sddec20-11: Dash Cam Defender (Working Title)
Week 1 Report
January 20 - February 2

Team Members
Evan Timmons — *Team Leader / Client*
Ismael Duran — *Full Stack Developer*
Cobi Mom — *Chief Mobile Engineer*
Danny Yip — *Head Test Engineer*
Durga Darba — *Head Data Architect*
Scott Vlasic — *Head Hardware Concept Engineer*

Summary of Progress this Report
Dashcam Defender™ Presentation - Evan
  • Presented existing concept for project
  • Provided flow diagram and concept art
  • Stimulated group discussion and incorporated new design ideas

Dashcam Defender™ research - Ismael
  • Studied and learned if machine learning Licence plate reader was capable for our team project
  • Gave input for project ideas and plan out the project

Dashcam Defender™ Software ideas - Danny Yip
  • Discuss about the software ideas like mobile application
  • Talk about user interface for the applications
  • Discuss briefly about the application's use cases

Dashcam Defender™ Hardware Ideas - Scott
  • Proposed the use of a Raspberry Pi as functionality for the mini computer component
  • Discussed whether the use of mobile phones would be a good use of hardware
  • Discussed briefly how the components would connect in a top down manner

Dashcam Defender™ - Durga
  • Discussed using AWS
  • Understood design of database
  • Understood how to send information using AWS api

Dashcam Defender™ Mobile Application Ideas - Cobi Mom
  • Researched the Pros and Cons of using Flutter vs. React Native
  • Discussed requirements needed for a barebones application

Pending Issues
Project Feasibility - Whole Team
  • Work to figure out which components will be sourced and which will be created
  • Communicate with the ETG to access financial funding
  • Create purchase plan for viable components

Plans for Upcoming Reporting Period

Investigate Existing Software - Evan
   • Research existing Automatic License Plate Reading (ALPR) technology
   • Compare paid vs open source software
   • Search for existing dash camera test footage

Investigate Hardware - Scott
   • Research which Raspberry Pi version would be best for our project
   • Contact ETG to see if they have the correct model or if we would need to order it through
them
   • Research and compare other hardware like the Nvidia Jeston and see if they apply to our idea better

Investigate Software for mobile application- Danny Yip
   • Research on the functionalities and the user interface for the mobile application
   • Research on the use cases that the application should have.
   • Search and refer on similar application that already exist.

Investigate Software for web application - Ismael Duran, Cobi Mom
   • Come up with the structure for our web application
   • Define requirements for our web application
   • Discuss interaction between our web application and our physical Dashcam Defender™

Investigate creating database - Durga
   • Find out how to get funding for AWS
   • Update architecture diagram for video storage.
   • Find out how to store ai data.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Evan Timmons	Maintained communication with faculty Adviser (Dr. Zambreno). Created multiple report tracking documents. Gave general project concept pitch to team and provided some prior project materials.	12	0
Ismael Duran	Attended meetings to discuss project feasiability and cordinate a plan for the Dash Cam Defender	12	0
Cobi Mom	Met with the team and Dr. Zambreno to discuss initial project clarifications. Researched what mobile application framework we should use (Flutter vs. React Native).	12	0
Danny Yip	Meeting with the team to discuss and plan for	12	0

	Dash Cam Defender. Discuss about the overall team expectations, and the roles we would like to take part in. Discuss and provides ideas for the software part.		
Durga Darba	Met with the team and Dr. Zambreno to begin understanding the overall scope of the project. We began designing the architecture at a high level.	12	0
Scott Vlasic	Met with the team and Dr. Zambreno to clarify the project idea. Brainstormed different ways we could implement the hardware features of the project.	12	0

Gitlab Activity Summary
Nothing to report.