sdmay18-21: Smart Laundry Planner

Week 9 & 10 Report March 8 - March 21

Team Members

Yazan Okasha — Hardware Engineer Almedin Mulalic — Backend Engineer Nathan Francque — Hardware Engineer Grant Wanderscheid — Team Lead and Mobile Development Engineer Lily Mosman — Backend Engineer Jay Sanborn — Mobile Development Engineer Devesh Mohan - Hardware Engineer

Summary of Progress this Report

This reporting period consisted mostly of spring break so a little less was accomplished than a normal two-week time span. Still, we continued the development of our project documentation. After finishing a rough draft of a poster, we have moved onto the drafting of our final report (to be done by 3/27). The hardware team is still waiting on a sensor to be used with drying machines. In the meantime, they have refined an algorithm and data pipeline to be used for sensing more machine states than just on/off. The database team has further developed the backend to support the new flow of data that will be supported. Almedin has also been making progress on the in-store desktop application that is part of our end product. The mobile team has continued to refine the mobile UI and make the application function optimally as well as use the new data that the hardware team is able to gather. Grant has also created a page within the mobile application that allows for users to input their needs and receive a store-to-use suggestion based on availability and proximity to the user.

Pending Issues

- Packaging electron desktop application -Almedin
- Need to find or create an encasing for the sensing device -Hardware Team

Plans for Upcoming Reporting Period

Package electron desktop application and some script testing -Almedin Add current machine cycle information to the interactive store map page -Lily More drafting of project documentation -Team Start on physical packaging of final hardware product -Hardware Team Further testing of the washer cycle detection code previously developed -Yazan UI changes to the mobile application machines page -Jay UI and logic changes to the mobile application store decider page -Grant

Individual Contributions

Team Member	Contribution	Report Hours	Total Hours
Yazan Okasha	 Developed washer cycle detection code and database storage of sensed state 	8	41
Almedin Mulalic	 Finished most of the UI on electron desktop application Finished average machine usage script for use availability predictions 	7	37.5
Nathan Francque	 Communication with Arduino and electron application Reviewed electron usage 	4	27
Grant Wanderscheid	 Documentation Implemented a store decider page to recommend what store to use based on user needs, store distance, and machine availability Current time graph filling to the laundry planner page 	11.5	67
Lily Mosman	 Development on the interactive store map 	5	30
Jay Sanborn	Mobile app UI designing	4	22.5
Devesh Mohan	 Researched and code development for dryer sensing operations Worked on washer cycle detection code 	5	29.5