

# **CEG4913 Weekly Progress Report**

Week #: 8

SCRUM/Sprint No. 15

Group Number: 3

Date: November 13th, 2025

One line summary of progress: The prototype hardware was tested, and the software development included completing the forgot password feature, starting driver sorting implementation, and finishing the login/driver selection APIs on the UI.

## **Work Completed**

### **Hardware:**

- Printed and tested prototype with components

### **Software:**

- Forgot/reset password implementation completed
- Began implementing the ability to sort drivers
- Completed login/driverSelection APIs on the UI Screen

### **Team Member Contributions:**

#### Aaditya Shah:

- Implementing the stereo depth algorithm

#### Abdullah Ramadan:

- Designed new camera mount

#### Keith Tran:

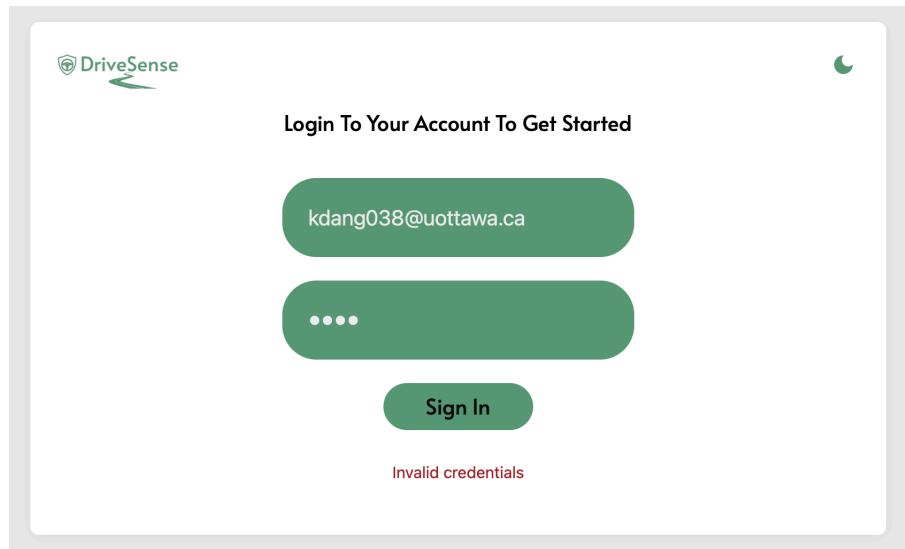
- Completed twilio implementation and tested its functionality

#### Kevin Dang:

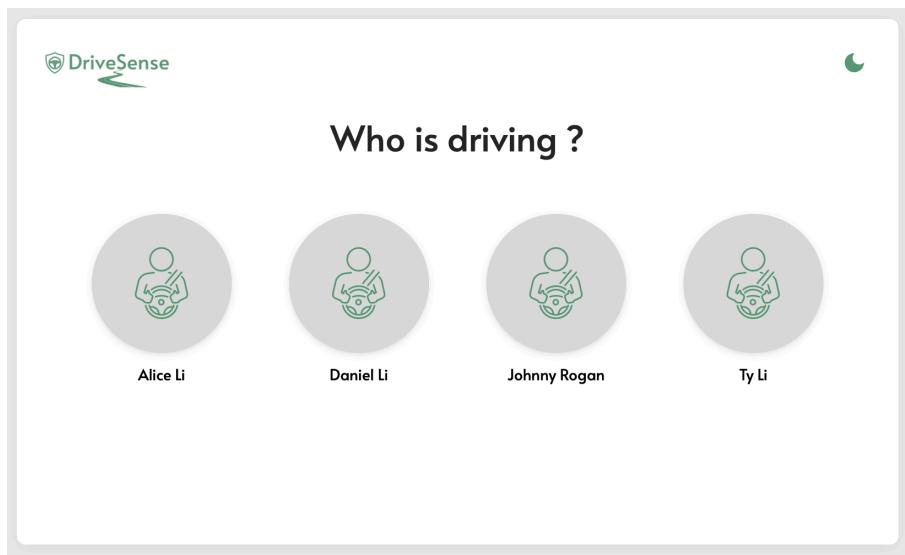
- Completed forgot/reset password implementation
- Began working on sorting drivers functionality

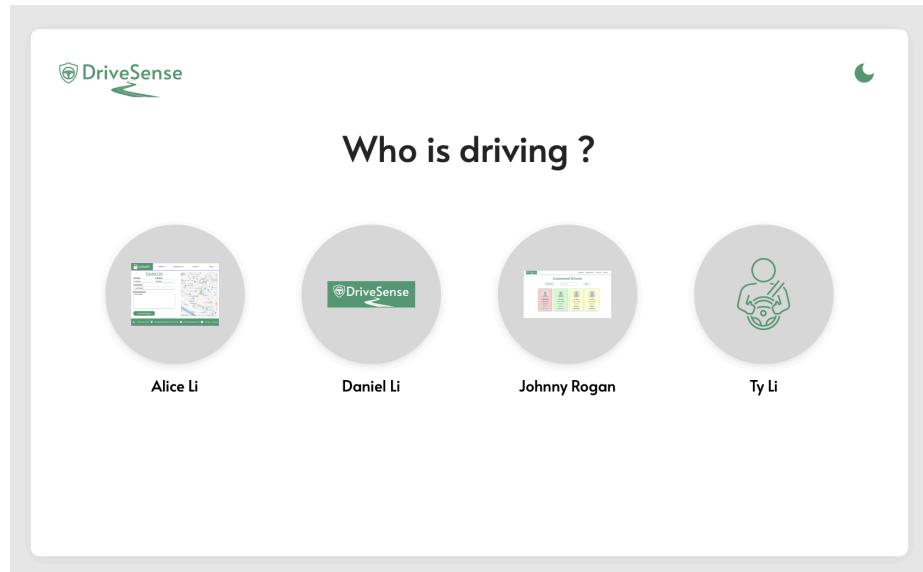
#### Hajer Fguir:

- Worked on the DB APIs for the UI Screen
- Completed login authentication



- Completed the drivers list API





Saurav Guduru:

- Completed yawning and alertness machine learning model

## Issues and Resolutions:

Issue: None

Status: N/A

Resolution: N/A

## Plans for next week:

### Hardware Goals:

- Improve and complete prototype for main body

### Software Goals:

- Implement logic for video capture
- Create logic for automatic event generation
- Complete API integration for screen UI
- Finish driver sorting functionality
- Complete sensor data implementation

# Management Board Screenshots:

The management board displays the following tasks across four columns:

- BACKLOG** (5 items):
  - Final Project Integration (**TERM 2 INTEGRATION**)
  - Midterm Project Report - Term 2 (**MIDTERM PRESENTATIONS - TERM 2**)
  - Final Presentation Slide Deck - Term 2 (**FINAL PRESENTATIONS - TERM 2**)
  - Final project demonstration (**FINAL PRESENTATIONS - TERM 2**)
  - Final Project Report - Term 2 (**FINAL PRESENTATIONS - TERM 2**)
- TO DO** (2 items):
  - Configure different dashboard access for different accounts (**WEBSITE FUNCTIONALITIES**)
  - Driver status for individual drivers (**FIREBASE CLOUD DATABASE**)
- IN PROGRESS** (10 items):
  - Final CAD Iteration (**TERM 2 INTEGRATION**)
  - Display driver metrics in the drivers' eventlog (**WEBSITE FUNCTIONALITIES**)
  - Implement driver card status colors updating real time (**WEBSITE FUNCTIONALITIES**)
  - Video capture feature (**INTEGRATION WITH INTERNET**)
  - Automatic event generation for drivers (**WEBSITE FUNCTIONALITIES**)
  - Add storage interface with MCU (**FIREBASE CLOUD DATABASE**)
  - Create REST API for sensor data (**FIREBASE CLOUD DATABASE**)
  - Stereo Camera Depth Model Development
  - Sorting drivers functionality (**WEBSITE FUNCTIONALITIES**)
  - Dynamic driver status (**DISPLAY UI DEVELOPMENT**)
- DONE** (4 items):
  - Reset password functionality (**WEBSITE FUNCTIONALITIES**)
  - AI model development
  - Write unit tests for sensors (**TESTING**)
  - Get measurements for new hardware

Figure 1 - General Management Board

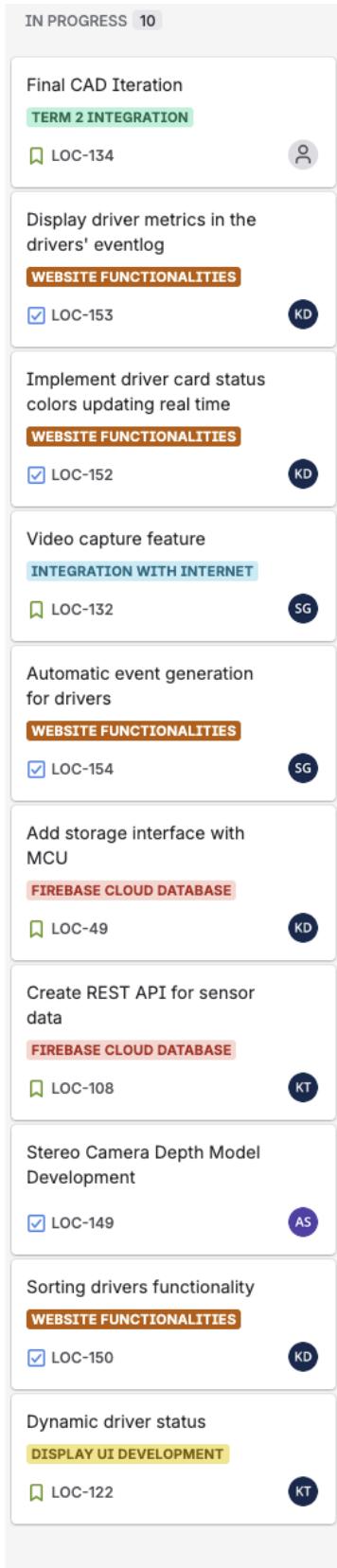


Figure 2 - This Week's Sprint

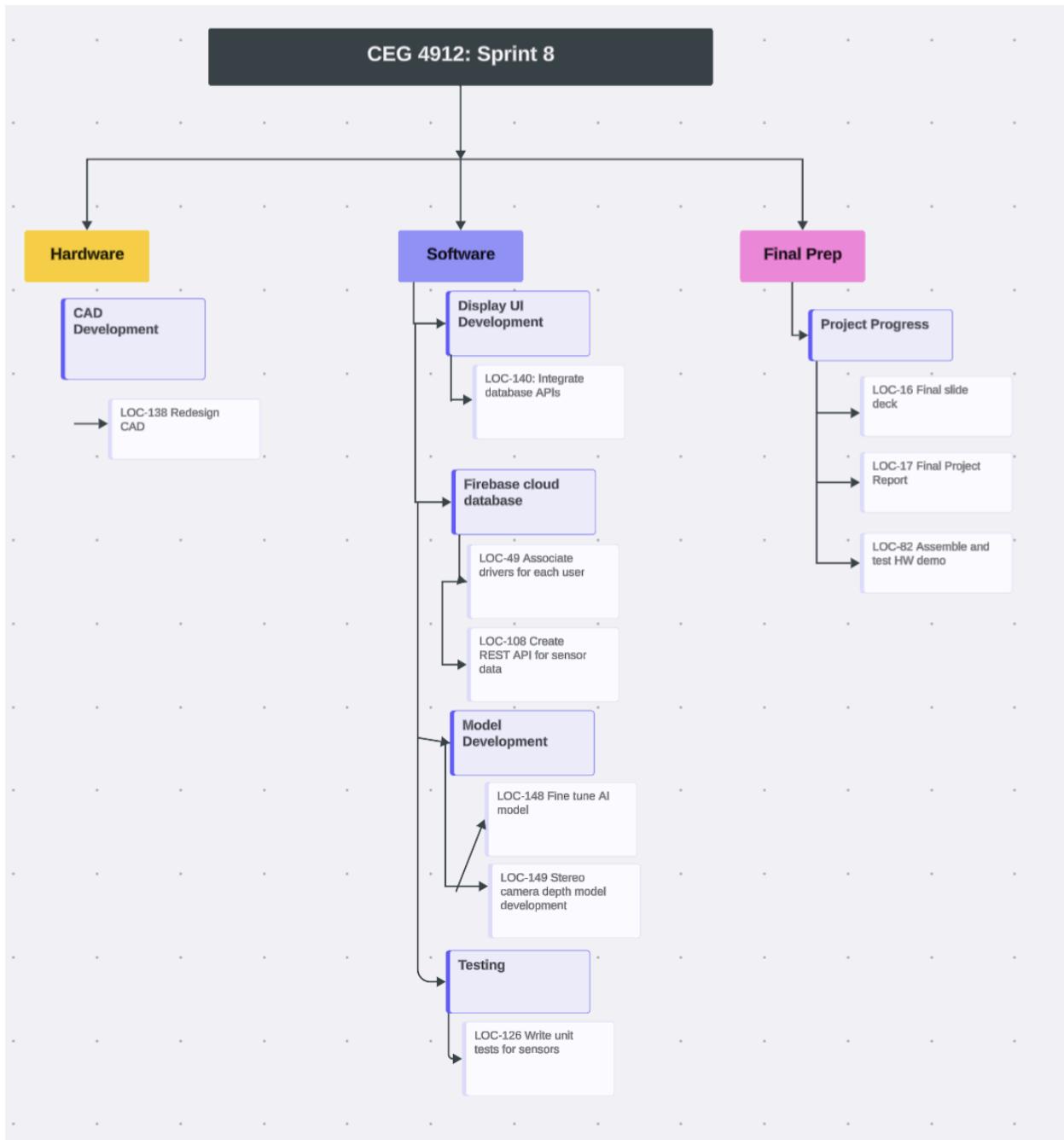


Figure 3 - WBS

**Additional Notes:**