
sdmay18-23: Internet of Things, Data Analytics for Snow Plow Truck-Data Live

Week 1 Report

August 30 - September 6

Team Members

Alexander Smola — *Design Lead*

Alan Peine — *Git Master*

Colin Heinrichs — *Test Engineer*

Evan Warych — *Report Manager*

Michael Entin — *Meeting Reporter*

Zachary Wilson — *Meeting Facilitator / Point of Contact*

Summary of Progress this Report

Progress for the past week includes...

The group got in touch with our point of contact at Henderson Products. A planned time for voice and potentially future video calls was established and the first meeting for our team took place on 9/6/2017. At the meeting the team was briefed on the current state of the project, and where it the team was expected to bring the project throughout the year (discussed in pending issues). Log files containing the raw data received from the trucks were shared and explained so the team can begin to familiarize themselves with the expected task at hand.

Pending Issues

An abundance of raw data is being received from the sensors equipped to the snow plows, output is being dumped into a log file every 4 milliseconds. The plan is to take this data which include GPS coordinates, power consumption, and other statistics involving the plows, and then display it on a web application so trends can be discovered and the decisions can be made accordingly. To do so, a database structure will need to be created to store the converted data. Then a script will be created to fetch the data which is currently stored on an FTP server, then parse the data, convert it decimal, and be stored for later display. Finally a web application will need to be created to visualize the data on a map.

Plans for Upcoming Reporting Period

The first step in accomplishing the broad goals in the pending issues would be to start considering the architecture plan for the application. Research will be done to decide on which technologies will best accomplish the presented exigencies.

Other general housekeeping that will need to be finished is setting up our git environment (start filling out sprint board and assign beginner tasks) and complete the necessary forms.

Individual Contributions

| Team Member | Contribution | Weekly Hours | Total Hours |
|-----------------|---|--------------|-------------|
| Alexander Smola | Attended first meeting to discuss roles and needs for the project | 2 | 2 |

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|-----------------|---|---|---|
| Alan Peine | Attended first meeting to discuss roles and needs for the project | 2 | 2 |
| Colin Heinrichs | Attended first meeting to discuss roles and needs for the project | 2 | 2 |
| Evan Warych | Attended first meeting to discuss roles and needs for the project | 2 | 2 |
| Michael Entin | Attended first meeting to discuss roles and needs for the project | 2 | 2 |
| Zachary Wilson | Attended first meeting to discuss roles and needs for the project | 2 | 2 |
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