

sdmay18-18: Fleet monitoring system

Week 6 Report

October 15 - October 22

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

For the front-end: all of the prototypes were moved to an AngularJS page. We started working on adding Bootstrap to make the pages look better.

For the micro controller: the server group members and the micro controller group members worked on learning the CAN BUS programming by looking through the provided simple example code and open source libraries using the OBD-II PIDs. The cable was apparently not ordered last week, although we are in communications with the manufacturer. We discovered that the library we are supposed to use to access the CAN BUS is a compiled library that is accessed through JNI, and tried to figure out how to fix this issue.

Pending Issues

The cable has still not been ordered: the manufacturer is not being cooperative.

The JNI library we were provided is compiled (we were only given a .so file). This means that we cannot see any functions that are not present in the simple example, and we need to use more functionality than there is in the example to support things like CAN extended frames. Either these things are supported and the simple example isn't working (we would need documentation of the library), or they are not supported and the library is not suited for the project. We will be contacting the manufacturer about this as well.

Plans for Upcoming Reporting Period

All: we plan on working on our changes for the Project Plan v2.

For the front-end: we plan to work on improving the look of our prototypes and begin combining them into one website.

For the micro controller: we plan to work on fixing our GPS and OBD-II connection for the hardware and start to work on the library for the CAN BUS.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Tyler Hartsock	I have continued researching the CAN BUS	2.5	12.5

	and looking at the example code on GitLab and open source examples.		
Anthony Guss	I've been researching the can-bus network and all of the resources that we have accumulated thus far on the can bus. I've also been working my way through the examples we have, but haven't had much success understanding how we can use it for our project.	5	25.75
William Fuhrmann	I researched the CAN BUS network, the example software and library APIs and tried to decide how to adapt that code to our current project.	4.5	27.75
Kendall Berner	I was in the hospital with a collapsed lung and had a 2 day interview in Kansas City so I've been playing catch-up. Next week I will do come CAN bus research and work on getting the front-end looking nicer.	0	26
Matthew Fuhrmann	I worked on trying to figure out how to use the JNI library, which resulted in me deciding that we needed the source code of the original library before it was compiled or documentation on the source code to understand how to use the JNI calls. I also looked through the open source vehicle interface and found some key sections of code to understand for the members who are helping us from the server group.	5	37
Venecia Alvarez	I've been working on adding features to our front end. I've transferred all of the work I've previously done onto an AngularJS page. I've also been trying to add Bootstrap.	3	26.5