sddec20-11: Dash Cam Defender
Bi-Weekly Report 4

September 29- October 12

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™ Jetson GUI Team - Evan
- Implemented version 1 of the prototype GUI with limited functionality
- Integrated bash commands to connect GUI with OpenALPR software
- Added file navigation and local customization options

Dashcam Defender™ Hardware Team - Durga & Scott
- Worked with the ETG to get a new board
- Began planning and writing code to upload to S3
- Catch Durga up to speed with hardware components

Software Development Team - Ismael, Danny & Cobi
- The user can log in only if their information is from the database.
- The user signup with first, last name, email, and password.
- Changed the UI for sign up page. Remove the confirmation password, and add the last name.
- Users can correctly sign out now- they won't be able to press the back button to fake sign in again.
- Add in the check record, search, rating into the application that we have created
- Add the alert for incorrectly sign in and sign out.
- Created Lambda function for login verification HTTP call
- Developed Lambda function for the sign-up HTTP call

Pending Issues
Dashcam Defender™ Jetson GUI Team - Evan
- Determine why OpenALPR output is not printing to the console

Dashcam Defender™ Hardware Team - Scott & Durga
- Determine the process to upload videos from Jetson to the database

Plans for Upcoming Reporting Period
Dashcam Defender™ Jetson GUI Team - Evan
- Add additional OpenALPR features to GUI
- Integrate database connection features with GUI
- Work with mobile team to connect Dev board to smartphone

Dashcam Defender™ Hardware Team - Scott, Evan & Durga

- Reconfigure the NVIDIA Jetson TX2 to meet our specifications (i.e. reinstall OpenALPR and do camera testing)
- Research and program a way to upload the videos on the Jetson to the database

Software Development Team - Ismael, Danny & Cobi
- For the mobile application create an add car UI.
- On AWS create a lambda function that will add new car under the user
- Create a lambda function that will return all the cars the user has added in their account.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Evan Timmons	Worked to make GUI compatible with Linux OS and also customized it for the specifications of our hardware (screen size etc). Began developing software using a personal computer to emulate the local board. Initial OpenALPR connections through bash commands were set up.	14	52
Ismael Duran	I contributed to developing a lambda function in AWS that is going to be used when making an HTTP request to the server. The lambda functions were developed to get the login and sign-up functionality working on the server for the mobile application to use. In addition, I worked on getting the login function in the mobile application to work as desired.	12	48
Danny Yip	Connect the signup page with the database, so users are able to signup correctly. Changed the UI for sign up page. Create a sign-out button so the user cannot use the back button to login again. Add in the check record, rating into the application. Add alert if the user fails to sign in and sign out.	12	48
Cobi Mom	Developed the lambda function used for signing up new accounts in our app. It takes a request from our Flutter app which then creates an entity in DynamoDB, pending a valid email address is supplied.	12	48
Durga Darba	Worked with Scott on getting a new board with the ETG. have been working on getting caught up with how the Nvidia Jetson hardware works. Going to connect it to the S3	12	49
Scott Vlasic	Communicated with ETG to reflash the NVIDIA Jetson TX2. Reinstalled OpenALPR and ensured that the board configuration was up to our standards.	12	48.5