

CEG4913 Weekly Progress Report

Week #: 9

SCRUM/Sprint No. 16

Group Number: 3

Date: November 20th, 2025

One line summary of progress: Finalized the enclosure and camera mounts, completed major UI/API features, improved driver management and event logging, and began integration of all aspects of the project.

Work Completed

Hardware:

- Designed full enclosure for main body
- Test fitted camera mounts

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:

- Switched fatigue detection model to opencv

Abdullah Ramadan:

- Designed new final full enclosure for parts, test-fitted camera mounts

Keith Tran:

- Completed twillio implementation and tested its functionality

Kevin Dang:

- Sorting drivers function implemented
- Allow different accounts to have access to different drivers
- Updated eventlog page

Hajer Fguir:

- Worked on the Events APIs for the UI Screen
- Completed the Screen Brightness Implementation

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:

- Print full enclosure for body and assembly final design

Software Goals:

- Pull and display sensor data on website
- Display pictures/videos when an event is made
- Upload sensor data and images/videos for website to display
- Complete both website and screen UI

Management Board Screenshots:

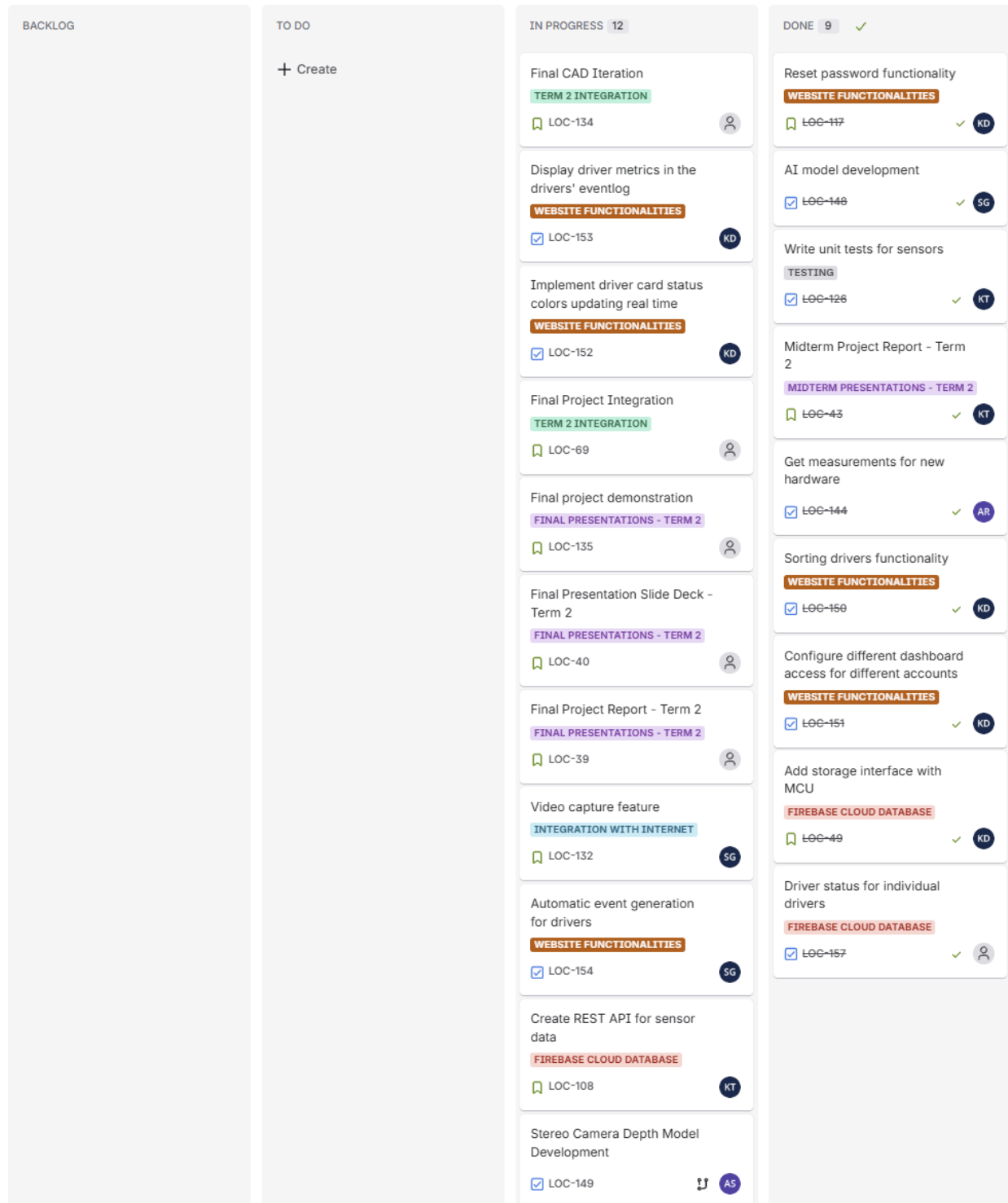


Figure 1 - General Management Board

IN PROGRESS 12

Final CAD Iteration

TERM 2 INTEGRATION

LOC-134



Display driver metrics in the drivers' eventlog

WEBSITE FUNCTIONALITIES

LOC-153



Implement driver card status colors updating real time

WEBSITE FUNCTIONALITIES

LOC-152



Final Project Integration

TERM 2 INTEGRATION

LOC-69



Final project demonstration

FINAL PRESENTATIONS - TERM 2

LOC-135



Final Presentation Slide Deck - Term 2

FINAL PRESENTATIONS - TERM 2

LOC-40



Final Project Report - Term 2

FINAL PRESENTATIONS - TERM 2

LOC-39



Video capture feature

INTEGRATION WITH INTERNET

LOC-132



Automatic event generation for drivers

WEBSITE FUNCTIONALITIES

LOC-154



Create REST API for sensor data

FIREBASE CLOUD DATABASE

LOC-108



Stereo Camera Depth Model Development

LOC-149



Dynamic driver status

DISPLAY UI DEVELOPMENT

LOC-122



Figure 2 - This Week's Sprint

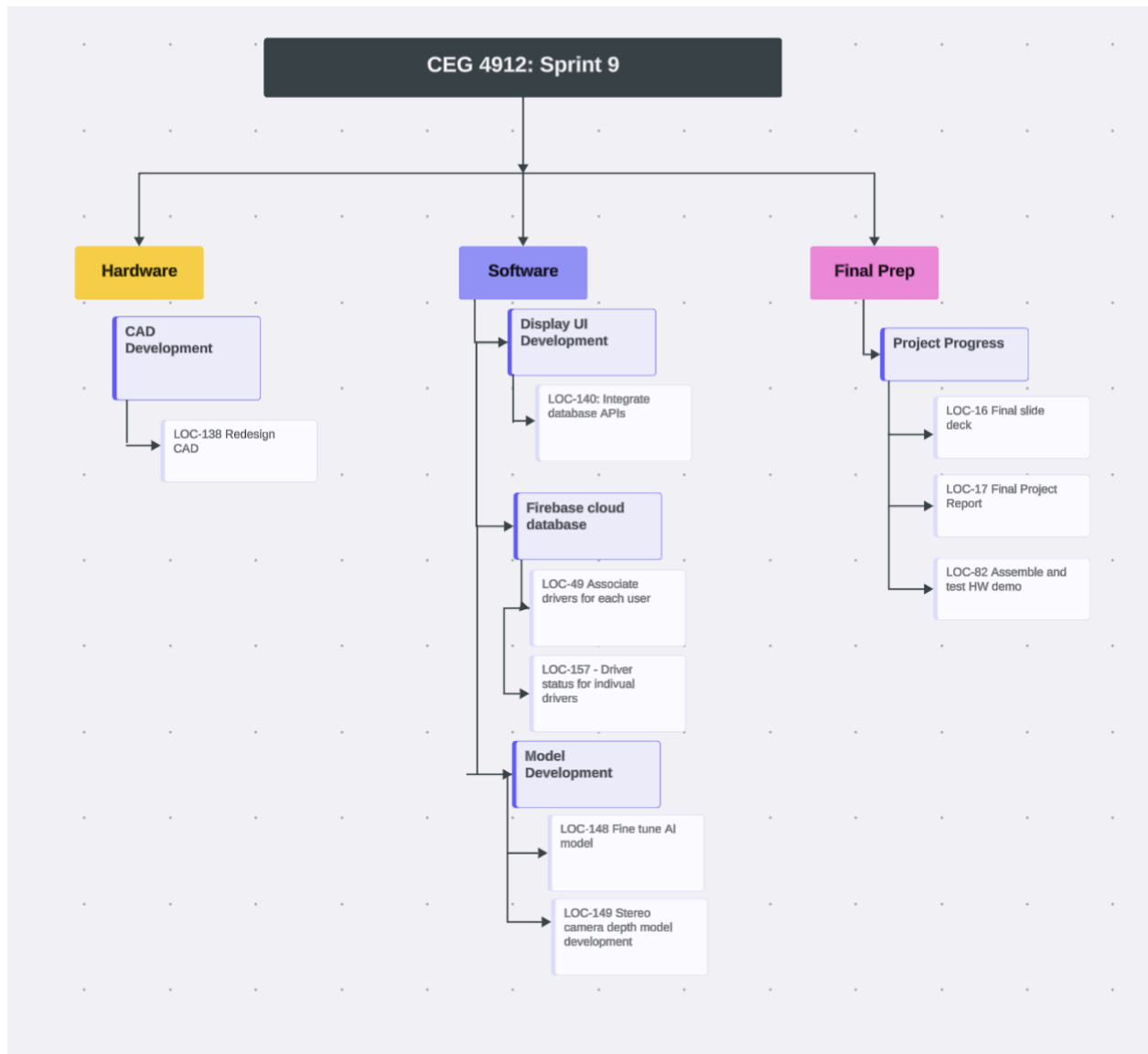


Figure 3 - WBS

Additional Notes: