

sdmay19-36: IoT sensor integration and back-end development for Sequoia

Week 2 Report

September 11 - September 17

Team Members

Michael Ludewig — *Meeting Facilitator*

Justin Somers — *Gitlab Administrator*

Josh Lang — *System Architect*

Josh Hatton — *Scrum Master/Website Manager*

Cody Brooks — *DevOps Lead/Report Manager*

Guan Lin — *Testing Lead*

Summary of Progress this Report

During this period the team broke up into two separate groups. The first group did research on different ways to track both the senior and guests in their home. They researched many different methods including RFID tracking, sub-gigahertz tracking, and using an already existing wearable for tracking. The other group did research of the other part of our project which is adding power sensors to the suet of sensors that are already incorporated into the project. This group found multiple different products already on the market that we could choose from and program to achieve the desired functionality.

Pending Issues

Issues that we are still working on include getting a better understanding of the scope of our project from our client, from there being able to define the functional and non-functional requirements of the specific problem we are trying to solve.

Plans for Upcoming Reporting Period

Our plan for the upcoming reporting period is to do a market survey on the four main brands of wearable devices that are on the market. 2 people each will research the two major brands Apple and Android, and one person each will research Fitbit, and Samsung. We are looking for looking for a good tracking mechanism, and a fairly open API that we can work with.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Michael Ludewig	Found two possible products to be used for the power tracking outlets	5	10
Justin Somers	Researched some wearables specifically Apple and Fitbit	5	5
Josh Lang	Researched the RFID tracking system, and one of the sub gigahertz tracking systems	3	
Josh Hatton	Looked at the code and reports of the other	5	

	senior design team working on this project so we could understand the system we are integrating with. Helped research Red Point tracking system.		
Cody Brooks	Did some research on data transfer from power monitoring outlets, and some wearables research	4	
Guan Lin	Researched RFID tracking system, and a different company for sub gigahertz tracking	3	

Gitlab Activity Summary

Nothing to report.
