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

Week 16 Report March 7– March 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

This week was another productive week on all parts of our project. The tests of the smart plug in our client's office were successful, and we were able to make a few tweaks to the code based on the data we got. We got the flow meter installed in our client's office for testing and calibration and will continue to monitor it. The smart watch app is working to collect hear rate and step count data locally, and the skeleton for the backend, and android layouts are ready.

Pending Issues

One big issue that we are working on at this point is that we still don't have the RightMider API documentation, 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. Another issue that we are working on is getting the smart watch app to run in the background on the phone to send data constantly.

Plans for Upcoming Reporting Period

During the upcoming reporting period we will install 2 of the smart plugs in the piolet program to start collecting real data. We will also monitor the flow meter in our client's office to make sure everything is working. We will also try to get the smart watch to start sending some data to the AWS server.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Michael Ludewig	Android app layout refinement	4	88
Justin Somers	AWS management	5	102
Josh Lang	Smart Watch app development and testing	5	70

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Josh Hatton	Fixing smart plug time stamp issues	10	89
Cody Brooks	Smartwatch backend development	3	65.5
Guan Lin	Installed and calibrated flow meter	5	81