WEEKLY REPORT and MEETING AGENDA

Report #:5 Project Name: <u>vBox: Vehicle BlackBox</u>

Date: 3/28/2022 Prepared by: Christian Loth

Agenda for the weekly meeting

- 1. Work on having the back end talk to the front end
- 2. Talk about the design of our web app.
- 3. Establish connections between software front end and cloud database(back end).
- 4. Talk about what we need to do to successfully display the data

Accomplishments during this period

- 1. Completed uploading test data to the cloud database.
- 2. Wrote the Lambda function and its corresponding API gateway to extract the data from cloud database to the front end.
- Successfully made API call AWS to return the data from cloud database to the front end, and implemented the average velocity plot with the test data extracted from cloud database.
- 4. Received GPS Hat and soldered the pins
- 5. Successfully installed the required packages to create a serial connection with the Raspberry Pi
- 6. Obtain longitude and latitude from the GPS from python script

Plans for next period

- 1. Work on the algorithm to analyze the data
- 2. Further developing python program by adding threads to each of the hardware devices
- 3. continue implementing the scripts to return data from cloud database to front end.

 Coordinate with Jose to complete the final format of data to be uploaded to the could database

Project management status

- 1. Finish Critical Design Review and Presentation. Templates on the Drive
- 2. Regular meeting on Tuesday
- 3. Meet with Professor should there be any confusion and need for help
- 4. Regularly updated Google Shared Drive
- 5. Regularly updated project github



We went over the point system to determine the driver's behavior. Discussed the possible dimensions of our box since parts are missing. Demonstrated to the team how the raspberry pi obtains information from the obd port. Discussed the changes to be made to the web app. Lastly, as the parts are coming together on the Raspi, we will modify our hull design to begin solidworks preparation.