sddec18-15: Portable DAQ for dogs

Week 5 Report
February 23 – March 9

Advisors
Simon Laflamme
Austin Downee

Client
Simon Laflamme

Team Members

Matt Faronbi — *Communications Lead*
Daeyoo Kim — *Hardware lead*
Rohan Yadlapati — *Co-Team Lead*
Rishab Kinnerkar — *Web developer*
Yan Jie Hui — *Co-Team Lead*

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Matt Faronbi	Researched more ways to remove unneeded part in our DAQ in order to further shrink down the device.	2	31

Daeyoo Kim	I tried to figure out how long the battery will last. I calculated it based on the battery life equation, which is "Battery Life = (Battery Capacity) / (Current Drawn)". I used datasheets of Arduino Uno, strain sensor, and wifi module in order to find out the total current draw. As i researched last week, we will use 3.7V coin cell batteries that its capacity is 200mAh, so the total current draw is approximately 100mAh, so the battery life = 200mAh / 100mA = 2 hours. We are still thinking of using coin cell batteries, because it looks too short usable time, so we are going to use specially made coin cell batteries even though the price is much expensive than the regular one.	6	37
Rohan Yadlapati	Presented CAD designs to group and picked final design. Started researching signal processing capabilities of arduino and other methods to do the same tasks with bearduino design.	5	37
Rishab Kinnerkar	Researched on plugin which would help to port our web-app onto other platforms like IOS and Android. Installed social media to the web-application which makes it possible for users to search other users	2	39
Yan Jie Hui	Finished design details of second prototype. Gathered all the components and soldered it into a working second prototype.	6	41