

# CEG4913 Weekly Progress Report

Week #: 3

SCRUM/Sprint No. 11

Group Number: 3

Date: September 25th, 2025

One line summary of progress:

Started development on database and CI pipeline

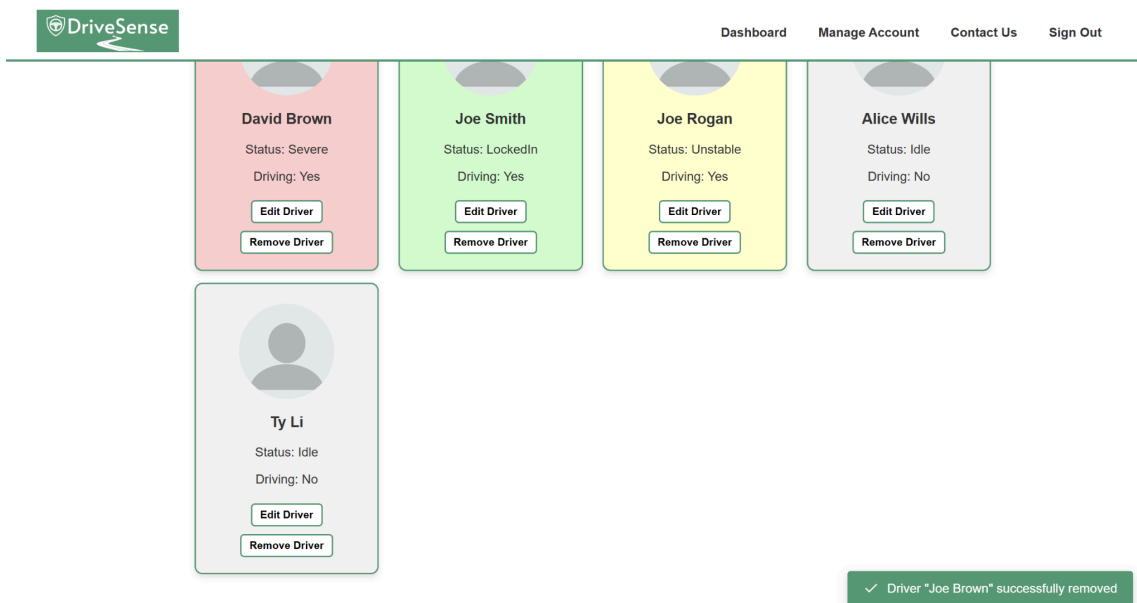
## Work Completed

Hardware:

- Ordered new parts (Camera, pressure sensors, power supply)

Software:

- Added toast notification for driver removal



- Added the logout button and began development of screen UI using React JS

## Driver Selection Page



Who is driving ?



David Brown



Joe Smith



Joe Rogan



David Brown

## Status Processing Page



Initializing DriveSense...

Please place your hands on the wheel and  
look forward while we check your status...

### Alert Page - Critical Status



CAUTION

**PULL OVER IMMEDIATELY**

CALL EMERGENCY

### Alert Page - Drowsy Status



Need Help ? Call Your Emergency Contact Now



**REST SOON, STAY ALERT**

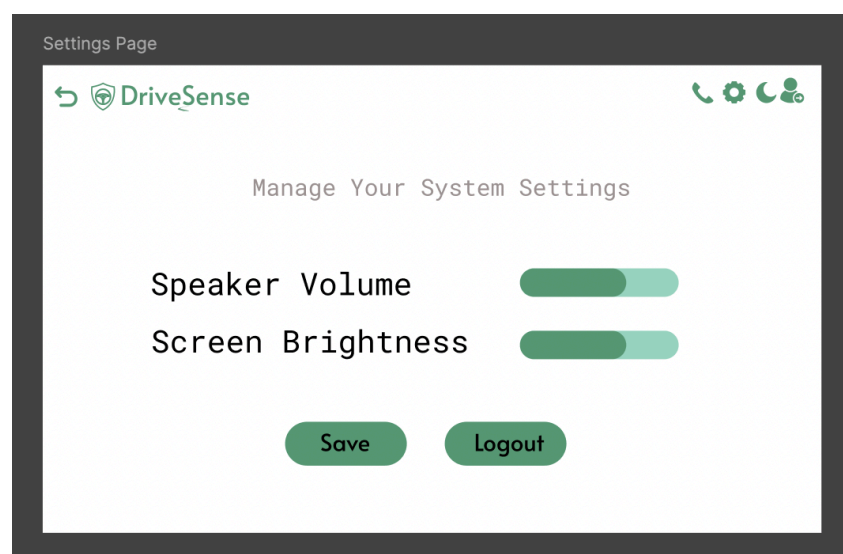
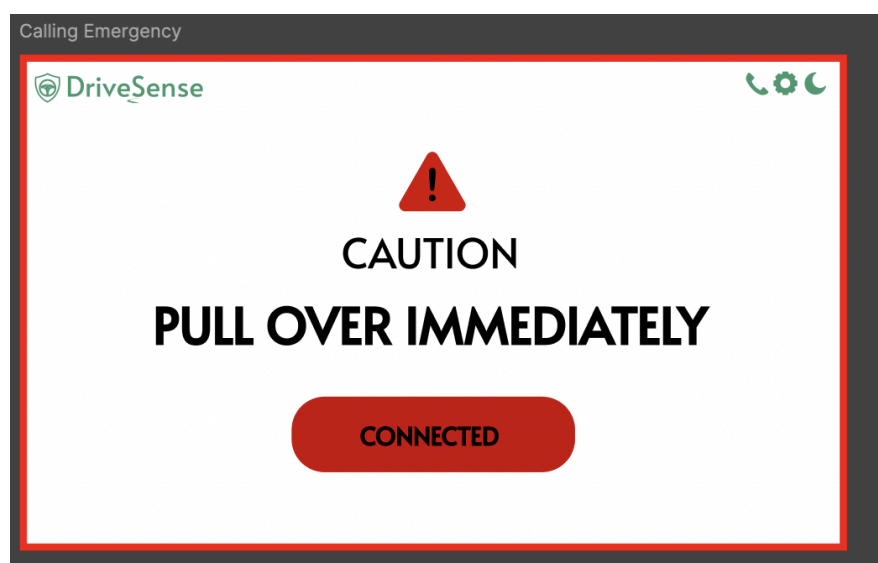
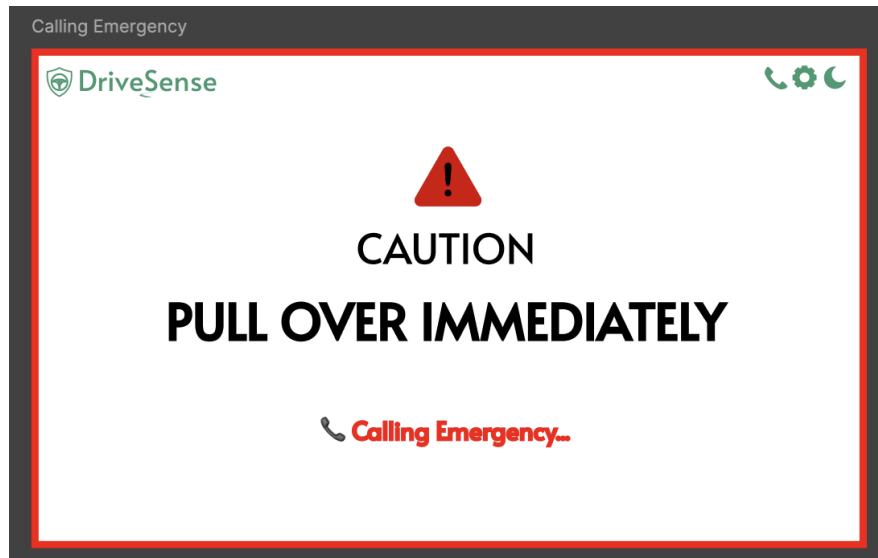
### Alert Page - Normal Status



Need Help ? Call Your Emergency Contact Now



**YOU ARE DRIVING SAFELY**



- Setup database and created database tables for the data will be using for website
- Begun development on REST API's
- Dockerized jetson nano environment to allow dev and testing remotely
- Created another docker container to allow the database to run at all times

## Team Member Contributions:

Aaditya Shah:

- Sourced new hardware

Abdullah Ramadan:

- CI Pipeline Structure Implemented

Keith Tran:

- Set up Twilio account
- Coded Twilio implementation for screen device

Kevin Dang:

- Added toast notification for driver removal
- Began working on REST API's for database

Hajer Fguir:

- Finalized the UI Screen Mockup
- Started the development of the car screen
- Prepared a detailed list of APIs required for the UI screen

Saurav Guduru:

- Setup database tables on firebase
- Dockerized a jetson nano environment
- Created a docker container to host the firebase database

## Issues and Resolutions:

Issue: None

Status: N/A

Resolution: N/A

## Plans for next week:

### Hardware Goals:

- Test new camera, pressure sensors and power supply
- Perform integration test with all HW
- Get measurements for new HW

### Software Goals:

- Complete all API's related to sensor and UI data for database
- Create a main thread to survey all modularized drivers for HW
- Write unit tests
- Start the development of the new UI car Screen using React JS
- Prepare the list of APIs needed for the UI screen

## Management Board Screenshots:

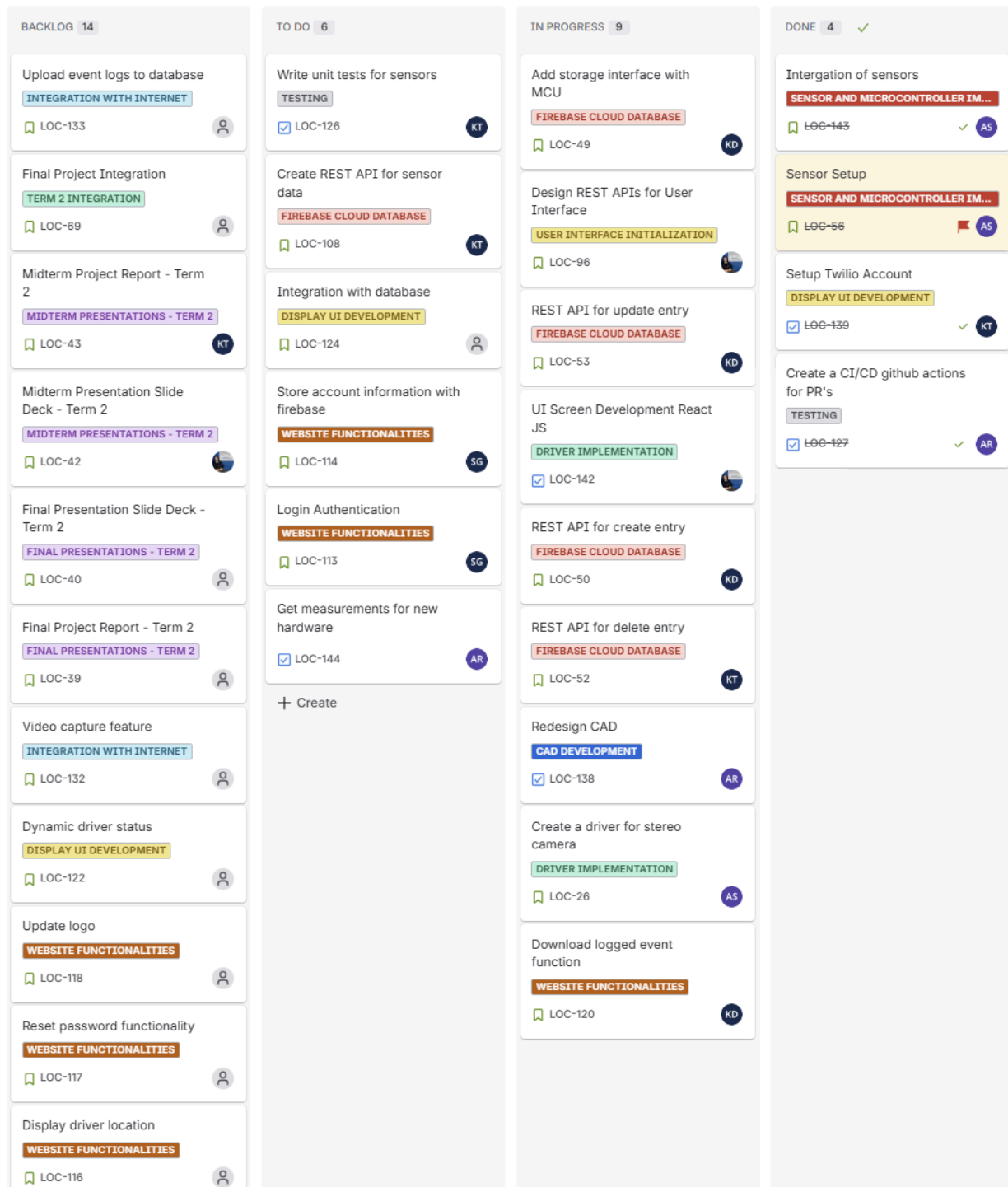


Figure 1 - General Management Board

IN PROGRESS 9

Add storage interface with MCU

FIREBASE CLOUD DATABASE

🔖 LOC-49

KD

Design REST APIs for User Interface

USER INTERFACE INITIALIZATION

🔖 LOC-96

REST API for update entry

FIREBASE CLOUD DATABASE

🔖 LOC-53

KD

UI Screen Development React JS

DRIVER IMPLEMENTATION

☑ LOC-142

REST API for create entry

FIREBASE CLOUD DATABASE

🔖 LOC-50

KD

REST API for delete entry

FIREBASE CLOUD DATABASE

🔖 LOC-52

KT

Redesign CAD

CAD DEVELOPMENT

☑ LOC-138

AR

Create a driver for stereo camera

DRIVER IMPLEMENTATION

🔖 LOC-26

AS

Download logged event function

WEBSITE FUNCTIONALITIES

🔖 LOC-120

KD

Figure 2 - This Week's Sprint

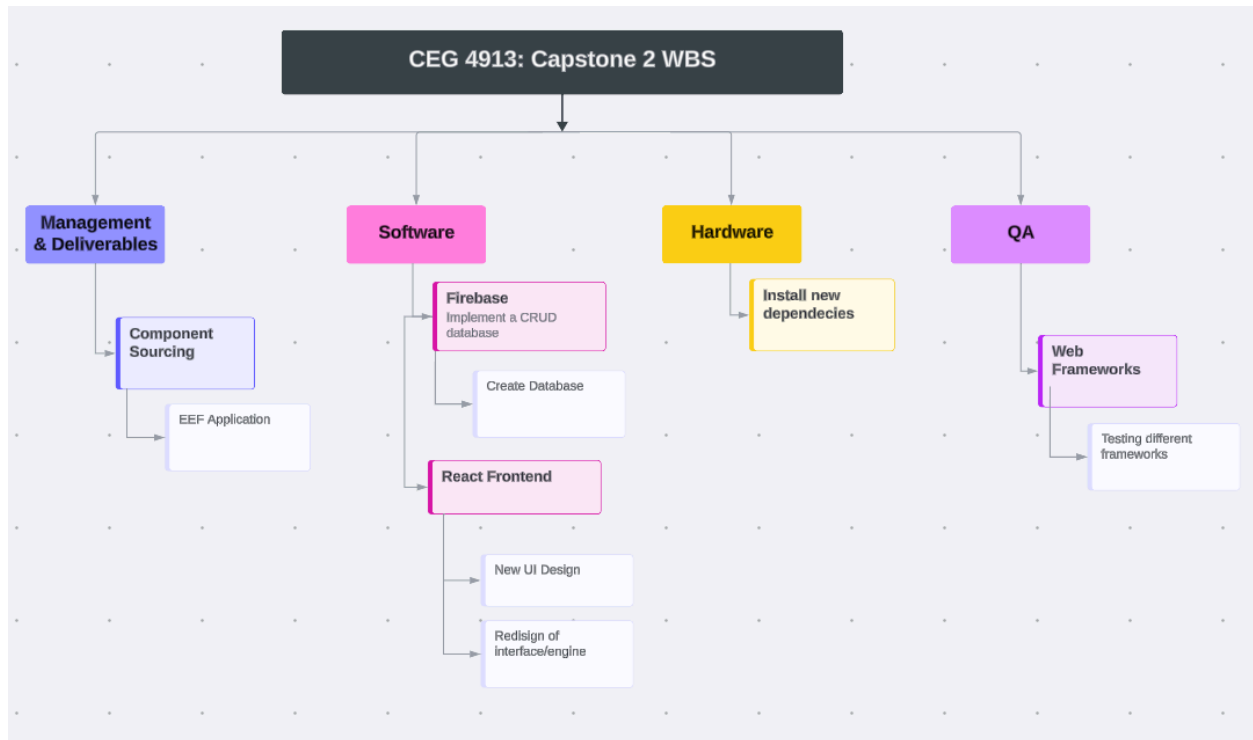


Figure 3 - WBS

Additional Notes: