sdmay19-16: Smartphone App to Detect TwD (Texting while Driving)
Week 12 Report
April 1 - Month 7

Team Members
Kristina Robinson - *Project Lead*
Andrew Knaack - *Lead Designer*
Sara Mace - *Meeting Scribe*
Lucas Golinghorst - *Test Engineer*
Ryan Baker - *Architect*
Derek Clayton - *Report Manager*

Summary of Progress this Report
The goal of this reporting period was to merge modules and collect data for the centripetal acceleration module. The data was then analyzed and thresholds were produced and coded into the module. Tests were conducted on the speedometer module to determine the impact of having wifi connectivity.

Pending Issues

- More integration testing must be conducted on the merged modules.
- The centripetal acceleration module must be thoroughly tested.

Plans for Upcoming Reporting Period
Kristina - Work on integration verification of speedometer and centripetal acceleration so the team can do field testing
Andrew - do whatever the team needs from me; currently free of projects
Sara - Work on verification that the integration of the modules has succeeded.
Lucas - Test the acceleration module thresholds that we got from the data this week.
Ryan - Testing and possible merging of the acceleration module.
Derek - Testing the centripetal acceleration module thresholds.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Kristina Robinson	Merged texting speed integration into master. Integrated speedometer module into branch to test before adding to master.	6	65
Andrew Knaack	Modularized the Speedometer and took it on test drives. Confirmed it's more accurate and	6	78

	consistent with an Internet access.		
Sara Mace	Did some integration testing of the merged modules.	6	68
Lucas Golinghorst	Collected data for the centripetal acceleration module with Ryan and Derek. This had to be redone a couple times because the module crashed at first. The turn data was collected by doing field tests in a parking lot.	6	72
Ryan Baker	Collected data for the centripetal acceleration module. This had to be redone a couple times because the module was broken when we started collecting data.	6	65
Derek Clayton	Worked out errors in centripetal acceleration module. Conducted data collection for determining thresholds for detecting passenger/driver side. Compiled and graphed data collected. Analyzed data to create initial thresholds and created methods to detect passenger/driver side using said thresholds.	15	75.5
		Total Group Hours:	423.5

Gitlab Activity Summary

Derek added data collection to all sensors[1 changed file, 71 adds, 2 dels](4/1/19).

Andrew modularized location services into the speedometer module[11 changed files, 156 adds, 555 dels](4/2/19).

Derek added timer to display and data collection in the accel module[2 changed files, 36 adds, 2 dels](4/3/19).

Derek fixed errors in timer implementation[1 changed file, 8 adds, 6 dels](4/3/19).

Andrew added more speed log numbers to display[3 changed files, 24 adds, 9 dels](4/3/19).

Derek fixed data collection bugs, wiped out unnecessary data structures[1 changed file, 24 adds, 4 dels](4/5/19).