EE/ CprE/ CybE/ SE 492 – sdmay23-43 Feederal Reserve Week 7 Report

05 Mar 2023 - 24 Mar 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

Since our last report, our team has addressed a multitude of issues we outlined both hardware and software. On the hardware side of the house, we have worked towards updating the prototype we initially designed to allow for an easier printing process, and have actually begun printing more. For the software side, we have been developing the backend for server connection and began troubleshooting package problems. We have also been proposing new ideas and updating the dashboard pages of the application, with more security analysis. Outside of the technological field, we have also begun researching the market for our product, what sets it apart and costs for the final presentation.

Pending Issues

Over the course of this period, we have come across a few more issues that need resolutions in order for our product to be successful. For the hardware, as stated above, we have been working to develop a design that is easily producable on a 3D printer. We have come up with several designs without prevail. As for the software, we are continuing to have issues with the server and on the application with the buttons for navigating through the pages.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Jack	Began work on putting the backend on our development server. Worked on fixing package issued some members of the team were having when attempting to run the server on their local machines.	6	50.5
Sarah	Updated the design document to include the most recent testing and designs for the mechanism. Proposed changes in the application sections based on meeting notes.	6	39.5
Melanie	Updating the edit/create schedule page dialogs of the application	2	59
Bella	Began research into existing market options and potential pricing for later versions of device.	4	34
Adan	Logging meeting notes, filling out reports and documents associated with the project, researched most recent security measures and applied to frontend analysis, updated team website	5.5	42.5
Brandon	Updated the case prototypes for ease of printing.	3	63
Nathan	3D printed more prototype case designs	4	40

Summary of Advisor Meeting

Over this past period, we had one meeting with our advisor and one meeting with our client. The meeting with Dr. Fila was preparation for meeting with our clients. Therefore, most of the discussion was revolving what we were going to present, what issues we are currently facing, and what questions may be beneficial to ask the clients about. As for the client meeting, on the

hardware side, we presented our first prototype of the food hopper with the feeding mechanism and how we expect it to fit on the fish tank. On the software side, we demonstrated some of the new features and colors we have added to the website's layout since our last meeting.

Plans for the Upcoming Week

In the upcoming weeks, we plan on meeting again with Dr. Fila and our clients to provide more information on our current situation, updates we have made, and clarify any issues that have arisen in the time since our last meeting. We also are planning to prototype more with the hardware design to allow for easier printing. Lastly, for the application, we plan on addressing all of the issues discussed in our client meeting including attempting to get the mapping of the buttons correct