



College of Engineering

## CS CAPSTONE FINAL REPORT

JUNE 4, 2018

# "I HEART CORVALLIS" MOBILE APPLICATION

PREPARED FOR

CORVALLIS COMMUNITY RELATIONS OFFICE

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PREPARED BY

**GROUP 14**

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### **Abstract**

This document takes a look back at the work we have done on the I Heart Corvallis mobile application this past term. It recaps the purposes and goals of the project, explains our current status on the project, and details what we have left to complete. It also describes any problems that we have encountered, how they impeded our progress, and how we solved them. The document also showcases some notable pieces of code that we have recently implemented and some updated screenshots of our application and administrative website.

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## 1 INTRODUCTION

The "I Heart Corvallis" mobile application was conceptualized by the Corvallis Community Relations office to complement their larger "I Heart Corvallis" initiative. The CCR office noticed that many OSU students do not engage much with the greater community and prefer to interact with the OSU community itself, so they started this initiative to build and promote a strong and cooperative relationship between the OSU community and the greater Corvallis community. The goal of the mobile app is to inform students about the various community events, activities, and service opportunities available to them around the community, as well as to give them an incentive to engage in these activities. Our client was Lyndi-Rae Petty, the Graduate Teaching Assistant at the Corvallis Community Relations office, a subset of the Office of Student Life. The development team consisted of Omeed Habibelahian, Bradley Imai, and Dylan Tomlinson. All three of us were heavily involved in nearly all aspects of the application, and we often helped each other out when one of us was stuck on a particular section of the development. It was not so much that one of us took a particular role; we were all involved in the various aspects of development and implementation, as well as in communicating updates and changes with our client. There were, however, a few aspects of the development that we each took more control of. Omeed handled more of the implementation of the administrative website, Dylan was in charge of user security on both the mobile application and the administrative website, and Bradley put in quite a bit of work on the design of the user interface. Our client primarily took the role of supervisor of the project. Every week we would meet with her to discuss the changes we made and new features we implemented, as well as what we had to do next, and she gave input on how she felt about our changes and anything she wanted done differently. When we needed to reach out to another organization or source for guidance or help, we would describe our situation to her, and she would take charge of reaching out to these organizations.

## 2 REQUIREMENTS DOCUMENT

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### 3 DESIGN DOCUMENT

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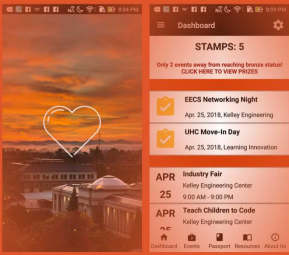

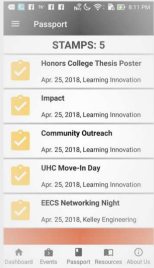


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## 5 WEEKLY BLOG POSTS

## 6 FINAL POSTER

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<p><b>About the Project</b></p> <p>The I Heart Corvallis project is a mobile application we created for the Corvallis Community Relations (CCR) office and is part of a larger initiative ran by the office to help students become more involved in the community.</p> <p>The application focuses on increasing student awareness of events and service opportunities happening around Corvallis, as well as creating an incentive for students to attend these events.</p> <p>Students will be able to view upcoming community events and service opportunities, receive stamps for attending these events, and win rewards to accumulating enough stamps. They can also view community resources and more information about the initiative.</p>  	<h3 data-bbox="505 317 1068 369">“I Heart Corvallis” Mobile App</h3> <p data-bbox="505 386 1052 459">Incentivize student involvement with the greater Corvallis community</p> <div data-bbox="565 468 704 489"> <p><b>Passport System</b></p>  <ul style="list-style-type: none"> <li>• Users can see the events they completed in their passport</li> <li>• When a user has completed enough events, they can turn in their stamps to redeem prizes from the CCR office</li> </ul> </div> <div data-bbox="873 468 1036 489"> <p><b>Detailed Event View</b></p>  <ul style="list-style-type: none"> <li>• Users can see the events they completed in their passport</li> <li>• When a user has completed enough events, they can turn in their stamps to redeem prizes from the CCR office</li> </ul> </div> <div data-bbox="488 926 805 1115"> <p><b>Client Administrative Interface</b></p>  <ul style="list-style-type: none"> <li>• The CCR office has the ability to add, modify, and remove events, resources, and prizes from the application via the administrative website</li> <li>• The office can also view summaries for events and organizations, such as how many students attended an event and how students are rating events by a particular organization</li> </ul> </div>	<p><b>Implementation</b></p> <p><b>App Development</b> Java, XML Android Studio Emulator Android devices (smartphones, tablet)</p> <p><b>Website Development</b> HTML, CSS, Javascript</p> <p><b>Database Integration</b> PHP, MySQL</p> <p><b>Corvallis Community Relations Office</b> Lyndi-Rae Petty, PI and project organizer. Outreach Coordinator for Center for Civic Engagement Jonathan Stoll, Director of Corvallis Community Outreach</p> <p><b>CS Capstone Team</b> (Pictured from left to right below): Dylan Tomlinson, tomlinsd@oregonstate.edu Omeed Habibelahian, habibelo@oregonstate.edu Bradley Imai, imab@oregonstate.edu</p> 	

## 7 RECOMMENDED TECHNICAL RESOURCES TO LEARN MORE

- Android Developers Website (<https://developer.android.com/>)

## 8 CONCLUSIONS AND REFLECTIONS

### 8.1 Omeed

### 8.2 Bradley

### 8.3 Dylan

## 9 APPENDIX I: ESSENTIAL CODE LISTINGS

## 10 APPENDIX II: SCREENSHOTS