

Driver Safety Monitoring System

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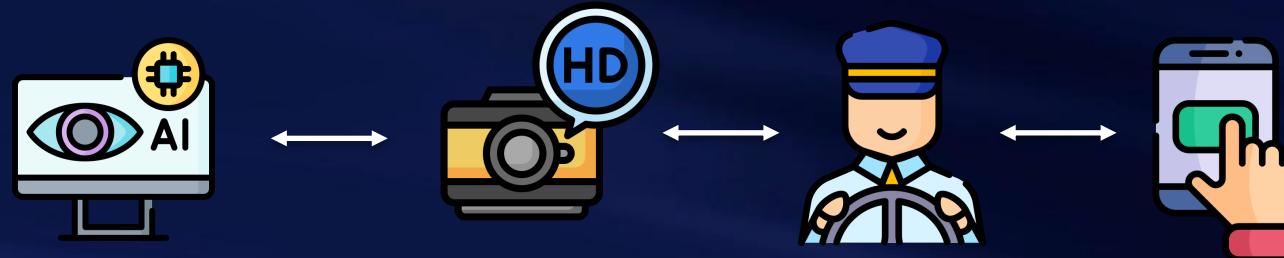
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Problem Description

- ▶ Driving fatigue is responsible for 25% of road accidents.
- ▶ Using mobile phones increases the risk of accidents by 4 times.
- ▶ chronic conditions significantly increase the likelihood of road accidents.



Proposed Solution



Aims and Objectives

- This project aims to enhance road safety by using technology to monitor drivers for signs of drowsiness, distraction, and critical health conditions in real-time.



Functional Requirements



- ▶ The system shall allow the driver to register a new account.
- ▶ The system shall allow the driver to log in to an existing account.
- ▶ The system shall allow the driver to manage account
- ▶ The system shall allow the driver to manage emergency contacts
- ▶ The system shall allow the driver to view reports.
- ▶ The system shall allow the driver to manage monitoring session
- ▶ The system shall trigger an alert if any critical conditions are detected
- ▶ The system shall send an SMS message with the driver's live location to the emergency contact
- ▶ The system shall detect critical indicators
- ▶ The system shall capture a live video of the driver.



Non-Functional Requirements

Availability

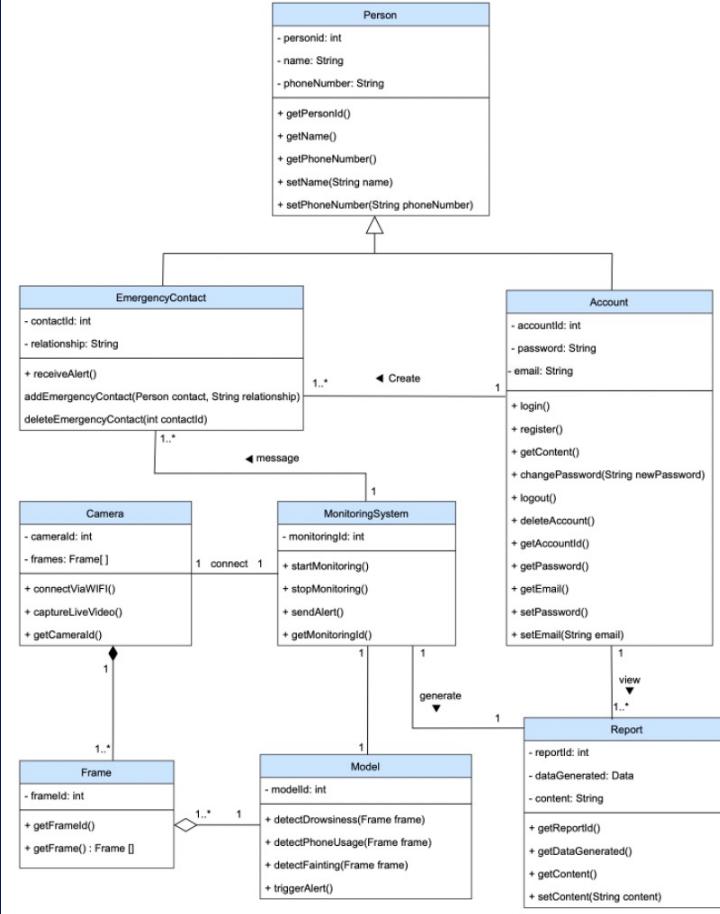
Usability

Performance

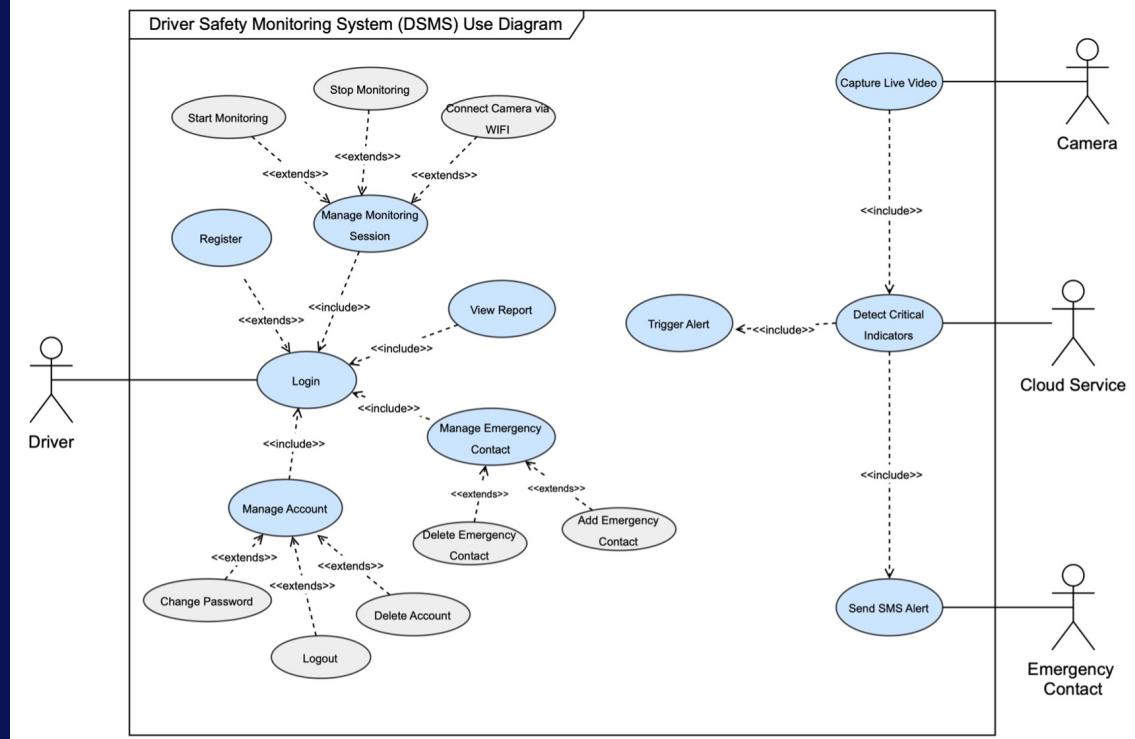
Security

Speed

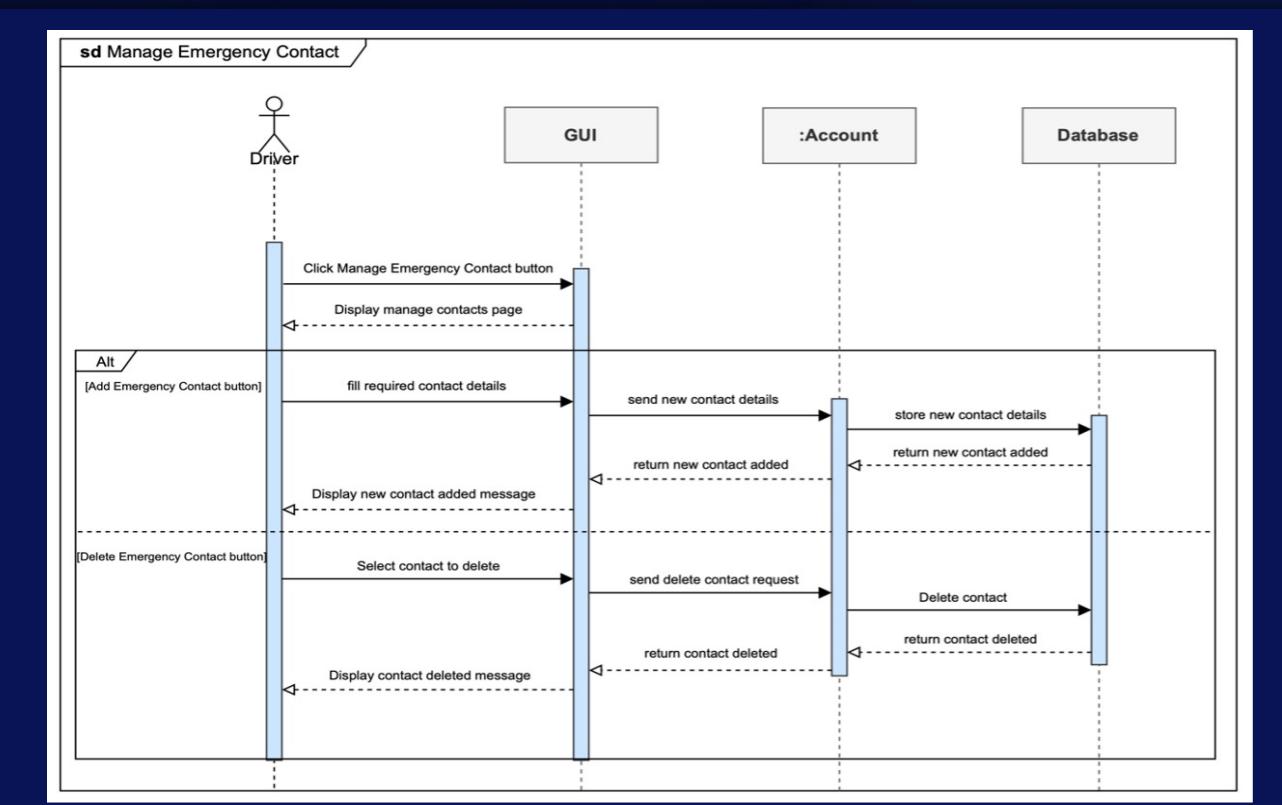
Class Diagram



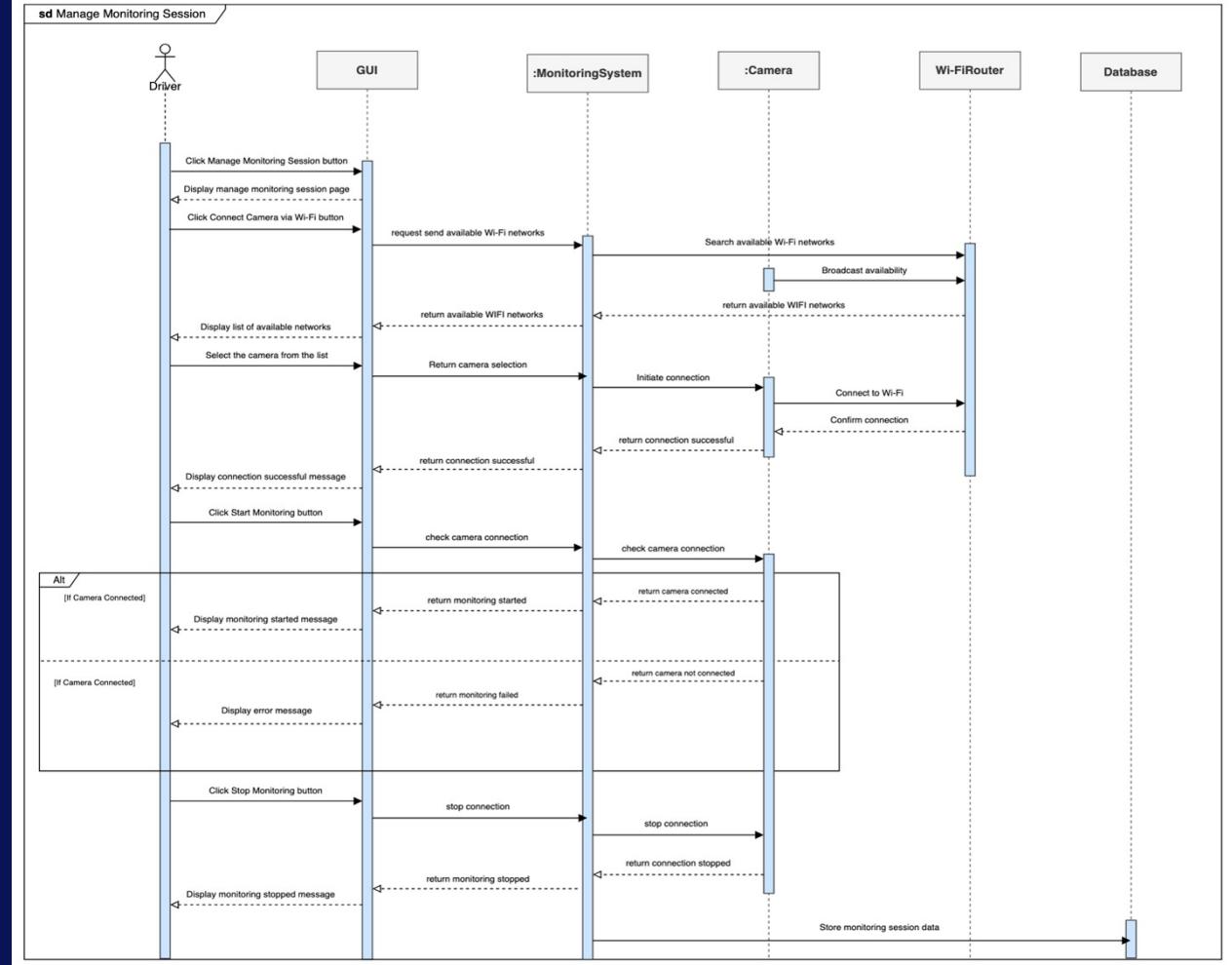
Use Case Diagram



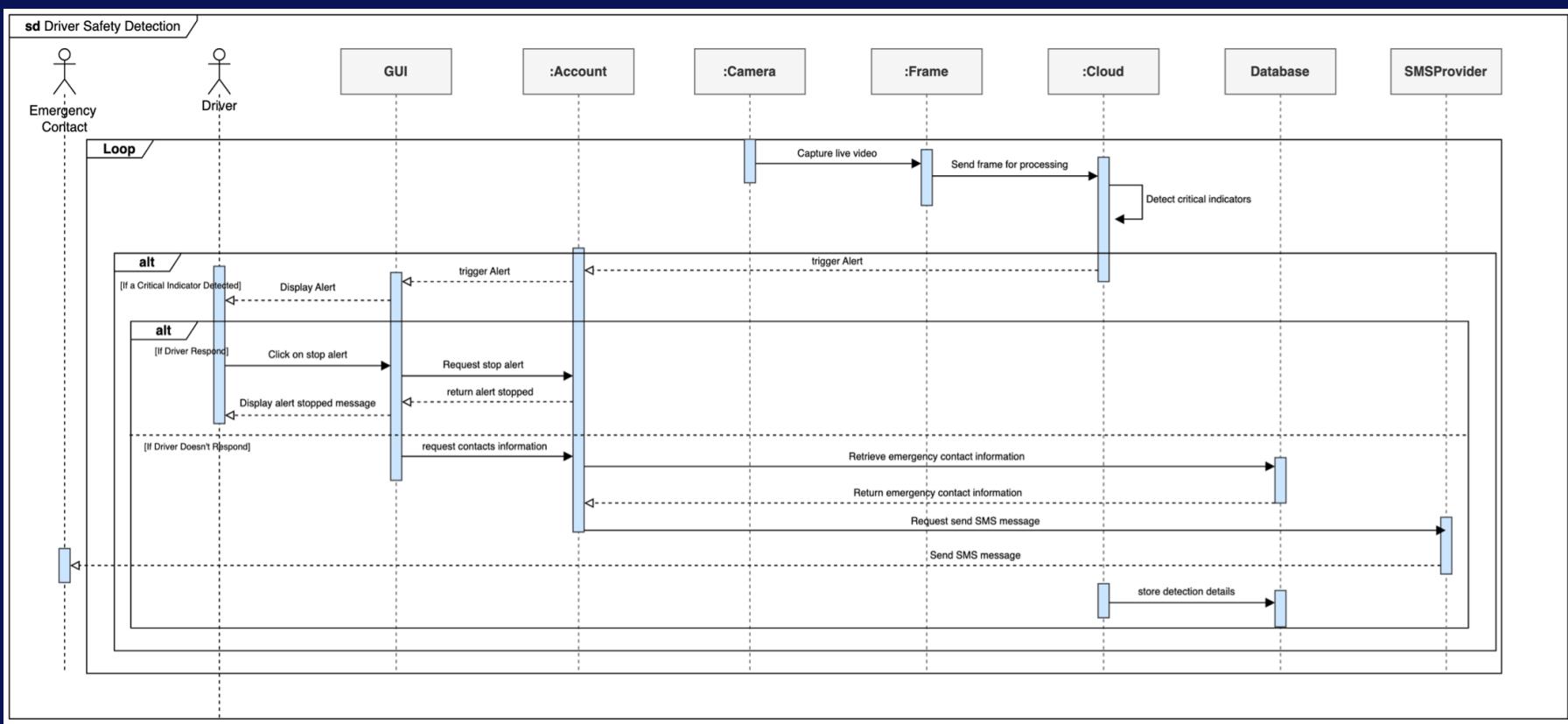
Manage Emergency Contact Sequence Diagram



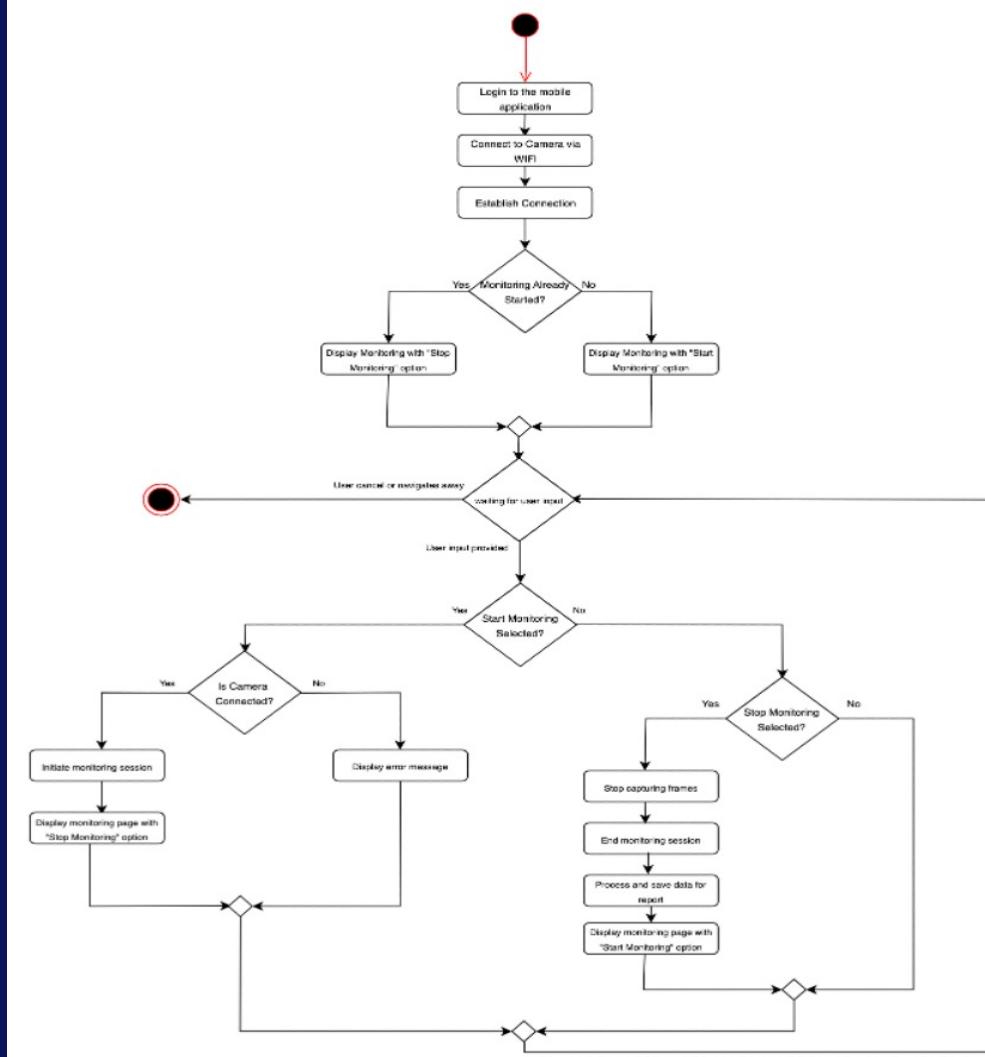
Manage Monitoring Session Sequence Diagram



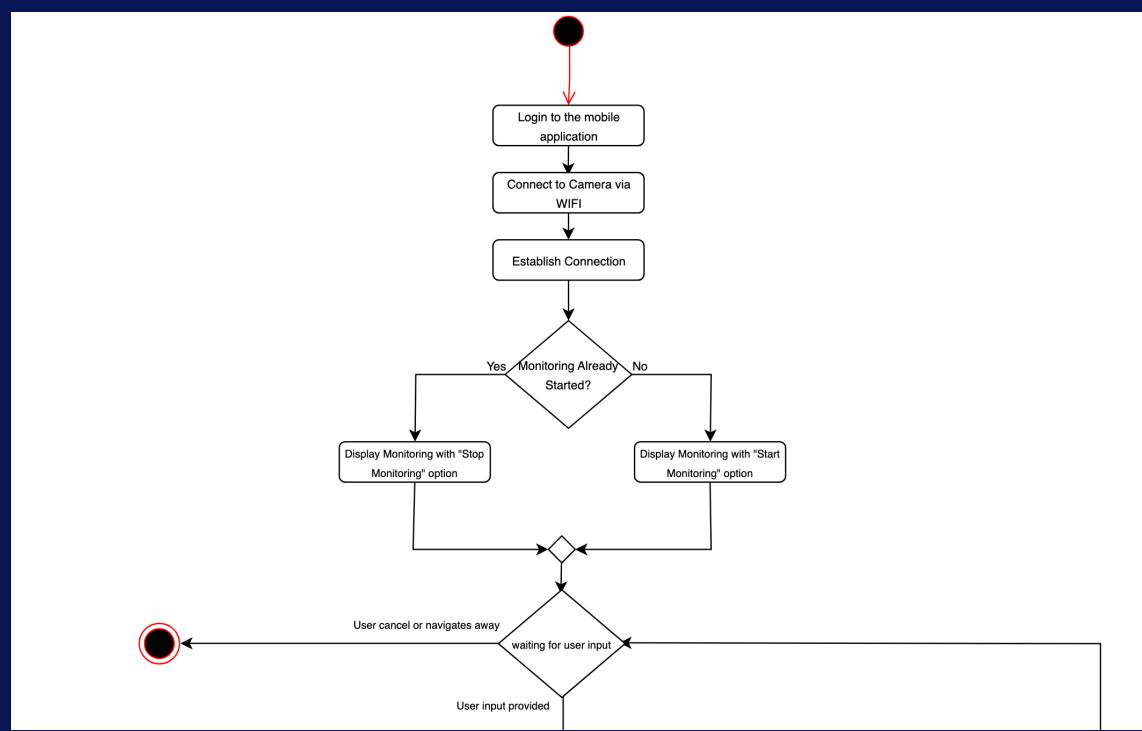
Driver Safety Detection Sequence Diagram



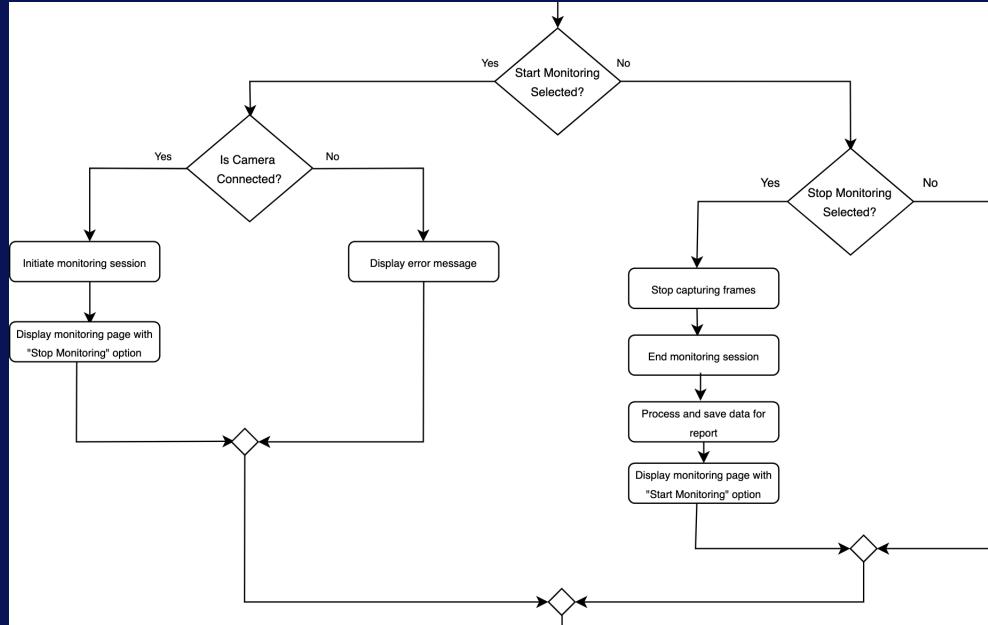
Monitoring Session and Camera Connection Activity Diagram



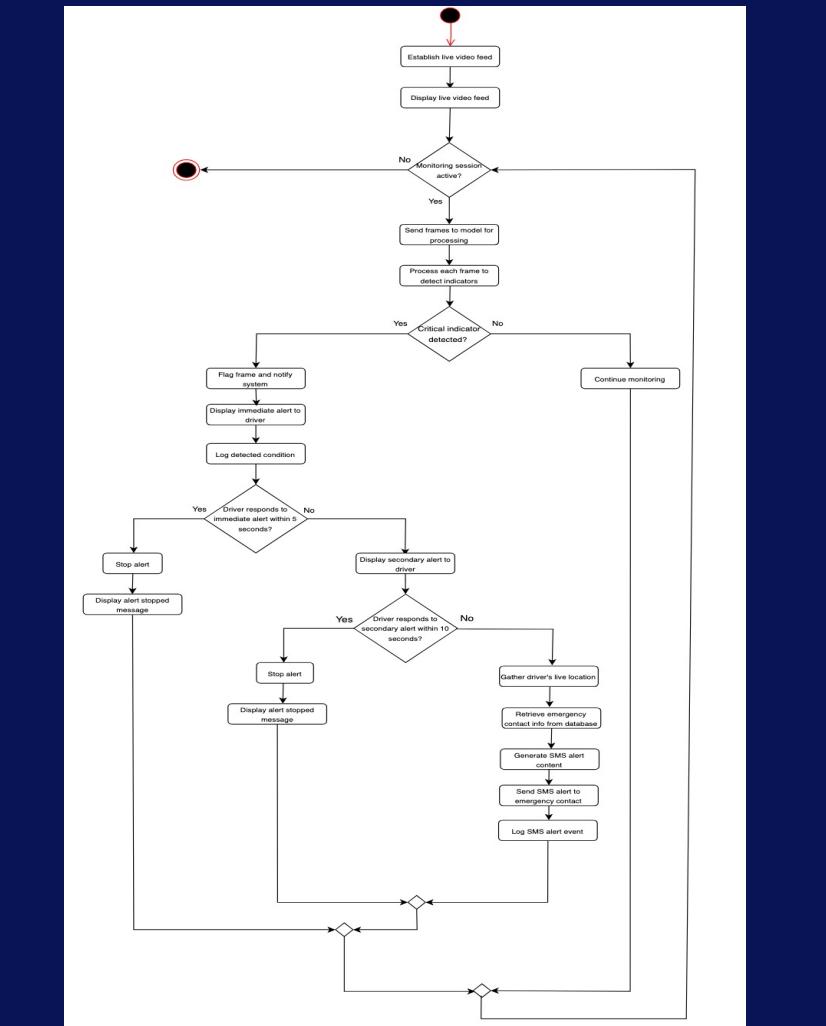
Monitoring Session and Camera Connection Activity Diagram



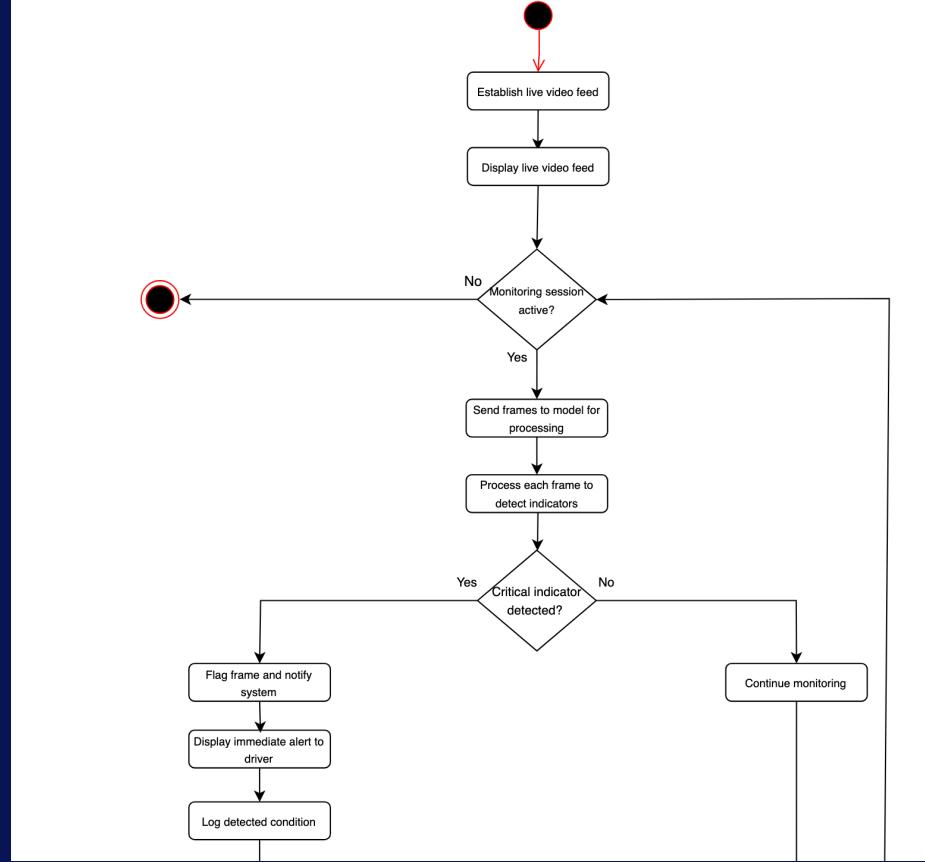
Monitoring Session and Camera Connection Activity Diagram



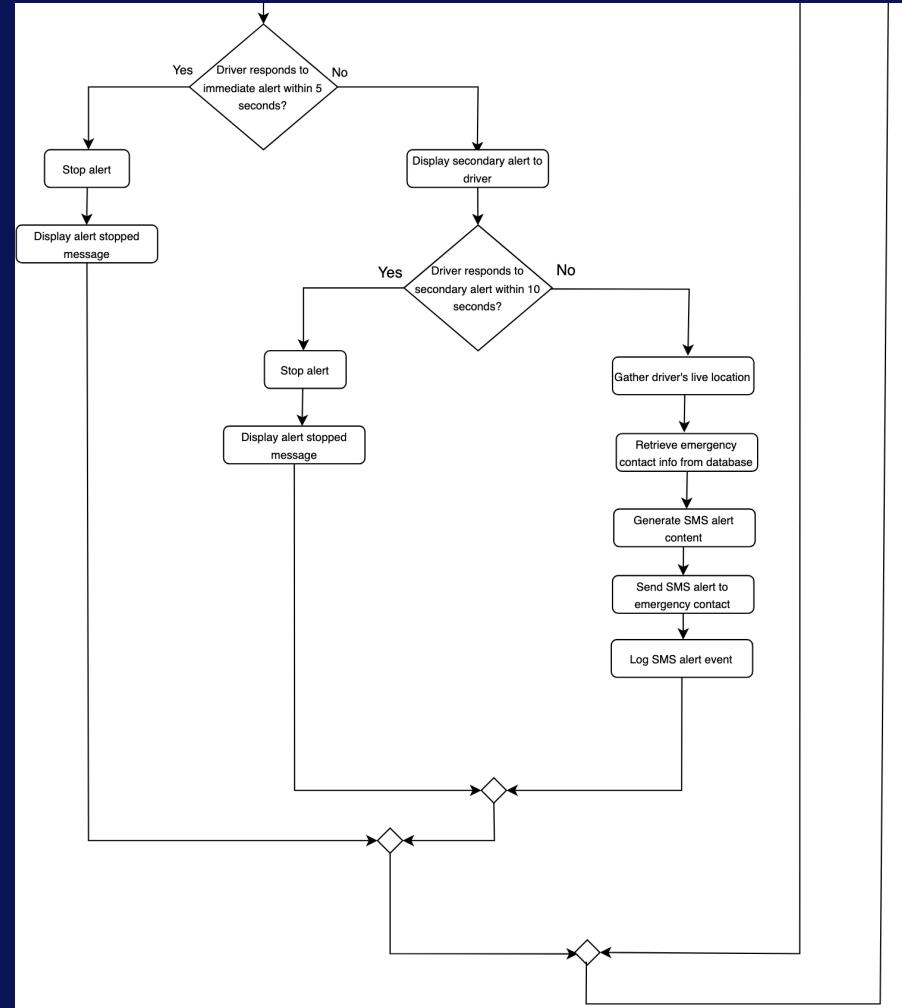
Detection Activity Diagram



Detection Activity Diagram



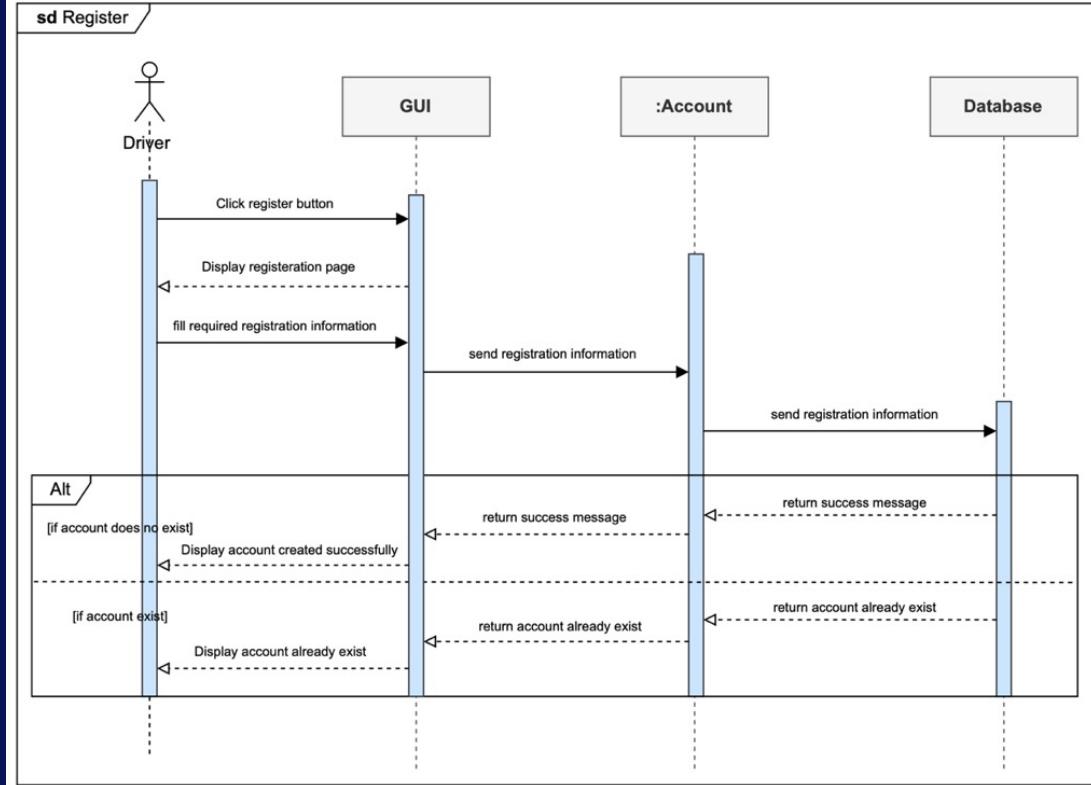
Detection Activity Diagram



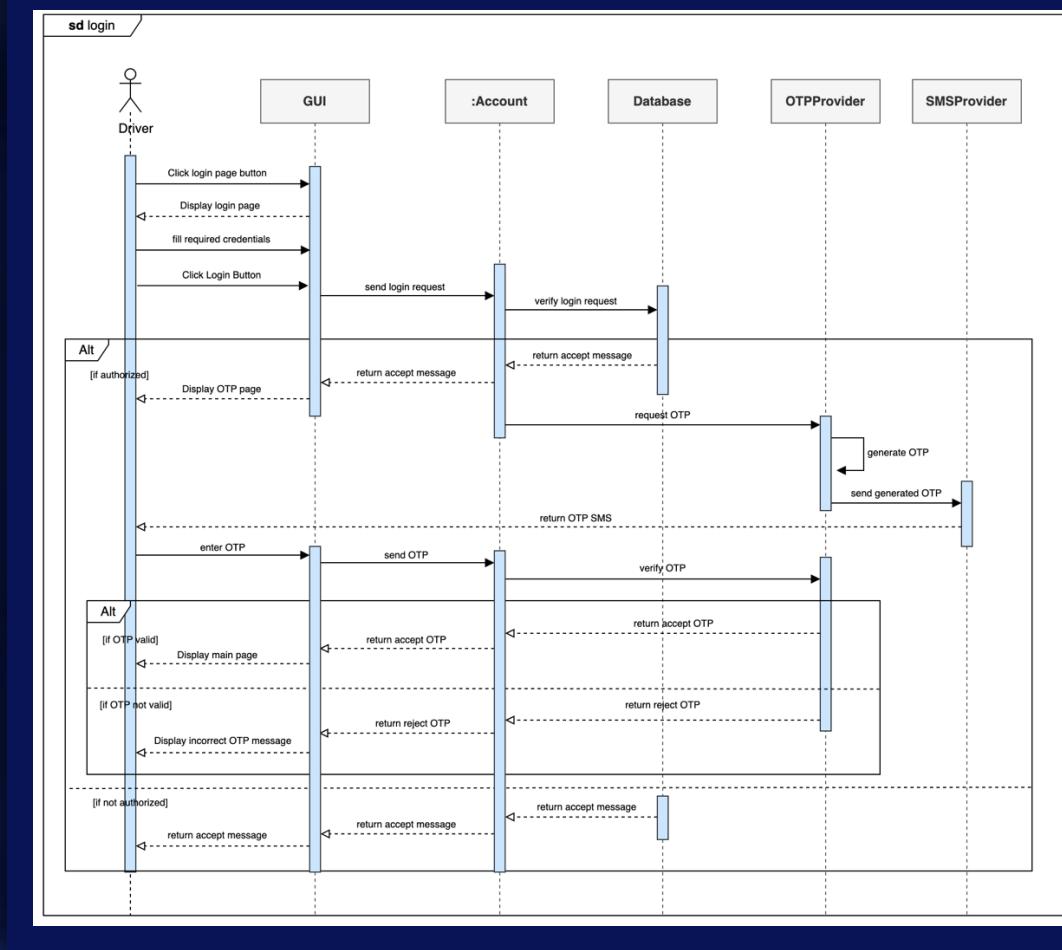
End of Presentation
THANK YOU

*The rest of the
Sequence Diagrams*

Register Sequence Diagram



Login Sequence Diagram



Manage Account Sequence Diagram

