sdmay18-21: Smart Laundry Planner

Week 5 & 6 Report February 8 - February 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 the algorithm to display average machines used during a particular time period was started. This will allow us to display some helpful information to the users of store locations. Over the past two weeks, the hardware team was also able to get readings and test values from a washing machine using the sensing device. They have since been working on some calculations to bring the accuracy of noticing the on/off state higher and working on getting the correct information to also show in the database. The mobile team has started another user information page and will continue to work on that in the following weeks. Lastly, the backend team has been doing some minor work on the interactive store map and some web application packaging.

Pending Issues

- Web app bugs -Yazan
- Having specific areas be targeted upon click in interactive map -Lily
- Algorithm for laundry machine states needs some more work for better accuracy -Nathan

Plans for Upcoming Reporting Period

Fix web app bugs, get sensor status display to work (needs sockets), post KWh on web app -Yazan Further develop interactive store map -Lily

Write code for future analysis to indicate machine status and design a casing for hardware -Devesh Develop machine availability graph page -Mobile Team

Start looking at and working on final documentation -Grant

Finish web app packaging and get machines in use per hour averages posting to database -Almedin Advance the laundry machine state sensing algorithm -Nathan

Individual Contributions

Team Member	Contribution	Report Hours	Total Hours
Yazan Okasha	 Finished sensing device with Devesh Web app development Integrated Devesh's Arduino code with hardware 	16	36
Almedin Mulalic	 Worked on average machines in use algorithm Worked on web app electron packaging 	6	16.5
Nathan Francque	Laundry machine sensor state testsDevelopment of state sensing algorithm	7	16
Grant Wanderscheid	 Developed new user email verification using firebase triggered nodejs function Developed account deletion email verification using firebase triggered nodejs function Researched in app graphing approaches/techniques Fixed mobile app user login bug Minor project documentation drafting 	15	45.5
Lily Mosman	 Changes to interactive store map More research and development on image mapping for interactive store map 	5	17
Jay Sanborn	 Research and initial development on mobile app graph views 	7.5	14.5
Devesh Mohan	 Tested and gathered data for current sensor on washer unit Developed Arduino hardware integration code Built perf board to finalize board electrical schematic 	10	20