agree;;Strongly Agree;;Strongly Agree;;Would love for VT Alerts to be updated like this! Would be very helpful and make students feel safer and more connected with the campus as a whole. Awesome idea!!

9;2014-04-23 15:50:28;;9;Neutral;;Strongly Agree;Great idea, seems like it would be a very good addition;Strongly Agree;;Strongly Agree;;

10;2014-04-23 17:01:25;;10;Agree;;Agree;;Agree;;Agree;

11;2014-04-24 16:06:14;;11;Agree;;Agree;;Disagree;;Neutral;;VT alerts sends many wasteful messages like tests. Useful alerts are class cancelations due to weather.

12;2014-04-25 11:44:33;;12;Agree;;Strongly Agree;;Agree;The heading of each alert could/should be the alert title and not just generic Alert Details to give me instant context;Strongly Agree;;A link/button to call emergency services related to each alert would be good on alert details

Appendix C Usability Follow-up Interview

C.1 Recruitment Announcement

Interview Recruitment

Virginia Polytechnic Institute and State University

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C.2 Consent Form

Informed Consent

Virginia Polytechnic Institute and State University

Project: n Optimi ed ert S stem ased on Geospatia ocation Data

Experiment Time: ppro imate minutes

Investigators: imber eit a eit t edu

and arc an marc an t edu
Dr osep ront tront cs t edu

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C.3 Interview Transcript

Interview Questions

Virginia Polytechnic Institute and State University

ID Number:

Hello. As you have read in the consent form, this study is to gather more information and test the second iteration of a new application interface prototype. If you are ready to begin we will start.

You will be given screen shots of the second interface prototype and asked to elaborate on how you would interpret the screen and complete a few tasks.

SCREEN 1: Alert Details (Gas Leak)

Your phone has displayed a push notification saying "VT ALERT." When you click this noti ication t is screen is disp a ed ic ie ds do ou be ie e to be t e most important?

e ie ds a e been reordered in an attempt to put t e re e ant in ormation irst Do ou a ree it t is a out?

SCREEN 2: MAP (Zoomed in view)

P ease describe at actions ou ou de pect en c ic in on eac button

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- o S o cti e erts
- o Street ie

C.4 Post-Questionnaire

Post-Questionnaire

Virginia Polytechnic Institute and State University

ID Number:

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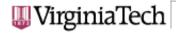
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C.5 IRB Approval Letter



Office of Research Compliance

Institutational Review Board

North End Center, Suite 4120, Virginia Tech

300 Turner Street NW Blacksburg, Virginia 24061 540/231-4606 Fax 540/231-0959

email irb@vt.edu

website http://www.irb.vt.edu

MEMORANDUM

DATE: April 29, 2014

TO: Randolph Carlos Marchany, Joseph G Tront, Kimberly Ann Zeitz

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires April 25, 2018)

PROTOCOL TITLE: VTGeoAlerts

IRB NUMBER: 14-184

Effective April 28, 2014, the Virginia Tech Institution Review Board (IRB) Chair, David M Moore, approved the Amendment request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

http://www.irb.vt.edu/pages/responsibilities.htm

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As: Exempt, under 45 CFR 46.110 category(ies) 2

Protocol Approval Date: February 17, 2014

Protocol Expiration Date: N/A
Continuing Review Due Date*: N/A

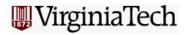
*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

IRB Research Protocol C.6



Institutional Review Board Research Protocol

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| Once complete, upload this form as a Word document to the IRB Protocol Management System: https://secure.research.vt.edu/irb |
|--|
| Section 1: General Information |
| .1 DO ANY OF THE INVESTIGATORS OF THIS PROJECT HAVE A REPORTABLE CONFLICT OF INTEREST? <u>ttp</u> irb t edu pa es researc ers tm con ict |
| No ☐ Yes, explain: |
| .2 WILL THIS RESEARCH INVOLVE COLLABORATION WITH ANOTHER INSTITUTION? |
| No, go to question 1.3Yes, answer questions within table |
| IF YES |
| Provide the name of the institution [for institutions located overseas, please also provide name of country]: |
| Indicate the status of this research project with the other institution's IRB: Pending approval Approved Other institution does not have a human subject protections review board Other, explain: |
| Will the collaborating institution(s) be engaged in the research? (ttp s o o rp po ic en a e tm No es |
| Will Virginia Tech's IRB review all human subject research activities involved with this project? No, provide the name of the primary institution: Yes |
| Note: primary institution = primary recipient of the grant or main coordinating center |
| .3 IS THIS RESEARCH FUNDED? |
| No, go to question 1.4Yes, answer questions within table |
| IF YES |
| Provide the name of the sponsor [if NIH, specify department]: |
| Is this project receiving federal funds? ☐ No ☐ Yes |

3.1 DESCRIBE THE SUBJECT POOL, INCLUDING INCLUSION AND EXCLUSION CRITERIA AND NUMBER OF SUBJECTS:

Examples of inclusion/exclusion criteria - gender, age, health status, ethnicity

The subject pool will include Virginia Tech affiliated people of any gender, age, health status, and ethnicity. This shall include undergraduates, graduates, faculty, and staff. We hope that our short survey will reach hundreds of participants, and aim to get as many as we can.

3.2 WILL EXISTING RECORDS BE USED TO IDENTIFY AND CONTACT / RECRUIT SUBJECTS?

Examples of existing records - directories, class roster, university records, educational records

No, go to question 3.3

Yes, answer questions within table

IF YES

Are these records private or public?

Public

Private, describe the researcher's privilege to the records:

Will student, faculty, and/or staff records or contact information be requested from the University?

No

Yes, visit the following link for further information: http://www.policies.vt.edu/index.php (policy no. 2010)

3.3 DESCRIBE RECRUITMENT METHODS, INCLUDING HOW THE STUDY WILL BE ADVERTISED OR INTRODUCED TO SUBJECTS:

The recruitment methods will be through approved postings via the Virginia Tech emailing lists, the SONA System, as well as through word of mouth from the researchers.

3.4 PROVIDE AN EXPLANATION FOR CHOOSING THIS POPULATION:

Note: the IRB must ensure that the risks and benefits of participating in a study are distributed equitably among the general population and that a specific population is not targeted because of ease of recruitment.

The population has been chosen as Virginia Tech affiliated undergraduates, graduates, faculty, and staff as the target audience for the model system being implemented. We hope to gain insights into the usage habits and other usability data from people representative of a campus population.

Section 4: Consent Process

For more information about consent process and consent forms visit the following link: http://www.irb.vt.edu/pages/consent.htm

If feasible, researchers are advised and may be required to obtain signed consent from each participant unless obtaining signatures leads to an increase of risk (e.g., the only record linking the subject and the research would be the consent document and the principal risk would be potential harm resulting in a breach of confidentiality). Signed consent is typically not required for low risk questionnaires (consent is implied) unless audio/video recording or an in-person interview is involved. If researchers will not be obtaining signed consent, participants must, in most cases, be supplied with consent information in a different format (e.g., in recruitment document, at the beginning of survey instrument, read to participant over the phone, information sheet physically or verbally provided to participant).

4.1 CHECK ALL OF THE FOLLOWING THAT APPLY TO THIS STUDY'S CONSENT PROCESS:

| | Verbal consent will be obtained from participants | |
|-------------|---|----|
| \boxtimes | Written/signed consent will be obtained from participan | ts |

| | Consent will be implied from the return of completed questionnaire. Note: The IRB recommends providing consent information in a recruitment document or at the beginning of the questionnaire (if the study only involves implied consent, skip to Section 5 below) Other, describe: |
|-----|---|
| 1.2 | PROVIDE A GENERAL DESCRIPTION OF THE PROCESS THE RESEARCH TEAM WILL USE TO OBTAIN AND MAINTAIN INFORMED CONSENT: |
| | A consent form will be presented at the start of the interview and the contestent will be given plenty of time to read through the document and sign consent. |
| 1.3 | WHO, FROM THE RESEARCH TEAM, WILL BE OVERSEEING THE PROCESS AND OBTAINING CONSENT FROM SUBJECTS? |
| | Kimberly Zeitz will be overseeing the interviews in person. Dr. Tront and Randy Marchany are also investigators who will be informed. |
| 1.4 | WHERE WILL THE CONSENT PROCESS TAKE PLACE? |
| | The consent process will take place in a reserved conference room before the study begins. |
| | DURING WHAT POINT IN THE STUDY PROCESS WILL CONSENTING OCCUR? Note: unless waived by the IRB, participants must be consented before completing any study procedure, including screening questionnaires. |
| | Consent will be given before the pre-questionnaire, interview, and post-questionnaire. The second interview will only include a short interview and post-questionnaire. |
| | IF APPLICABLE, DESCRIBE HOW THE RESEARCHERS WILL GIVE SUBJECTS AMPLE TIME TO REVIEW THE CONSENT DOCUMENT BEFORE SIGNING: Note: typically applicable for complex studies, studies involving more than one session, or studies involving more of a risk to subjects. |
| | Time will be a lot to allow for time before the study begins. Not applicable |
| | Little application |

Section 5: Procedures

5.1 PROVIDE A STEP-BY-STEP THOROUGH EXPLANATION OF ALL STUDY PROCEDURES EXPECTED FROM STUDY PARTICIPANTS, INCLUDING TIME COMMITMENT & LOCATION:

This research will include a short electronic survey to be completed by participants at their desired location and on their own device. The survey is considered to have a time commitment estimated to be less than fifteen minutes with around 15 questions. Further, participants will be recruited to sign-up for an interview. This study will involve time for filling out a consent form first followed by a pre-questionnaire, interview, and post-questionnaire. A second follow-up interview will be conducted to test the usability of the second interface protype interation. This will have a short interview and post-questionnaire.

5.2 DESCRIBE HOW DATA WILL BE COLLECTED AND RECORDED:

The data will be collected electronically through the VT Surveys system to include answer selection and optional further descriptions provided. Participants will be anonymized.

5.3 DOES THE PROJECT INVOLVE ONLINE RESEARCH ACTIVITES (INCLUDES ENROLLMENT, RECRUITMENT, SURVEYS)?

View the "Policy for Online Research Data Collection Activities Involving Human Subjects" at http://www.irb.vt.edu/documents/onlinepolicy.pdf

| No, go to que | estion 6.1 questions within table |
|----------------------|---|
| | IF YES |
| | Identify the service / program that will be used: www.survey.vt.edu, go to question 6.1 Blackboard, go to question 6.1 Center for Survey Research, go to question 6.1 Other |
| | IF OTHER: Name of service / program: URL: This service is Included on the list found at: http://www.irb.vt.edu/pages/validated.htm Approved by VT IT Security An external service with proper SSL or similar encryption (https://) on the login (if applicable) and all other data collection pages. None of the above (note: only permissible if this is a collaborative project in which VT individuals are only responsible for data analysis, consulting, or recruitment) |

Section 6: Risks and Benefits

6.1 WHAT ARE THE POTENTIAL RISKS (E.G., EMOTIONAL, PHYSICAL, SOCIAL, LEGAL, ECONOMIC, OR DIGNITY) TO STUDY PARTICIPANTS?

There is next to no risk from participation. Questions will refer to device usage and application download habits including user thoughts on downloading a campus safety application. The interview questions involve VTAlerts and looking at a paper interface prototype.

6.2 EXPLAIN THE STUDY'S EFFORTS TO REDUCE POTENTIAL RISKS TO SUBJECTS:

The study will anonymize participants and does not prompt for any highly emotional responses of campus safety. It only focuses on device and download usage.

6.3 WHAT ARE THE DIRECT OR INDIRECT ANTICIPATED BENEFITS TO STUDY PARTICIPANTS AND/OR SOCIETY?

Data collected during this study will allow for an assessment of mobile device usage to aid in the design, development, and analysis of a campus notification system. Findings will be published and utilized for research aimed at optimizing and enhancing the performance of crisis notification systems.

Section 7: Full Board Assessment

7.1 DOES THE RESEARCH INVOLVE MICROWAVES/X-RAYS, OR GENERAL ANESTHESIA OR SEDATION?

| ⊠ No □ Yes |
|---|
| 7.2 DO RESEARCH ACTIVITIES INVOLVE PRISONERS, PREGNANT WOMEN, FETUSES, HUMAN IN VITRO FERTILIZATION, OR MENTALLY DISABLED PERSONS? |
| No, go to question 7.3☐ Yes, answer questions within table |
| IF YES |
| This research involves: Prisoners Pregnant women Fetuses Human in vitro fertilization Mentally disabled persons |
| 7.3 DOES THIS STUDY INVOLVE MORE THAN MINIMAL RISK TO STUDY PARTICIPANTS? Minimal risk means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily activities or during the performance of routine physical or psychological examinations or tests. Examples of research involving greater than minimal risk include collecting data about abuse or illegal activities. Note: if the project qualifies for Exempt review (http://www.irb.vt.edu/pages/categories.htm), it will not need to go to the Full Board. |
| ⊠ No □ Yes |
| IF YOU ANSWERED "YES" TO <i>ANY ONE</i> OF THE ABOVE QUESTIONS, 7.1, 7.2, OR 7.3, THE BOARD MAY REVIEW THE PROJECT'S APPLICATION MATERIALS AT ITS MONTHLY MEETING. VIEW THE FOLLOWING LINK FOR DEADLINES AND ADDITIONAL INFORMATION: http://www.irb.vt.edu/pages/deadlines.htm |
| Section 8: Confidentiality / Anonymity |
| For more information about confidentiality and anonymity visit the following link: http://www.irb.vt.edu/pages/confidentiality.htm |
| 8.1 WILL PERSONALLY IDENTIFYING STUDY RESULTS OR DATA BE RELEASED TO ANYONE OUTSIDE OF THE RESEARCH TEAM? For example – to the funding agency or outside data analyst, or participants identified in publications with individual consent |
| NoYes, to whom will identifying data be released? |
| 8.2 WILL ANY STUDY FILES CONTAIN PARTICIPANT IDENTIFYING INFORMATION (E.G., NAME, CONTACT INFORMATION, VIDEO/AUDIO RECORDINGS)? Note: if collecting signatures on a consent form, select "Yes." |
| No, go to question 8.3☐ Yes, answer questions within table |
| IF YES |
| Describe if/how the study will utilize study codes: |
| If applicable, where will the key [i.e., linked code and identifying information document (for instance, John Doe = study ID 001)] be stored and who will have access? |

Note: the key should be stored separately from subjects' completed data documents and accessibility should be limited.

The IRB strongly suggests and may require that all data documents (e.g., questionnaire responses, interview responses, etc.) do not include or request identifying information (e.g., name, contact information, etc.) from participants. If you need to link subjects' identifying information to subjects' data documents, use a study ID/code on all data documents.

8.3 WHERE WILL DATA BE STORED?

Examples of data - questionnaire, interview responses, downloaded online survey data, observation recordings, biological samples

Downloaded online survey data will be stored in a secure place, such that only research team members have access.

8.4 WHO WILL HAVE ACCESS TO STUDY DATA?

The study investigators.

8.5 DESCRIBE THE PLANS FOR RETAINING OR DESTROYING THE STUDY DATA

The data will be stored for at most three years, at which time the investigator(s) will re-evaluate the plans for retaining or destroying data.

8.6 DOES THIS STUDY REQUEST INFORMATION FROM PARTICIPANTS REGARDING ILLEGAL BEHAVIOR?

| Yes, answer | questions within table ———————————————————————————————————— |
|-------------|---|
| | IF YES |
| | Does the study plan to obtain a Certificate of Confidentiality? No Yes (Note: participants must be fully informed of the conditions of the Certificate of Confidentiality within the consent process and form) |
| | For more information about Certificates of Confidentiality, visit the following link: http://www.irb.vt.edu/pages/coc.htm |

Section 9: Compensation

For more information about compensating subjects, visit the following link: http://www.irb.vt.edu/pages/compensation.htm

9.1 WILL SUBJECTS BE COMPENSATED FOR THEIR PARTICIPATION?

| \square No, go to question 10.1 | |
|--------------------------------------|---|
| Yes, answer questions within table — | 1 |
| | 1 |

IF YES

What is the amount of compensation? Some students may choose to receive credit for classes by participating.

| | participation: |
|--------------------------------|---|
| | Note: if it is feasible to use students from a class of students not under the instruction of the researcher, the IRB recommends and may require doing so. |
| | Will the study need to access student records (e.g., SAT, GPA, or GRE scores)? ⊠ No □ Yes |
| 11.2 DOES TH | IIS PROJECT INCLUDE <u>ELEMENTARY</u> , <u>JUNIOR</u> , OR <u>HIGH SCHOOL</u> STUDENTS? |
| No, go to que ☐ Yes, answer | estion 11.3 questions within table — |
| | IF YES |
| | Will study procedures be completed during school hours? No Yes |
| | If yes, |
| | Students not included in the study may view other students' involvement with the research during school time as unfair. Address this issue and how the study will reduce this outcome: |
| | Missing out on regular class time or seeing other students participate may influence a student's decision to participate. Address how the study will reduce this outcome: |
| | Is the school's approval letter(s) attached to this submission? ☐ Yes ☐ No, project involves Montgomery County Public Schools (MCPS) ☐ No, explain why: |
| | You will need to obtain school approval (if involving MCPS, click here: http://www.irb.vt.edu/pages/mcps.htm). Approval is typically granted by the superintendent, principal, and classroom teacher (in that order). Approval by an individual teacher is insufficient. School approval, in the form of a letter or a memorandum should accompany the approval request to the IRB. |
| 11.3 DOES TH | HIS PROJECT INCLUDE <u>COLLEGE</u> STUDENTS? |
| No, go to que ✓ Yes, answer | estion 12.1 questions within table — |
| | IF YES |
| | Some college students might be minors. Indicate whether these minors will be included in the research or actively excluded: Included |
| | Will extra credit be offered to subjects? □ No □ Yes |
| | If yes, |

What will be offered to subjects as an equal alternative to receiving extra credit without participating in this study? Students receiving credit for the study have the option to choose which they participate in through the SONA System.

Include a description of the extra credit (e.g., amount) to be provided within question 9.1 ("IF YES" table)

Section 12: Research Involving Minors

12.1 DOES THIS PROJECT INVOLVE MINORS (UNDER THE AGE OF 18 IN VIRGINIA)?

| Note: age con | nstituting a minor may differ in other States. |
|------------------------------|--|
| No, go to que ✓ Yes, answer | estion 13.1 questions within table — |
| | IF YES Does the project reasonably pose a risk of reports of current threats of abuse and/or suicide? No Yes, thoroughly explain how the study will react to such reports: Note: subjects and parents must be fully informed of the fact that researchers must report threats of suicide or suspected/reported abuse to the appropriate authorities within the Confidentiality section of the Consent, Assent, and/or Permission documents. |
| | Are you requesting a waiver of parental permission (i.e., parent uninformed of child's involvement)? No, both parents/guardians will provide their permission, if possible. No, only one parent/guardian will provide permission. Yes, describe below how your research meets all of the following criteria (A-D): Criteria A - The research involves no more than minimal risk to the subjects: The survey is a device usability survey and does not prompt for anything more than usage statistics and the interview questions are kept with anonymized ids. Criteria B - The waiver will not adversely affect the rights and welfare of the subjects: The survey and interviews are anonymized and do not ask for any PII and is based on device usage. Criteria C - The research could not practicably be carried out without the waiver: As an electronic survey, there is no way to regulate submission of students who are minors without excluding them by prompting for age. Interviews include a notice for participants stating that they should be 18 or older. Criteria D - (Optional) Parents will be provided with additional pertinent information after participation: Study results will be published |
| | Is it possible that minor research participants will reach the legal age of consent (18 in Virginia) while enrolled in this study? No Yes, will the investigators seek and obtain the legally effective informed consent (in place of the minors' previously provided assent and parents' permission) for the now-adult subjects for any ongoing interactions with the subjects, or analysis of subjects' data? If yes, explain how: |
| | For more information about minors reaching legal age during enrollment, visit the following link: http://www.irb.vt.edu/pages/assent.htm |

The procedure for obtaining assent from minors and permission from the minor's guardian(s) must be described

in Section 4 (Consent Process) of this form.

Section 13: Research Involving Deception

For more information about involving deception in research and for assistance with developing your debriefing form, visit our website at http://www.irb.vt.edu/pages/deception.htm

13.1 DOES THIS PROJECT INVOLVE DECEPTION?

| No, go to question 14.1Yes, answer questions within table |
|--|
| |

IF YES

Describe the deception:

Why is the use of deception necessary for this project?

Describe the debriefing process:

Provide an explanation of how the study meets all the following criteria (A-D) for an alteration of consent:

- Criteria A The research involves no more than minimal risk to the subjects:
- Criteria B The alteration will not adversely affect the rights and welfare of the subjects:
- Criteria C The research could not practicably be carried out without the alteration:
- Criteria D (Optional) Subjects will be provided with additional pertinent information after participation (i.e., debriefing for studies involving deception):

By nature, studies involving deception cannot provide subjects with a complete description of the study during the consent process; therefore, the IRB must allow (by granting an alteration of consent) a consent process which does not include, or which alters, some or all of the elements of informed consent.

The IRB requests that the researcher use the title "Information Sheet" instead of "Consent Form" on the document used to obtain subjects' signatures to participate in the research. This will adequately reflect the fact that the subject cannot fully consent to the research without the researcher fully disclosing the true intent of the research.

Section 14: Research Involving Existing Data

14.1 WILL THIS PROJECT INVOLVE THE COLLECTION OR STUDY/ANALYSIS OF EXISTING DATA DOCUMENTS, RECORDS, PATHOLOGICAL SPECIMENS, OR DIAGNOSTIC SPECIMENS?

Please note: it is not considered existing data if a researcher transfers to Virginia Tech from another institution and will be conducting data analysis of an on-going study.

| conducting | adda dhariysis of an on going stady. |
|------------|---|
| | finished with the application questions within table |
| | <u> </u> |
| | IF YES |
| | From where does the existing data originate? |
| | Provide a detailed description of the existing data that will be collected or studied/analyzed: |

| Is the source of the data public? No, continue with the next question Yes, you are finished with this application | | |
|---|--|--|
| Will any individual associated with this project (internal or external) have access to or be provided with | | |
| existing data containing information which would enable the identification of subjects: | | |
| Directly (e.g., by name, phone number, address, email address, social security number, student ID number), or | | |
| Indirectly through study codes even if the researcher or research team does not have access to the master list linking study codes to identifiable information such as name, student ID number, etc or | | |
| ■ Indirectly through the use of information that could reasonably be used in combination to identify an individual (e.g., demographics) | | |
| ☐ No, collected/analyzed data will be completely de-identified ☐ Yes, | | |
| If yes, | | |
| Research will not qualify for exempt review; therefore, if feasible, written consent must be obtained from individuals whose data will be collected / analyzed, unless this requirement is waived by the IRB. | | |
| Will written/signed or verbal consent be obtained from participants prior to the analysis of collected data? -select one- | | |

This research protocol represents a contract between all research personnel associated with the project, the University, and federal government; therefore, must be followed accordingly and kept current.

Proposed modifications must be approved by the IRB prior to implementation except where necessary to eliminate apparent immediate hazards to the human subjects.

Do not begin human subjects activities until you receive an IRB approval letter via email.

It is the Principal Investigator's responsibility to ensure all members of the research team who interact with research subjects, or collect or handle human subjects data have completed human subjects protection training prior to interacting with subjects, or handling or collecting the data.



C.7 Interview Data

Nr;Date;;ID:;;1. Your phone has displayed a push notification saying "VT ALERT." When you click this notification this screen is displayed. Which fields do you believe to be the most important?;2. The fields have been reordered in an attempt to put the relevant information first. Do you agree with this layout?;;;Show Nearby Alerts;Show All Active Alerts;Street View;;4. Can you please tell me the context of this screen? Which alerts are you viewing?;;5. Is the differentiation between the "Show Nearby Alerts" and the "Show All Active Alerts" button views clear? Please explain.;6. Can you please point to your current location on this screen?;;7. What is the context of this screen?

1;2014-04-29 16:12:30;;11;;The event field because it tells me what to do. Classes postponed therefore don't go to class. My office is in Torg so I would not go.;Seems reasonable. Wants to be able to click on the location. To have the context to show the building. Did not see the map button at the bottom. Having it with the location would have been nice.;;;Show the nearby alerts. I don't know how it would show them, I guess on the map.;Not just those nearby and maybe zoom out on the map to show them all. I don't know how one shows nearby.;That is a google maps thing between the two views. (Don't know why you need + and - would be nearly impossible on small screen) Make as much as possible to look like google maps.;;I assume blue is the active one. Not really obvious, cause the other buttons are blue, so what does that mean. Since that one is different, I assume nearby and you click on blue buttons. That could be made more clear. It doesn't look like the nearby ones cause it is zoomed way out. Who knows? If two state thing why show only one toggle button. Still a bit confusing. APNS Demo is wasting space and means nothing to me.;;I don't know which is which. The title are pretty straight forward.;Pointed to blue button and nicely labelled for me. I did not realize the icon at first.;;It is the same thing. Oh, I see the title is different. Would you expect overlap? I would expect that All active is a super-set of this one. All means universe.

2;2014-04-29 17:56:48;;4;;The most important probably will be based on how accurate it is, the headline. The event is the next one. The description is pretty basic. Headline, event, location, description, sent and expires.; I like it a lot better than the first prototype. I don't know how helpful the description is so much. The event and description sections seem to be the same. The event is like worker hits gas line or something. The description has all the details. Maybe language what happened and what should I do? Is this too strong? If you were exposed to gas seek medical help immediately or something like that.;;;That button has already been pushed as it is grey and not blue. So show nearby..it looks like I am the blue dot next to the alert at Torg. The red circle is area to avoid. I assume to scale. The blue dot is a little hard to see compared to bus symbols.; All alerts currently happening not just nearby me.; Google chrome street view. From what I see? Or street view of the location being alerted;;The show nearby alerts is grey. Blue not pushed currently. I am curious if this is the street view since it now says earth view. I assume I am in a different place from these two cause the scale should have changed. I am still the blue dot which is much easier to see. I can see the red circle get out of this zone area. It is interesting that this is called street view. All other blue buttons have not been pushed yet.;;Now we have all active alerts button active and I can see an alert at lane stadium. Yes. The nearby is nearest to me active all campus regardless of if I was near to it. Because of the scale of it it really just shows are you in the red circle or not. That seems to be the only info you get from this as there is no traffic info.; Pointed to the blue dot. Makes me curious if the swipe fingers in and out would work for

area;It would give you the streets listed or make it like a more map view. I personally think the map view would sound better because when you are on iPhone it is called "map view.";;I guess this would be the street or map view. I am viewing the nearby alerts. I compared the two to determine. Also the other buttons are blue and nearby alerts is not.;;Yes. The nearby alerts is where you are which is close to you and the other shows all alerts in VT/Blacksburg area.;Pointed to the little blue dot.;;There is a fire in lane stadium don't go near that area. It was released at two o'clock. This one is all active and the other screen is nearby. It is obviously like a different alert. I would expect my nearby alert to be listed in all active alerts.

Nr;Date;;ID:;1. The prototype interface was intuitive to use.;Additional explanation or comments:;2.

The prototype interface navigation was consistent with other smartphone applications.;Additional explanation or comments:;3. I would enjoy using an interface based on this prototype.;Additional explanation or comments:;4. Please add any additional comments here.

1;2014-04-29 16:14:27;;11;Agree;;Disagree;zooming would use 2 finger instead of buttons, back is usually top left;Agree;;

2;2014-04-29 18:03:26;;4;Agree;It wasn't clear how to navigate between nearby & all alerts without first accessing the map features. Also, it wasn't clear if I could tap an alert on the map and bring up that alert's detail information.;Agree;The only thing I noticed was the + and - signs on the map. Usually smartphones allow for zooming in and out by pinch zoom.;Neutral;Again, not sure I'd "enjoy" it. I do find it useful and I would prefer it to the current VT alerts.;I'd like a "where are my VIPs?" feature for the maps. I also would like a "safety plan" information page for the alerts and suggested "evac" routes. It doesn't have to be fancy, but I think it would be useful in an emergency to circumnavigate clogged roadways and blocked exits. I should note that in the prototype presented to me there was no way to tell if alerts switched categories (from nearby to all or vice versa) based on my changing location.

3;2014-04-29 18:24:22;;3;Neutral;All screens are not consistent. Some screen have back button on screen others rely on device's back button.;Agree;;Neutral;;

4;2014-04-30 11:10:13;;7;Agree;;Agree;;Strongly Agree;;i think prioritizing the alerts by color would help a lot. EX: construction was yellow and Emergency Alerts were red.

Appendix D Prototype Code URL

This is a prototype application implementation of the GeoVTAlerts which utilizes push notifications and user geospatial awareness to map a user's location and show nearby relevant and also all active VT alerts messages. The application has been built on top of the CNS provided android push library and demo application. Therefore, an installer certificate (in pkcs12/p12 format) is needed and should be placed into the res/raw directory. The Virginia Tech sandbox testing environment is utilized and alerts were sent through the use of a prototype web application. Further developments and testing are needed to ensure the robustness and scalability of this application which has not undergone rigorous testing. Development based on interface iterations and additional features is ongoing. As such, this is the basic proof of concept.

The code can be found at:

- https://github.com/kazeitz/GeoAlertVT.git
- https://filebox.ece.vt.edu/~jgtront/zeitz/