Project Summaries - CSCI 240 Software Engineering, Fall 2014

This document contains summaries of the projects that customers have asked us to complete. I compiled these summaries based on my discussions with the customers, and so are subject to change and revision. These are simple to give you a broad idea of the topic; you will need to talk to the customer to find out more details!

I have also listed some of the particular challenges that I *hypothesize* projects may include, to give you a sense for what skills you might need to work with.

Psychology Student Research Subject Pool Management System

Contact: Carolyn Weisz, Professor of Psychology. cweisz@pugetsound.edu

This system will allow the Psychology Department to electronically manage their pool of student research subjects and projects. The system will allow researchers to register projects, subjects to sign up for projects, and record that subjects have participated in the project.

Project Challenges: This project may be challenging in that it has a large number of stakeholders and non-functional requirements that control human subject research.

New Student Orientation Scheduler Application

Contact: Marta Palmquist Cady, Director of Student Activities. mpalmquist@pugetsound.edu

This mobile application will act as a calendar and event scheduler for activities during student orientation. Students will be able to see their required event schedule, as well as browse and vote on other events. Other social networking and communication components may be included. The application will also have an "admin" interface for easily adding events and assigning those events to particular students.

Project Challenges: This application's presentation will likely be highly dynamic, requiring a lot of JavaScript for interaction. Similarly, structuring a calendar system so it is usable on a mobile phone may require advanced CSS.

Green Dot / Peer Allies Alert System

Contact: Marta Palmquist Cady, Director of Student Activities. mpalmquist@pugetsound.edu

The Peer Allies are a peer-to-peer support group for victims of sexual violence, in conjunction with the Green Dot program. This system will act as a contact and dispatch service for users: members of the Peer Allies will be able to indicate contact availability, so that requests for support are routed to the available allies. The system may also include support for access further Sexual Assault Prevention and Education resources.

Project Challenges: This application will require including a working email dispatch system, as well as appropriate measures to protect the privacy of victims.

The Puget Sound Experience App

Contact: Chris Krull, Asst. Director of Enrollment Communications. ckrull@pugetsound.edu

This mobile application will support prospective Puget Sound students (high school juniors and seniors in particular) and help them learn more about the campus before and during visits. The application may involve features such as: an engaging way to learn about Puget Sound such as majors available and other talking points; view produced multimedia content such as videos (and possibly a live feed of Mount Rainier); the ability to schedule a meeting with an admission counselor; a simple walking tour for visitors who come when admissions counselor aren't available; and potentially other features. This project will also involve developing an "admin" interface so that Communications staff will be able to easily update and manage the application's content.

Project Challenges: This project is framed as a mobile application, and so will involve being run on mobile devices (and possibly integrating with an existing campus tour application); basics of mobile device development may be required. Integrating with an existing mobile application may also be necessary. Finally, it is very important that the application match Puget Sound's branding guidelines for colors, logos, and fonts, possibly needing advanced CSS styling.

The Slater Museum / Thompson-Harned Hall App

Contact: Peter Wimberger, Director Slater Museum. pwimberger@pugetsound.edu

This application will allow users to interact with the visual content of Slater Museum's new interactive displays, either online or on mobile devices. The application will also include a content "authoring" system, so that Museum staff can easily add content in the same format as the interactive displays.

Additionally, this project will enable visitors in Thompson and Harned Halls to learn more about the installations and science exhibits that permeate the building (such as the tile patterns on the floor!) Users will have a way to look up information about these exhibits on their mobile phones, such as through QR codes.

Project Challenges: The content of this system is image-based, and thus the authoring system will need to be edited spatially (rather than as a simple form), which may require advanced JavaScript. The mobile component of this application will require the ability to process QR codes, requiring some basics of mobile device development.