

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

Week 3 Report

September 18 - September 24

Team MembersMichael 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 reporting period team did research on different types of smart watches that we could use for tracking the senior around their apartment. The four types of smart watches that we researched were Android wear, Apple watches, Fitbit fitness trackers, and Samsung watches. After the research we decided to go with either Android wear or Apple watches for the tracking because they have the best API's for access to the sensor data. We also decided that we will use the TP-Link HS110 smart outlet in order to track the power use of the appliances. We are working with our client to get one of these so we can start working on programming it.

Pending Issues

The issues that we are still trying to solve include creating accurate system diagrams for our project, and figuring out how we will integrate the parts of our systems into the existing back end system that was developed by a previous senior design group.

Plans for Upcoming Reporting Period

For the upcoming reporting period we plan to get access to the TP-Link HS110 smart outlet so we can begin to program it to send the data successfully. We will also work with our client to weight the pro's and cons of the two remaining options for smart watches to decide and which one to choose.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Michael Ludewig	Samsung watch research, and research on purchasing of the smart outlet.	5	15
Justin Somers	Apple watch research.	7	18
Josh Lang	Researched Android wear and the possibility of Bluetooth tracking.	3	10
Josh Hatton	Looking into feasibility of Fitbit smart watches and their API. Come up with system design diagram.	6	15

Cody Brooks	Smart plug communication research.	3	11
Guan Lin	Android wear API/documentation research.	5	11

Gitlab Activity Summary

Nothing to report.
