

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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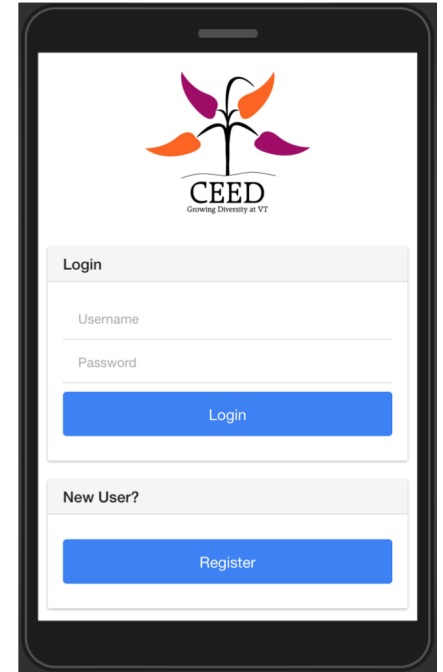
OUTLINE

1. Problem Identification
2. Project Timeline
3. Implementation
4. Technology Stack
5. Testing
6. Challenges
7. Possible Improvements
8. Demo
9. References & Acknowledgements



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

First Client Meeting

- ✓ Project specification
- ✓ Requirements gathering

2/13

Presentation 2

- ✓ User account functionality
- ✓ Link calendar

4/03

Testing

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

5/01

Presentation 1

- ✓ Begin development
- ✓ Graphic design

Presentation 3

- ✓ Basic forum posts
- ✓ CEED program details

Documentation

- ✓ Document all steps
- Client tutorial



IMPLEMENTATION

Appery.io

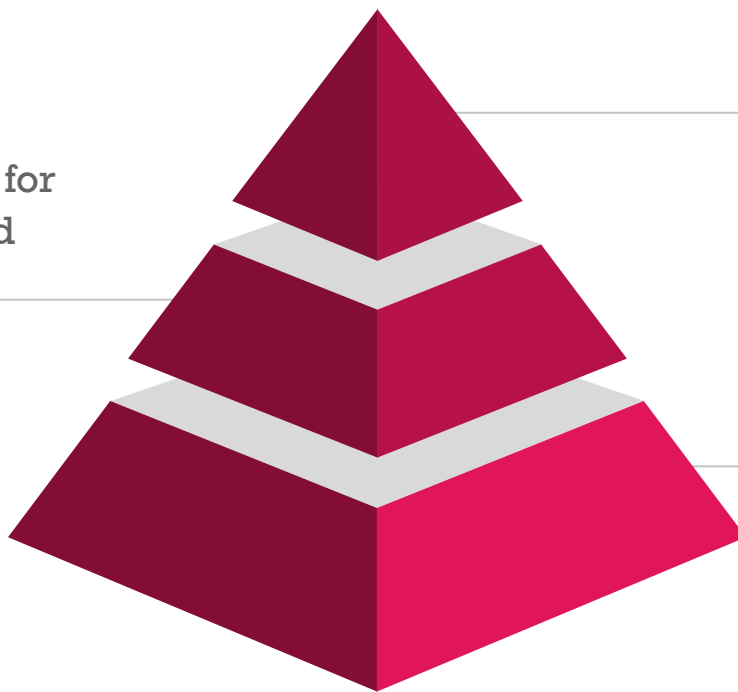
- Full stack cloud platform for hybrid mobile applications
- Tool to drag-n-drop major UI components
- Dashboard for easy app administration
- Custom javascript services and HTML code
- Implemented Existing Appery Plugins



TECHNOLOGY STACK

- Apache Cordova for native iOS/Android support

2



1

- HTML/Javascript/CSS
- Ionic+AngularJS for UI components

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)

Participant	q1	q2	q3	q4	q5	q6	q7	q8	q9	q10	SUS Score
p1	1	2	4	2	3	2	3	2	3	2	60
p2	1	1	4	1	2	1	4	1	4	1	75
p3	1	1	5	1	3	1	3	2	3	1	72.5



CHALLENGES

- Vague project requirements
- Communication with client
- Short time-frame
- Appery.io learning curve
- Poor Appery.io support



POSSIBLE IMPROVEMENTS

01

Complex Forum Posts

- Tag forum posts
- Search posts

02

Performance

- Cache app pages
- Tag based push notifications
- Publish on app store

04

Tags

- Automatically update tags
- Filter forum and announcements

03

UI/UX

- Update CSS
- Incorporate front end frameworks
- Further UI/UX testing



DEMO

Demo



REFERENCES & ACKNOWLEDGEMENTS

- CEED contacts
 - Kristin Morrill
 - Dr. Bevlee Watford
 - Karis Boyd-Sinkler
- “Center for Enhancement of Engineering Diversity-CEED.” Virginia Tech College of Engineering. Virginia Tech. Web. 23 Feb. 2018. <<https://eng.vt.edu/ceed.html>>.
- “Plans & Pricing.” Appery.io. Appery, LLC. Web. 23 Feb. 2018. <<https://appery.io/pricing/>>.



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

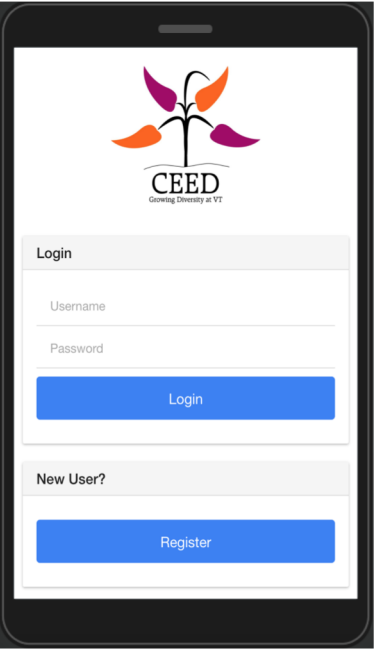


Figure 1.1 Login Page

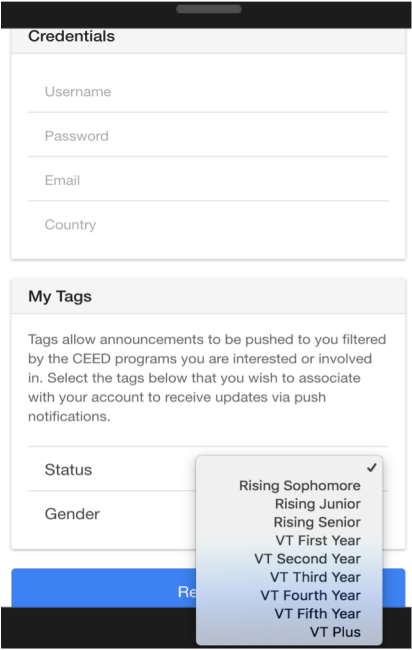


Figure 1.2 Create Account Page

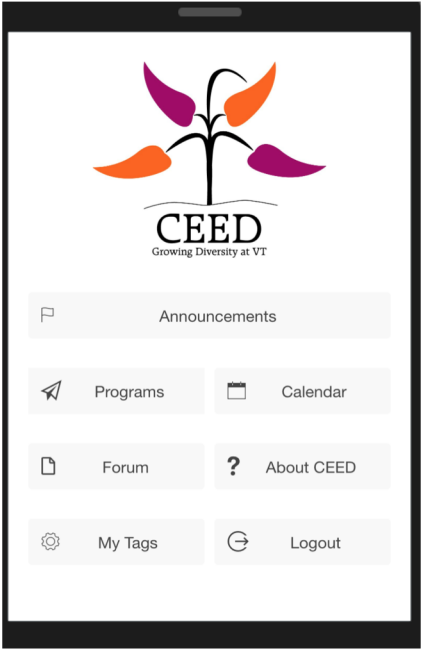


Figure 1.3 Home Page



APPENDIX

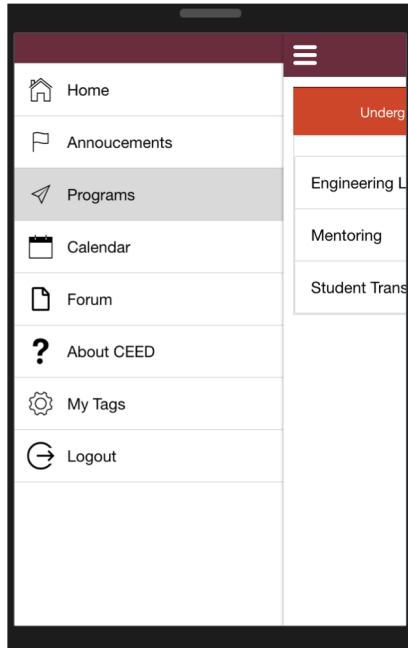


Figure 1.4 Hamburger Menu

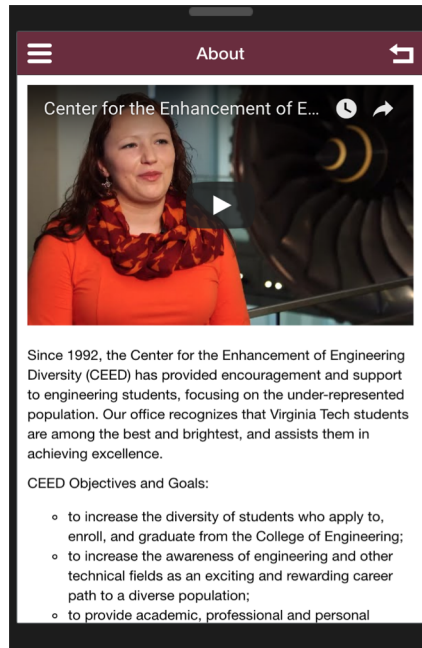


Figure 1.5 About CEED

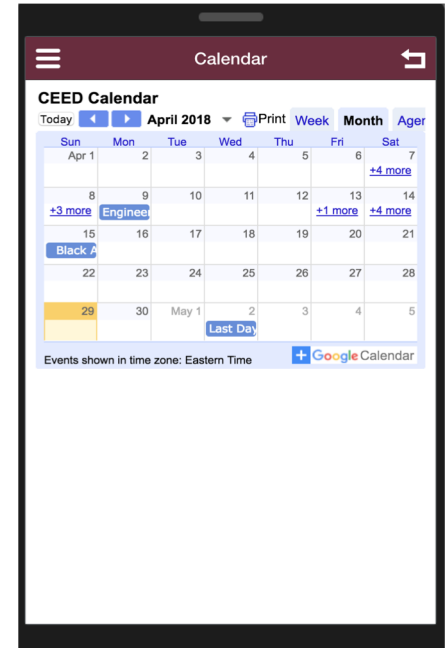


Figure 1.6 Calendar Page



APPENDIX

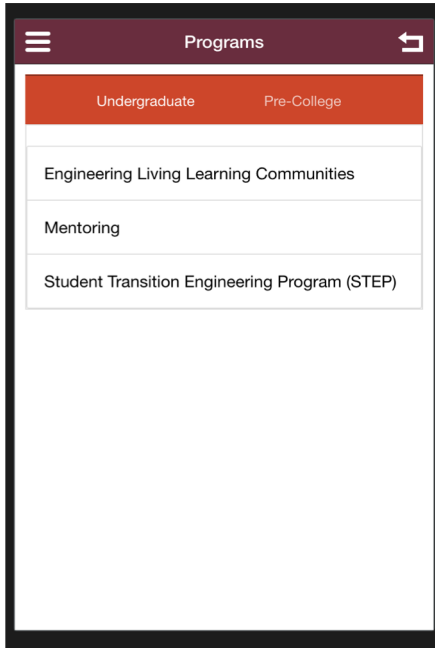


Figure 1.7 Programs Page

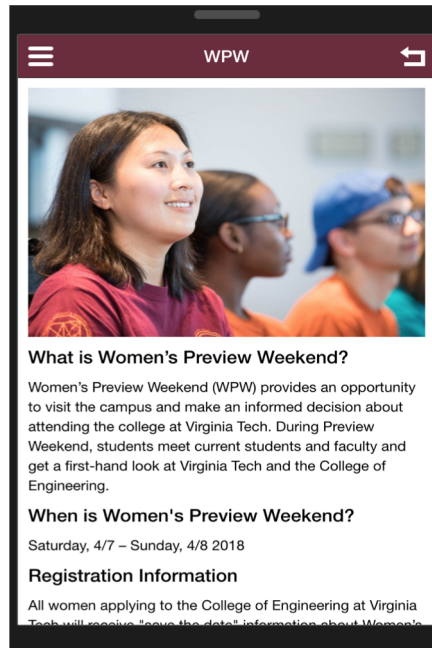


Figure 1.8 Program Details Page

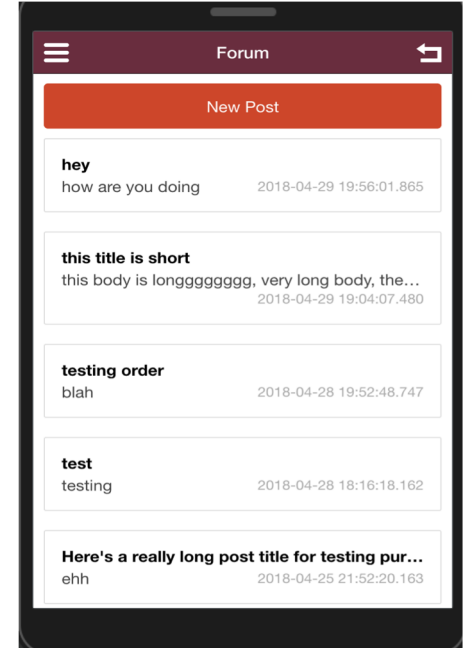


Figure 1.9 Forum Page



APPENDIX

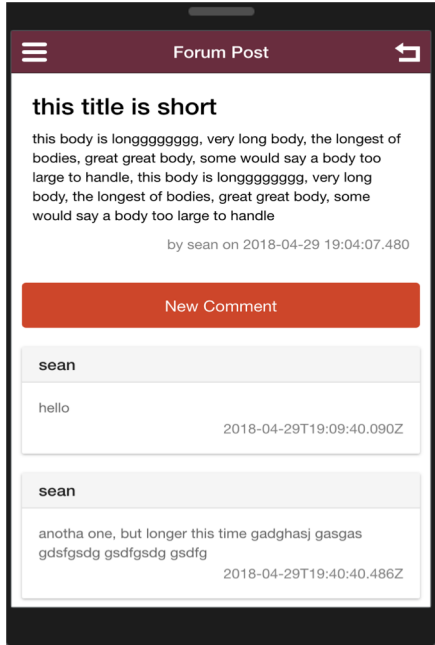


Figure 1.10 Forum Post Detail Page

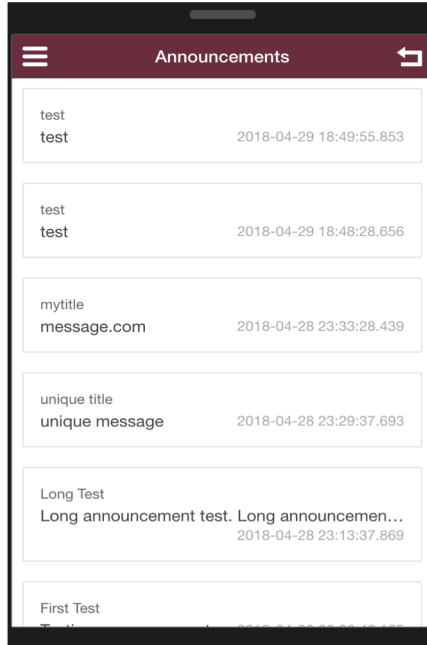


Figure 1.11 Announcements Main Page

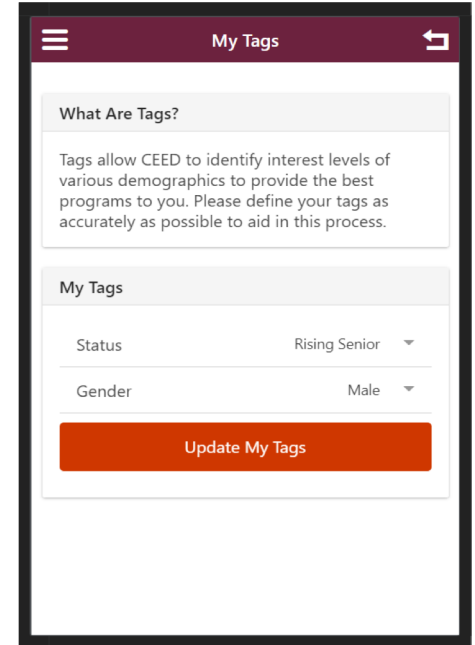


Figure 1.12 Update Tags

