

# **CMU Professional Development Services**

## **Executive Summary**

### **Community Partner**

Kim Abel  
Sarah Emory  
Adam Marks

### **Student Development Team**

Travis Chambers  
Richard Huang  
Piyush Puri

---

## **Background**

Our client for this project is the Professional Development Services at CMU. The organization is a crucial part of CMU and helps every employee including staff and faculty member acclimate to the university, fully understand their roles and responsibilities, and support the career growth of each individual. The main focus is to have all employees at CMU be prepared for the job and all its responsibilities, provide access to the necessary resources and networking available on campus, and invest in each member of the community to help them develop and grow.

## **Project Description**

### **Project Opportunity**

Professional Development Services consolidating their copious amounts of professional development resources into digestible learning plans for CMU faculty and staff. They have developed “competency areas” to organize silos of professional development, each competency has an assessment to gauge your status in this area. A web application that allows faculty and staff to take assessments for different competencies and view personalized learning plans would equip our client with a new tool to drive increased user engagement.

### **Project Vision**

Our goal for this project was to build a robust, deployable, and scalable web application for Professional Development Services. Their new competency-centric initiative hinged on our application being deployed and usable. We began the project knowing a successful deployment was expected and adjusted our scope and feature set accordingly throughout the semester. Our biggest goals were a highly interactive assessment report and an intuitive admin-side for the application.

## **Project Outcomes**

We have developed a working version of the proposed application that is currently in beta testing. CMU staff and faculty are able to access the web application, pick a competency area, take a quick assessment, and a report will be generated with a learning plan and resources that will help the user improve with that competency area. The user can then email or print out the assessment report so

they can view it at a later time to track performance. CMU PDS staff is able to login as an admin and make changes to the assessment as well as the resources available. On the admin side, PDS is also able to use our Excel import feature to pre-populate the database with existing data.

## **Project Deliverables**

The final project is a Ruby on Rails web application, hosted on AWS EC2 (Amazon Web Services). This web app provides CMU's faculty and staff a competency assessment that they can take where a learning plan on emerging areas will be generated. The clients have access to both the Github repo and the Github organization of the code base as well as the AWS account that is currently hosting the application. The project also contains various documentation, both technical and user manuals, to help transition next year's IS team as well as help guide CMU PDS staff's interactions with the application.

## **Recommendations**

For the future teams we see the integration of shibboleth and FocusU as two important steps in creating the fullest experience for faculty and staff who will use this application. Shibboleth will allow users to login and save their assessment results in the app rather than being forced to download and keep track of a PDF or a link to their assessment report. FocusU integration will allow a user to create a learning plan through the application and export it to FocusU. We have created documentation for future teams to review that detail the meetings we have had about these features. We also recommend future teams review our Github issue tracker as we have been noting all the features we did not have time to build and all bugs we did not fix.

---

## **Student Development Team**

**Travis Chambers** served as the technical lead. He is a third-year student majoring in Information Systems. He will be interning at the New York Times this coming summer as an iOS developer and is looking forward to a career in software development.

**Richard Huang** served as project manager. He is a third-year student majoring in Information Systems with minors in both Computer Science and Business Administration. He will be interning at Two Sigma Investments this coming summer as a software engineer/product management and is looking toward a career that bridges the gap between technology and business.

**Piyush Puri** served as the client advocate. He is a third-year student majoring in Information Systems with minors in Software Engineering and Business Administration. He will be interning at Accenture this coming summer as a Consulting Analyst and is looking forward to a career in software engineering.