

**sdmay18-21: Smart Laundry Planner**

Week 5 Report

September 27 - October 04

**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*

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**Summary of Progress this Report**

This week the mobile team met with the hardware team to discuss a change in approach to database implementation. After further research, a real-time database called “Firebase” was discovered. Experimentation with the capabilities and ease of use of the database lead the teams to mutually agree that it was a good idea to move forward with. The backend team then got acquainted with the new database through research and some development of its tables and data within. The mobile team experimented connecting to the database and successfully received data from it (haven’t tried sending any data yet). On top of this the mobile team was able to do some significant development within the google maps store location page. The hardware team has yet to receive the Arduino for use with the sensors but may try and start some experimentation with a raspberry pie they own if not acquired soon. Lastly, the hardware team was also able to start implementation of the local store server since they have not been able to do anything with ordered parts yet. The development of the login page for that local server has been started.

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**Pending Issues**

- Struggling to figure out how to have unique user id generated into table upon registration of a new user – Almedin, Grant
  - Not being able to use school email for google maps API, going to see about switching over to a team email we made this week for though – Jay
  - Don’t have all the parts yet, still need to be picked up parts that have arrived– Hardware Team
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**Plans for Upcoming Reporting Period**

Continue research/implementation for adding new user unique id into table upon registration – Almedin, Grant

Work with the mobile and hardware teams to add functionality and data fields to database as needed – Lilly

Start experimenting with parts and their capabilities – Hardware Team

Research and develop the Angular2 local server login – Yazan

Transfer google map API key from personal to team email and have the app get store location info from database – Jay

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## Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Yazan Okasha	<ul style="list-style-type: none"><li>• Researched c# basics for local server development</li><li>• Built up the local server and attempted to allow other devices to connect to it without messing with the firewall</li><li>• Migrated to a node js server and set up basic API after failing at c# server</li><li>• Started local server login page in the process of learning about using angular2 with it</li></ul>	18	23.25
Almedin Mulalic	<ul style="list-style-type: none"><li>• Made table in new Firebase database for user, stores, and machines</li><li>• Within the tables, made a “dummy” store and machine to be used for testing</li><li>• Research on how to send and receive data from firebase</li><li>• Research on having new user unique id automatically get added to table upon account registration</li></ul>	1.5	13
Nathan Francque	<ul style="list-style-type: none"><li>• Research on other sensors to purchase for testing so that the best sensor for our project’s needs can be found</li><li>• Discussed with Yazan how to minimize the local database and how the end user could communicate with the Arduino</li></ul>	2	13
Grant Wanderscheid	<ul style="list-style-type: none"><li>• Development of login page to be able to register new users in the database and allowing for sign in of existing users</li><li>• Discovered Firebase database and experimented with capabilities before proposing new approach to mobile and backend teams</li><li>• Met with Professor Ponpandi for input on future interactive store map implementation</li></ul>	8	40.5

	<ul style="list-style-type: none"><li>Set up communication capabilities between android store locations page and new firebase</li></ul>		
Lily Mosman	<ul style="list-style-type: none"><li>Research on new firebase database approach</li><li>Modified “stores” table to contain column for machine ids</li></ul>	3	15
Jay Sanborn	<ul style="list-style-type: none"><li>Finished basic store locations google map implementation</li></ul>	3.5	13.75