sdmay18-18: Fleet monitoring system
Week 4 Report
September 25 - October 2

Team Members
Tyler Hartsock — *Web Manager*
Anthony Guss — *Technical Lead*
William Fuhrmann — *Test Engineer*
Kendall Berner — *Project Manager*
Matthew Fuhrmann — *Report Manager*
Venecia Alvarez — *Point of Contact*

Summary of Progress this Report
We began prototyping this week. We made a prototype for the server that has an API that accepts data to be put into the database, puts it into a MongoDB database, and has an API to access the data. We mocked elements of our front-end GUI including usage of Chart.js and Google Maps API. We created an Android application we can use to test the location services using GPS on our device, and tested putting an APK onto the board. We researched how the CAN network PIDs work for requesting information and started learning about the CAN network frames.

Pending Issues
N/A

Plans for Upcoming Reporting Period
We plan to expand on our work from last week by beginning to try to develop software that uses our hardware to interface with the CAN BUS network, as well as testing the location services capabilities of the hardware so that we know if we need to get something to provide GPS to the board. We plan on having the mock-ups in Google Maps API and Chart.js use the server prototype to access the data and display that data. We plan on making code for Android that sends example data to the server using Post/JSON.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Tyler Hartsock	None	0	10
Anthony Guss	Created a server prototype that takes in data from JSON, puts it into a MongoDB, and has an API to access the data.	3	13.25
William Fuhrmann	Worked on creating the Android application prototype for testing the location services with the hardware, tried to debug why the application was not installing on the hardware, researched Post/JSON for sending	5	16.25

	data to server.		
Kendall Berner	Learned Chart.js and created several prototypes of using data to create charts.	3	18
Matthew Fuhrmann	Researched how the CAN BUS network PIDs worked and looked into open source code that interfaces with the CAN BUS network, helped Will with debugging Android application for testing location services.	4	20.5
Venecia Alvarez	Learned Google Maps API and created a prototype for displaying GPS locations on a map.	1.5	13