

EE/ CprE/ CybE/ SE 492 – sdmay23-43

Feederal Reserve

Week 5 Report

17 Jan 2023 - 18 Feb 2023

Client: Campus Organizations Accounting

Faculty Advisor: Nicholas Fila, PhD.

Team Members:

Jack Croghan – Backend Software

Sarah Degen – Circuit Design/ Note-taking

Melanie Fuhrmann – Frontend Application Development/ Client Contact

Isabella Leicht – Cyber Security

Adan Maher – Cyber Security/ Organization

Brandon Mauss – Component Design

Nathan Paskach – Firmware Design

Past Week Summary and Accomplishments

As a continuation of last semester and into the beginning of this second semester of Senior Design, we have continued to develop our application for client interaction, specifically the ease of navigation through the various pages and the robustness associated with the scheduling page. With the backend of the application, much of the work this week was to polish some of the existing code and start implementing the websockets required for functionality. As for the hardware aspects of the project, the circuit board designing has begun, and we are working on a protective covering to ensure the electrical equipment does not get wet. A couple team members have also begun working ahead on documentation and other necessities of the project while waiting until they are able to utilize their specific expertise to further the project.

Pending Issues

Currently we are experiencing issues within the application, mostly relating to navigating between the pages, finalizing the websockets, and ensuring proper functionality of both the client side of the application and the server side. As for the hardware relating to our product, we are currently coming up with mappings of the circuit board to ensure a logical flow of the board. We are currently, also attempting to finalize a design structure for the casing of our

non-waterproofed pieces to ensure they do not short circuit if the betta fish decide to splash near the machine.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Jack	Cleaning up and polishing code on the backend. Started implementation of websockets	5	40.5
Sarah	Prepared and formatted design doc for 2nd semester. Team/client/advisor meetings notes	4	30.5
Melanie	Formatted navigation bar and the pages. Fleshed out the Schedule page further	9	47
Bella	Began prep work for impending 2FA for user login. Summarized advisor meeting for 492 assignment 1.	6	20
Adan	Weekly team, client, and advisor meeting notes. Formatting and organizing drive space. Formatting and drafting reports. Updating team website	8.5	29.5
Brandon	Began designing case prototypes for components. Worked on possible other electrical components	5	45
Nathan	Started laying out the circuit board	6	30

Summary of Advisor Meeting

This week we met only with our advisor to discuss the conjoined meeting we had with our clients and some of their feedback, as well as, the progress we have made since the aforementioned meeting. During this meeting we went over the different types of feedback we can get from our clients and how we should plan to present something new every couple of weeks. Melanie presented her updates on the frontend software, which included changes in color

scheme, a new navigational bar, and a new idea for the scheduling pages. Nathan discussed his preparation for the hardware component to reach the next stages as circuit designing in the Eagle software begins. Lastly, we wrapped up by concluding we are still on schedule to have a functioning prototype for the clients before Spring Break.

Plans for the Upcoming Week

In the upcoming week, we are attempting to address the issues we have outlined above. Some of our biggest concerns are with the application because we have gotten some feedback for improvements and we want to ensure it is up to the client's standards. Also, we have a meeting scheduled with our client and advisor in-person to show and discuss the progress we have made in the past 2 weeks since our last meeting. Lastly, we are going to meet again with our advisor again afterwards to discuss the client meeting and some possible solutions we may have, and gather more information on what he thinks might be beneficial.