

sdmay19-16: Smartphone App to Detect TwD (Texting while Driving)

Week 13 Report

April 8 - April 14

Team MembersKristina 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 focus of this reporting period was on testing the integrated texting and speedometer modules and merging the centripetal acceleration module. Many members also worked on field testing the centripetal acceleration module's turn classification system (driver or passenger) and errors had to be fixed in the code.

Pending Issues

- Final documentation must be completed.
- The combined modules must be tested.
- An easier way to change thresholds in the acceleration module must be implemented.

Plans for Upcoming Reporting Period

Kristina - Field test the application with all parts integrated together

Andrew - Work on documents and poster

Sara - Do integration field testing and work on final documents.

Lucas - Work on final poster and final report document.

Ryan - Work on documents and poster as well as field testing.

Derek - Work on final documents as well as make accel thresholds modifiable on the fly.

Individual Contributions

| Team Member | Contribution | Weekly Hours | Total Hours |
|-------------------|--|--------------|-------------|
| Kristina Robinson | Modified centripetal acceleration module to work with the proprietary texting application. Once compatible, I integrated it. | 7 | 72 |
| Andrew Knaack | Tested texting and speedometer modules after integration. | 7 | 85 |

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|--------------------|--|--------------------|-------|
| Sara Mace | Integrated the texting speed module in with our proprietary texting application. Did field testing on the texting speed module and speedometer after integration. Also did field testing after the centripetal acceleration module was integrated. | 7 | 75 |
| Lucas Golvinghorst | Completed more field testing with Ryan and Derek to determine accuracy of centripetal acceleration thresholds. | 6 | 78 |
| Ryan Baker | Did field testing with Derek and Lucas to figure out the accuracy of the centripetal acceleration thresholds. | 6 | 71 |
| Derek Clayton | Field tested centripetal acceleration thresholds. Determined accuracy of the centripetal acceleration module. Fixed error in the module for more accurate field testing. | 8 | 83.5 |
| | | Total Group Hours: | 464.5 |

Gitlab Activity Summary

Kristina merged texting speed integration into master branch[13 changed files, 422 adds, 31 dels](4/8/19).

Derek fixed accel data collection methods for testing, added turn thresholds and classifiers. Updated UI with classifier[2 change files, 131 adds, 49 dels](4/8/19)

Sara moved a log statement from integration testing to main activity[2 changed files, 15 adds, 0 dels](4/9/19).

Sara merged speedometer integration into master[9 changed files, 285 adds, 21 dels](4/9/19).

Sara added main activity to app to combine speedometer and texting speed modules. Reimplemented log statements for debugging purposes[2 changed files, 18 adds, 3 dels](4/9/19).

Kristinia removed unused imports that were causing bugs[2 changed files, 0 adds, 11 dels](4/12/19).

Kristian integrated accel module into app[2 changed files, 95 adds, 108 dels](4/12/19).
