

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

Week 7 Report

October 18 - October 24

Advisor

Daji Qiao

Team MembersMichael Ludewig — *Meeting Facilitator*Justin Somers — *Gitlab Administrator*Josh Lang — *System Architect*Josh Hatten — *Scrum Master/Website Manager*Cody Brooks — *DevOps Lead/Report Manager*Guan Lin — *Testing Lead***Summary of Progress this Report**

During the last week our group made progress on two parts of the project. With the smart plugs we were able to test the 2nd API that we found, and it did allow us to get notified only when the power through the plug got above a certain threshold. We also received a 2nd plug to make sure there are no issues working with two plugs. We also officially decided that we will use the LG Sport 2 for the smartwatch that the senior will wear, and found some API's for getting sensor data off the watch.

Pending Issues

One issue that we are still working through include being able to integrate the smart plug into the already existing sensor network, and send the data to the server. Another issue we are working with is that the git repository that we found for fall detection is designed for an Android phone, not a watch so the code needs to be modified to run on a watch

Plans for Upcoming Reporting Period

Our plans for the upcoming reporting period are to work to convert the fall detection program to work on a smart watch, to start to get data sent from our smart plug to the system server, and to begin work on a program to get the sensor data from the smart watch.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Michael Ludewig	Work with the Android fall detection program	5	33
Justin Somers	Worked on figuring out how the 2nd smart plug API works.	3	34
Josh Lang	Made a document of the features of each watch to help us reach a final decision	5	30

Josh Hatton	Tested 2nd smart plug API and found that an event based system could be made with the API.	4	34
Cody Brooks	LTE research for Apple Watch and LG Sport	4	28.5
Guan Lin	Research how to get sensor data from the watch to the server	3	26

Gitlab Activity Summary

Nothing to report.
