sddec20-11: Dash Cam Defender
Week 2 Report
August 31- September 13

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

Summary of Progress this Report
Dashcam Defender™ Hardware Team - Scott & Evan
- Received camera, 7-inch screen, and keyboard/mouse
  - Worked onboard compatibility
- Researched and ordered a power inverter to power board from the car
- Research embedded software for the board to upload videos to the database

Dashcam Defender™ Database Team - Durga
- The server is now able to run the flask application
- Worked with the ETG to decide how to implement Azure Blob storage on the server.

Software Development Team - Ismael, Danny & Cobi
- Implement the check record page and UI so that user can search car plates
- Implement a car plate's rating functionality so that users can see the other driver's rating and rate them.
- Working on a database on python, and creating a table for the login page
- Developed HTTP request for the mobile application

Pending Issues
Dashcam Defender™ Hardware Team - Scott & Evan & Durga
- Awaiting order and confirmation for inverter
- Troubleshooting board compatibility issues

Dashcam Defender™ Database Team - Durga
- AWS/Azure account access and set up
- Implementing the server with Azure
- Fix issue database and API call integration.

Plans for Upcoming Reporting Period
Dashcam Defender™ Hardware Team - Scott, Evan & Durga
- Create GUI with python for interaction on the hardware
- Test out powering on the NVIDIA Jetson TX2 within a vehicle with the inverter
- Get functional output from OpenALPR

Dashcam Defender™ Database Team - Durga
- Continue developing tables as well as an API function
- Use a queuing algorithm to ensure no data loss with sending video.
- Work with the hardware team to send raw video data.

Software Development Team - Ismael, Danny & Cobi
- Work on the database and make sure the server is running correctly
- Work on the sidebar, profile, and account for the application. Make sure the UI looks good.
- Create more tables on the database
- Complete the sign-in functional requirements
- Update README on Sparrow repository

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Evan Timmons	Tested the OpenALPR software on the board. Researched script implementation for video uploads. Assembled the board and worked on component compatibility. Was able to successfully read a license plate with the webcam, but will need extensive software modification.	12	25
Ismael Duran	I worked on the log-in functionality by creating a function that will make an HTTP call to the server to verify the user credentials. In addition, I also worked an getting the flask application running on the server. The flask application is able to run on the server successfully.	12	24
Danny Yip	Created the check record page. It is now able to search car plates, and then see the car plate's initial rating, and also rate the car plate at the same time. We haven't connected to the database, because there is a problem for our database team to contact the ETG. But we will get it very soon.	12	24
Cobi Mom	Researched why our iOS application was not building. Collaborated with the software team to understand the database and began to implement necessary tables.	12	24
Durga Darba	Much of these past couple weeks were spent working with the ETG to setup the Azure account. I met with the Software team on many occasions to figure out ways to better connect the iPhone app to the server and get the necessary information. Currently still in the process of connecting the server to Azure blob storage and send data.	12	25
Scott Vlasic	Researched into different ways to power the NVIDIA Jetson TX within a vehicle and consulted different opinions. Found a compatible component	12	24.5

		and submitted an order through the ETG		

Gitlab Activity Summary

Commits
9/13

Added search page and rating- user is able to search car plate, and they can see their rating of the car plates. They can also rate them.

9/12

Function for http request to the server for log-in verification