

sdmay18-21: Smart Laundry Planner

Week 11 & 12 Report

March 22 - April 4

Team MembersYazan 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 we have started finalizing the various components of our product for delivery. The capability to sense various washer cycles is now reflected within the database and the mobile application. Along with that, an enclosure for the sensing device has been picked out and an attempt at packaging the sensor within it will be made in the coming weeks. The hardware team is still waiting on an extension cord purchased a while ago so that they may try to quickly implement the ability to sense dryers (already capable of doing so for washers). The database team has made progress on finalizing their work and will finish with that in the next two weeks. The mobile app team has also done the same, putting all their code onto the master branch and adding some finishing touches and functionality to the app. As far as the developed products go, everything will be finalized and ready to demo before the end of this coming reporting period. Over the past two weeks significant progress has also been made with the drafting of a final document, presentation, and poster with finishing touches coming in the following weeks as well.

Pending Issues

- Some errors still exist with sending machine cycle information to the server -Devesh
 - Still waiting on an extension cord to come in for dryer sensing -Hardware Team
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Plans for Upcoming Reporting Period

Add cycle information into app, make store suggestions “smarter”, and put everything into master -Grant

Add more cycle information to database, refactor client server code -Almedin

Work on communication between Arduino and electron app -Almedin and Nathan

Test on dryers -Hardware Team

Finish the interactive store map -Lily

Individual Contributions

Team Member	Contribution	Report Hours	Total Hours
Yazan Okasha	<ul style="list-style-type: none"> Fixed bugs relating to the sensing and data transfer of machine cycle information Helped Devesh build a testing platform for sensing washing machine cycles 	10	51
Almedin Mulalic	<ul style="list-style-type: none"> Finalizing electron application Work on predictive scheduling algorithm within the in-store server 	5	42.5
Nathan Francque	<ul style="list-style-type: none"> Finalizing of the Arduino-electron-firebase connection Gathered parts to begin testing process with dryers 	3	30
Grant Wanderscheid	<ul style="list-style-type: none"> Documentation drafting <ul style="list-style-type: none"> Final report Presentation Poster Attempted to add drive time into location suggestion within app Added current time indicator to statistics graphs Database and mobile app UI changes Created input validation when adding new store in app 	13	80
Lily Mosman	<ul style="list-style-type: none"> Implemented a new design for the interactive store map More machine information added to the interactive store map 	9	39
Jay Sanborn	<ul style="list-style-type: none"> Documentation Drafting <ul style="list-style-type: none"> Final report Mobile app icon creation and adding it into the app 	7	29.5
Devesh Mohan	<ul style="list-style-type: none"> Software development for machine cycle information Fixed issues with data logging 	5	34.5