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

Week 12 Report January 7 – February 13

#### **Advisor**

Daji Qiao

### **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 the last week we made good progress on multiple parts of the project. We got the Android app fully integrated with the smart plug data, so all the data is being successfully displayed. We also added the duration to the smart plug events, so we know how long the plug has been in use for. We fixed the timeout errors on our smart outlet code, so it will no long crash regularly. A fourth big thing we worked on was getting the data from the flow meter to send to the database. The final thing we worked on was to begin looking into RightMinder so we can quickly integrate that data into our system when we get the API documentation.

## **Pending Issues**

One big issue that we are working on at this point is that we still don't have the RightMider API documentation, or a smart watch to test any part of that, and it is starting to get to the point where we will not have time to finish everything that needs to get done with it. A second issue we are working with is making sure we know exactly what our test plan and final timeline will be for the rest of the semester

## **Plans for Upcoming Reporting Period**

For the upcoming reporting period we plan to get the Flow Meter and Outlets complete so we can install them in our test environment (Our clients office). We will also start to prepare the Android layouts for all the data we will get from RightMider so we don't have as much work to do once we get that data.

#### **Individual Contributions**

Team Member	Contribution	Weekly Hours	Total Hours
Michael Ludewig	Finished the Android app outlet data	6	64
Justin Somers	Smart plug service modification/debugging	6	81
Josh Lang	Smart Watch development prep	4	52

Josh Hatton	Work on back end smart plug events	8	62
Cody Brooks	Smart watch geofencing research	4	51.5
Guan Lin	Work on flow meter calibration	7	59