

sdmay18-18: Fleet monitoring system

Week 1 Report

August 25 - September 11

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 all researched and aggregated our findings on other fleet monitoring/management systems and came up with a list of interesting and common features these products provided. We also did some basic research on the CAN BUS network standard and did some research on the Google Cloud platform to determine whether it was a good fit for deploying our API. We did some research related to working with a circuit board, but our client (Lotfi) has introduced a new possible hardware that he wants to get. We are not sure what hardware he will end up using: it will either be an Android tablet that can connect to the CAN BUS or a pairing of an Android mobile phone and a micro controller that can connect to the CAN BUS.

Pending Issues

We do not know what hardware we will be using, so we cannot plan the exact architecture of the on-board portion of the project, though we do generally know what our options are.

Plans for Upcoming Reporting Period

From the list of features we got through market research, we will determine what features we want to include in the first version of our product. We will do this in two phases: one phase where we individually make a list of features we'd like to implement, and then we each review each other's lists and try to discuss and come to a consensus of our functionality for the first version of the deliverables.

We also are going to begin looking into system architecture, looking for the constraints of the solution we are implementing and getting a list of viable ways to implement the components of our architecture that fulfills our requirements. This has been divided into three section: the on-board device, the user front-end, and the database/back-end.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Tyler Hartsock	Researched basic info on the CAN BUS network, researched the Google Cloud API deployment, and researched the ManagerPlus, Collective Fleet, and Fleet Complete fleet monitoring systems.	5	5

Anthony Guss	Researched basic info on the CAN BUS network, researched the Google Cloud API deployment, and researched the FleetCommander, Fleetio, and FleetFACTZ fleet monitoring systems.	6.25	6.25
William Fuhrmann	Researched basic info on the CAN BUS network, researched the Google Cloud API deployment, and researched the Rhino Fleet Tracking, Collective Data, and Linxup fleet monitoring systems.	5.25	5.25
Kendall Berner	Researched basic info on the CAN BUS network, researched the Google Cloud API deployment, and researched the Fleetio, ClearPathGPS, and AUTOsist fleet monitoring systems.	8	8
Matthew Fuhrmann	Researched basic info on the CAN BUS network, researched the Google Cloud API deployment, researched the FleetComplete, Fleetmatics Now, and High Point GPS fleet monitoring systems, and used the specs of the hardware provided to us by Lotfi to determine how code would be loaded to the board and how the bluetooth connection would be established between the micro controller and an Android device.	9	9
Venecia Alvarez	Researched basic info on the CAN BUS network, researched the Google Cloud API deployment, and researched the Silent Passenger, Azuga Fleet, and Onfleet fleet monitoring systems.	5.5	5.5