

EE/ CprE/ CybE/ SE 492 – sdmay23-43

Feederal Reserve

Week 13 Report

08 Apr 2023 - 21 Apr 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

Over the past few weeks, we have begun adapting our application to connect the frontend, backend and server. The server has been placed on a Raspberry Pi and is currently being troubleshooted for issues related to what appears to be crashing. As for the hardware aspects related to our project, we have begun finalizing design ideas for printing, assembled casing with tuning of pieces associated, and begun working on the firmware to control the pieces. Lastly, from a team documentation standpoint, we have begun work toward the final presentation, along with updating of the team website and documentation of our project

Pending Issues

Currently we are working toward final integration of all pieces of our project, from the aspects relating to the application to the merging of the hardware and software pieces associated with this project. Then, we need to complete the final presentation, begin work on the final poster to be presented afterwards, and rounding up key documentation related to the project including our design documents, user's manual, and team website. Finally, we need to schedule a meeting with our clients to initiate the hand-off of our project, and give them any final instructions.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Jack	Helped set up the server. Added much functionality to the backend as well as worked on general stability. Worked with other group mates to implement API routes that return required information.	16	72.5
Sarah	Updated design document to reflect recently given requirements	1	43.5
Melanie	Worked to integrate Frontend with Backend. Created more and reorganized pages and settings to better suit the client.	22	85
Bella	Setting up server for development and deployment – including but not limited to access and security for SSH remote connection, Iptable configuration, and watchdog services for API connections. Also began work on technical documentation.	16	55
Adan	Docketed more meeting notes, updated team website, began work on final presentation, set up profile on Raspberry Pi	3.5	49.5
Brandon	Working on the the final case designs. Began updating the technical document manuals	6	74
Nathan	Printed case iterations, tested fully integrated hardware, began finalizing firmware, tuned food detection system	10	55

Summary of Advisor Meeting

Over the past couple of weeks, we have had two meetings to discuss progress with our advisor, and in one of which we were demonstrating our product to the clients. Within both of the advisor meetings, Dr. Fila was given an update on team standings at that moment in time. We also discussed our plans moving forward, such as addressing the components of the final presentation and how we plan on passing off our final product to the clients. In the client meeting, we demonstrated our progress on the application including new colors and pages, we also proved functionality of the physical device and some other features applied.

Plans for the Upcoming Week

For the upcoming period, we are beginning to shift focus from the physical product and toward the requirements of our final presentation. We need to address the final powerpoint and the poster associated. However before we shift, we are planning the final connection of pieces on all of the levels outlined above, as well as any issues that are sure to arise.