sdmay19-16: Smartphone App to Detect TwD (Texting while Driving)
Week 3 Report
September 23 - September 29

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

Due to the project plan being due during this report's interval, much of our focus was on completing the first version of the document. We assigned sections to be completed by individuals, while everyone contributed to references, adding many of the research papers we've been looking at. Outside of that, our client wanted us to focus more on researching possible design solutions, taking inspiration from previous studies and applications.

Pending Issues

The client wants us to develop more precise solutions.
More detailed research must be conducted on the types of tests we want to run (speed, angular speed, acceleration, camera position, sound waves, etc.)

Plans for Upcoming Reporting Period

Decide on solution paths (tests we want to implement).
Set up the android application.
Each member should provide feasibility reports for the solution path they research.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Kristina Robinson	Read about research done at the University of Waterloo. They used machine learning and also the camera of a smartphone to look at what way people are looking to determine if they are texting and driving. This research gave us another way that we could detect texting while driving and might become a possible component of our solution. Worked on project plan.	6.5	19.5

Andrew Knaack	Wrote proposed design, milestones, and contributed to other miscellaneous portions of the project plan; also researched two papers on TWD and summarized useful take-aways in our weekly client presentation.	6	18
Sara Mace	I spent time this reporting period researching the different apps that insurance companies use to monitor drivers habits. This research showed how insurance companies see distracted habits. This research has helped with brainstorming more ways to detect texting and driving. It showed how hardware can be used in a car to help with detecting driving habits. I also spent time working on the project plan and preparing slides for our meeting with our client.	6.5	19.5
Lucas Golinghorst	Contributed to project plan (limitations, task goals, conclusion, editing, etc.) initial draft and researched possible design solutions.	6	20
Ryan Baker	Investigated research in further detail by attempting to find the full paper for the poster found last week. I also came across some patents that would conflict with our project heavily and investigated those, while the end goal was to see what direction the project needed to take. Also worked on project plan.	6	19
Derek Clayton	Aided in developing portions of the project plan, with a focus on task approach, testing, and validation. Further explored the use centripetal acceleration and angular speed sensors in detecting one's position in vehicles.	6	18
		Total Group Hours:	94.5

Gitlab Activity Summary
Nothing to report.