CEED PHONE APP

Madhur Mahajan, Zachary Hensley, Randy Liang, Sean Greynolds
CS4624: Multimedia, Hypertext, and Information Access
Edward A. Fox
Virginia Tech, Blacksburg VA 24061
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OUTLINE

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**Problem Identification**

- **Problem Statement**: Cross-platform mobile application to serve current and future CEED members as well as parents

- **App Requirements**:
  - Push Notifications
  - CEED Program Information
  - CEED Event Calendar
  - Forum Functionality
**PROJECT TIMELINE**

1/30

First Client Meeting
✓ Project specification
✓ Requirements gathering

2/13

Presentation 1
✓ Begin development
✓ Graphic design

2/20

Presentation 2
✓ User account functionality
✓ Link calendar

3/07

Testing
✓ Push notifications
✓ UI/UX testing
✓ Forum post comments

4/03

Presentation 3
✓ Basic forum posts
✓ CEED program details

4/20

Documentation
✓ Document all steps
● Client tutorial

5/01
IMPLEMENTATION

Appery.io

- Full stack cloud platform for hybrid mobile applications
- Tool to drag-n-drop major UI components
- Dashboard for easy app administration
- Custom javascript services and HTML code
- Implemented Existing Appery Plugins
TECHNOLOGY STACK

1. - Javascript run on Google V8 engine
   - Ionic+AngularJS for UI components

2. - HTML/Javascript/CSS
   - Apache Cordova for native iOS/Android support

3. - Javascript run on Google V8 engine
   - NoSQL database
## Testing

- Testing performed on Appery.io backend
- Used SUS test via survey (UX)
- Weinre Debugger (UI)

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Challenges

- Vague project requirements
- Communication with client
- Short time-frame
- Appery.io learning curve
- Poor Appery.io support
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<thead>
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<th>Possible Improvements</th>
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<tbody>
<tr>
<td>01</td>
<td>Complex Forum Posts</td>
<td>- Tag forum posts&lt;br&gt;- Search posts</td>
</tr>
<tr>
<td>02</td>
<td>Performance</td>
<td>- Cache app pages&lt;br&gt;- Tag based push notifications&lt;br&gt;- Publish on app store</td>
</tr>
<tr>
<td>04</td>
<td>Tags</td>
<td>- Automatically update tags&lt;br&gt;- Filter forum and announcements</td>
</tr>
<tr>
<td>03</td>
<td>UI/UX</td>
<td>- Update CSS&lt;br&gt;- Incorporate front end frameworks&lt;br&gt;- Further UI/UX testing</td>
</tr>
</tbody>
</table>
Demo
REFERENCES & ACKNOWLEDGEMENTS

● CEED contacts
  ○ Kristin Morrill
  ○ Dr. Bevlee Watford
  ○ Karis Boyd-Sinkler


QUESTIONS
Appendix

- Figure 1.1 - Login Page
- Figure 1.2 - Create Account Page
- Figure 1.3 - Home Page
- Figure 1.4 - Hamburger Menu
- Figure 1.5 - About CEED
- Figure 1.6 - Calendar
- Figure 1.7 - Programs Page
- Figure 1.8 - Program Details Page
- Figure 1.9 - Forum Page
- Figure 1.10 - Forum Post Details Page
- Figure 1.11 - Announcements Main Page
- Figure 1.12 - Update Tags
APPENDIX

Figure 1.4 Hamburger Menu

Figure 1.5 About CEED

Since 1992, the Center for the Enhancement of Engineering Diversity (CEED) has provided encouragement and support to engineering students, focusing on the under-represented population. Our office recognizes that Virginia Tech students are among the best and brightest, and assists them in achieving excellence.

CEED Objectives and Goals:
- to increase the diversity of students who apply to, enroll, and graduate from the College of Engineering;
- to increase the awareness of engineering and other technical fields as an exciting and rewarding career path to a diverse population;
- to provide academic, professional and personal support.

Figure 1.6 Calendar Page
APPENDIX