

**MICHIGAN STATE**  

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**UNIVERSITY**

# Beta Presentation

## Safe Journey AI 2.0

The Capstone Experience

Team Volkswagen

Grant Bossio

Seth Neubauer

Ethan Rush

Emberlynn Zhao

CJ Nwogu

Aashish Harishchandre

Department of Computer Science and Engineering

Michigan State University

Spring 2025



*From Students...  
...to Professionals*

# Project Overview

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- Lack of Safety Focused Navigation Apps
- Real-Time Crime & Weather Data
- Rerouting to Avoid Dangerous & Unwanted Areas
- Safe Walk
- Android Auto Integration



# Team Member's Technical Tasks

## Technical Tasks Assigned

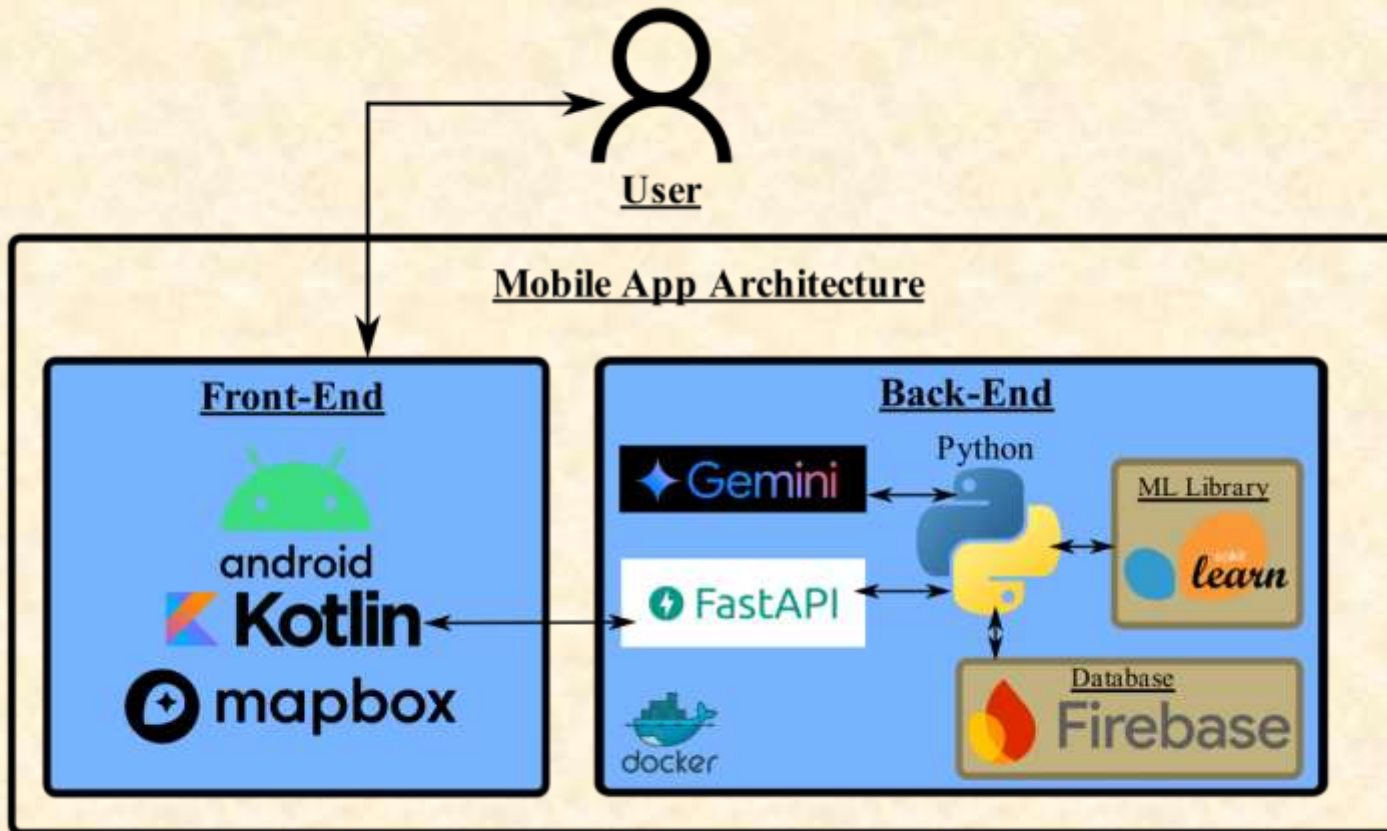
- Emberlynn Zhao
  - Safe Walk feature Frontend & Backend
  - User Reported Hazard & Real-Time Crime & Weather Hazard Alert Frontend
  - Maneuver View Implementation
- Aashish Harishchandre
  - Crime JSON Dataset & Gemini AI to Read/Navigate Crime
  - Implemented Location and Road Condition Ratings
  - Implemented Live Weather Data and Alerts
- CJ Nwogu
  - Search Frontend & Backend
  - Landing Page Frontend
  - Gas, EV and Parking Implementation
- Seth Neubauer
  - Android Auto lead
  - Setting & Info page UI
  - Populated Route Screen Before Route Start Screen Frontend
- Grant Bossio
  - All Routing Implementation
  - Avoidance Waypoint feature Frontend & Backend
  - Route Safety Calculation & Reported Hazards Frontend
- Ethan Rush
  - Hazard and Real Time Crime Backend
  - Route Safety Machine Learning Model
  - Backend Interface and Database Listener

## Technical Tasks Completed

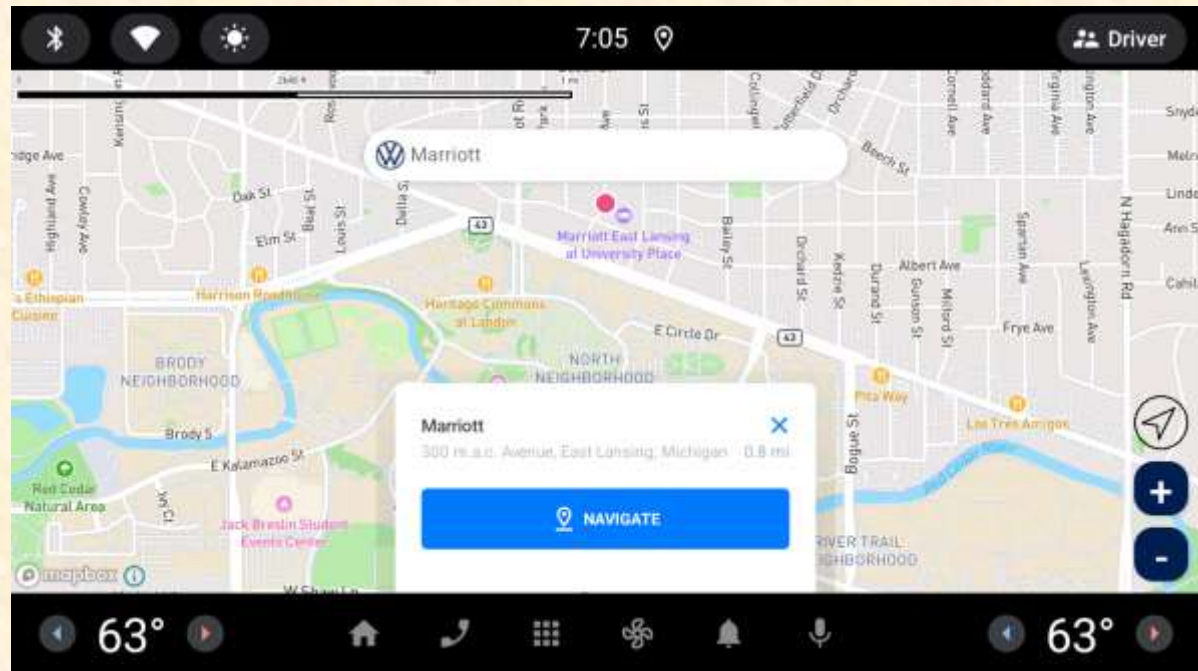
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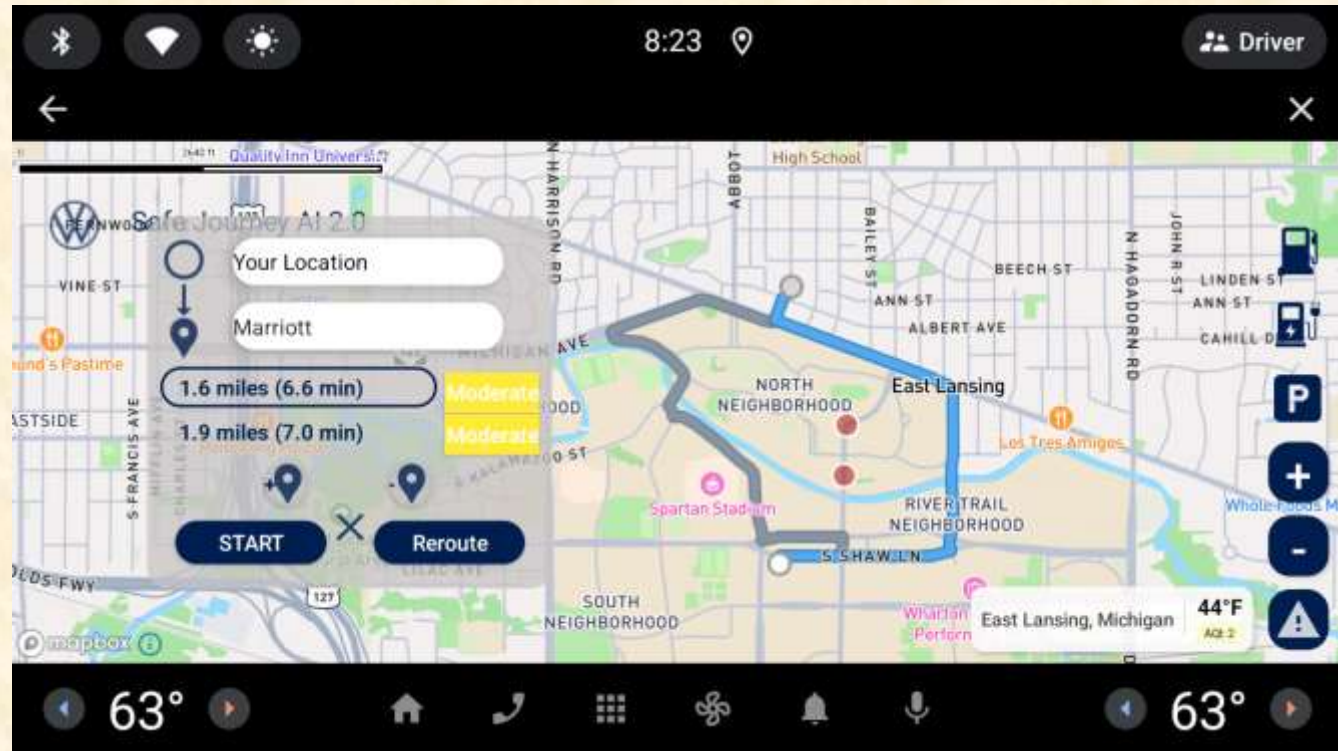
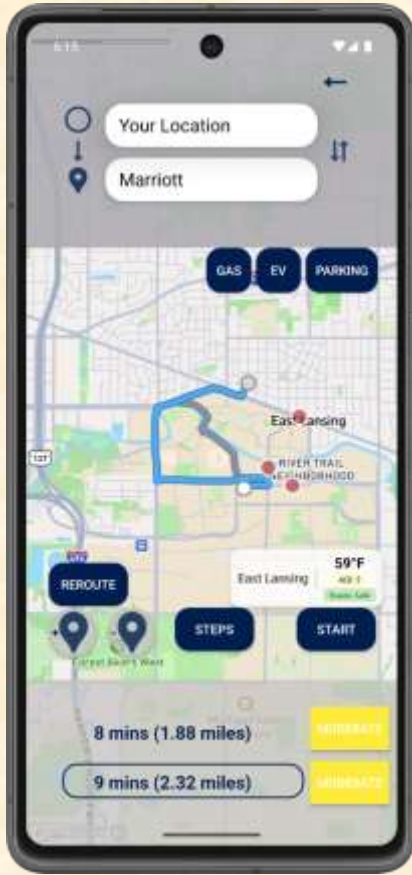
# System Architecture



# Search Screen



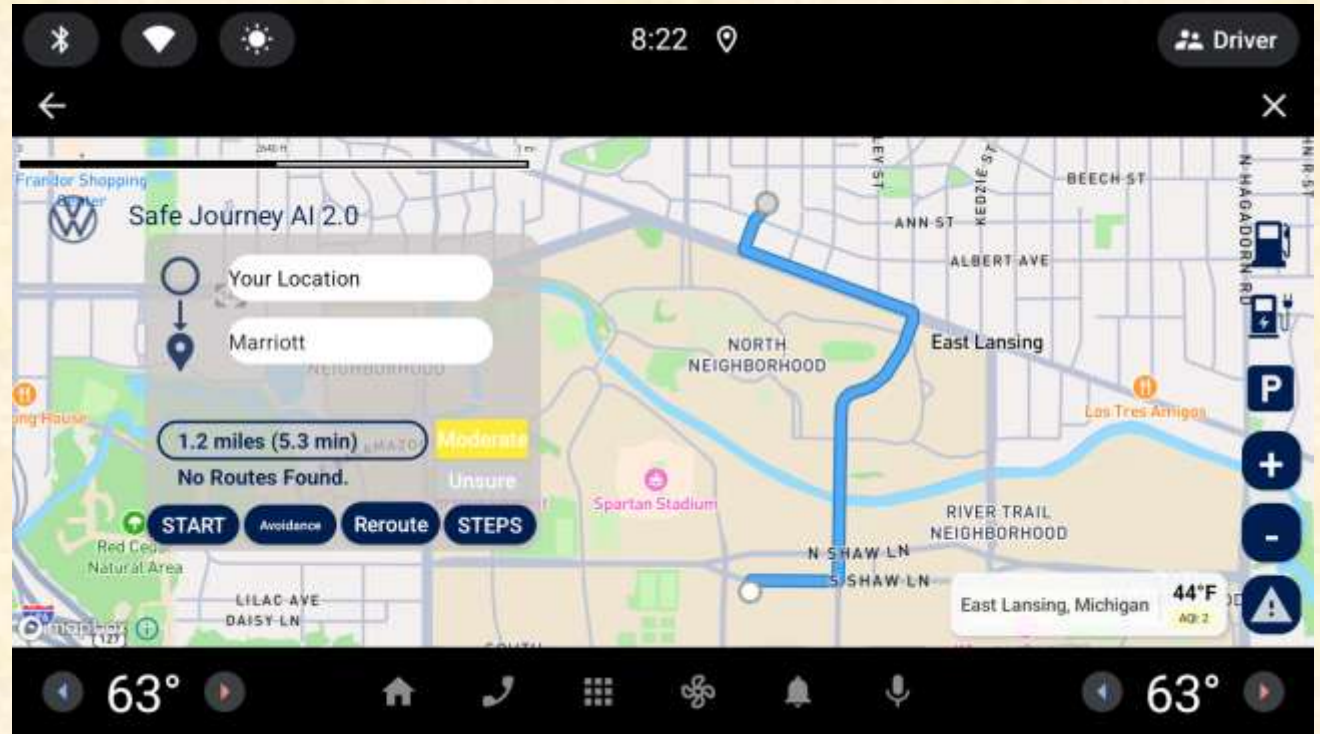
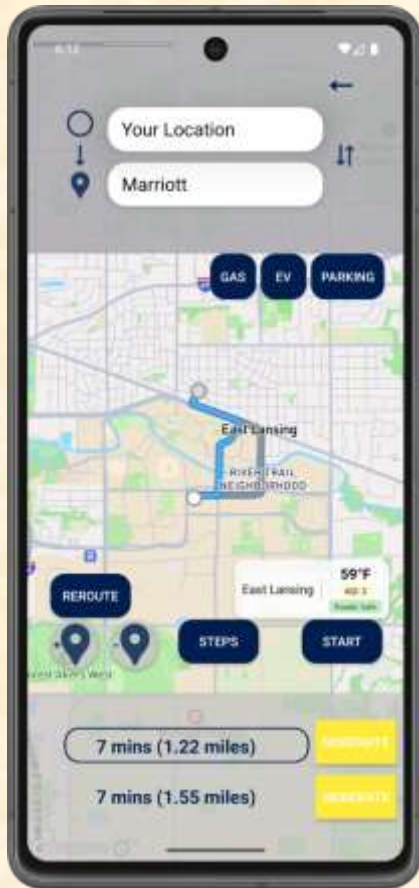
# Avoidance Waypoint Screen



# Crime Scene Warning Screen

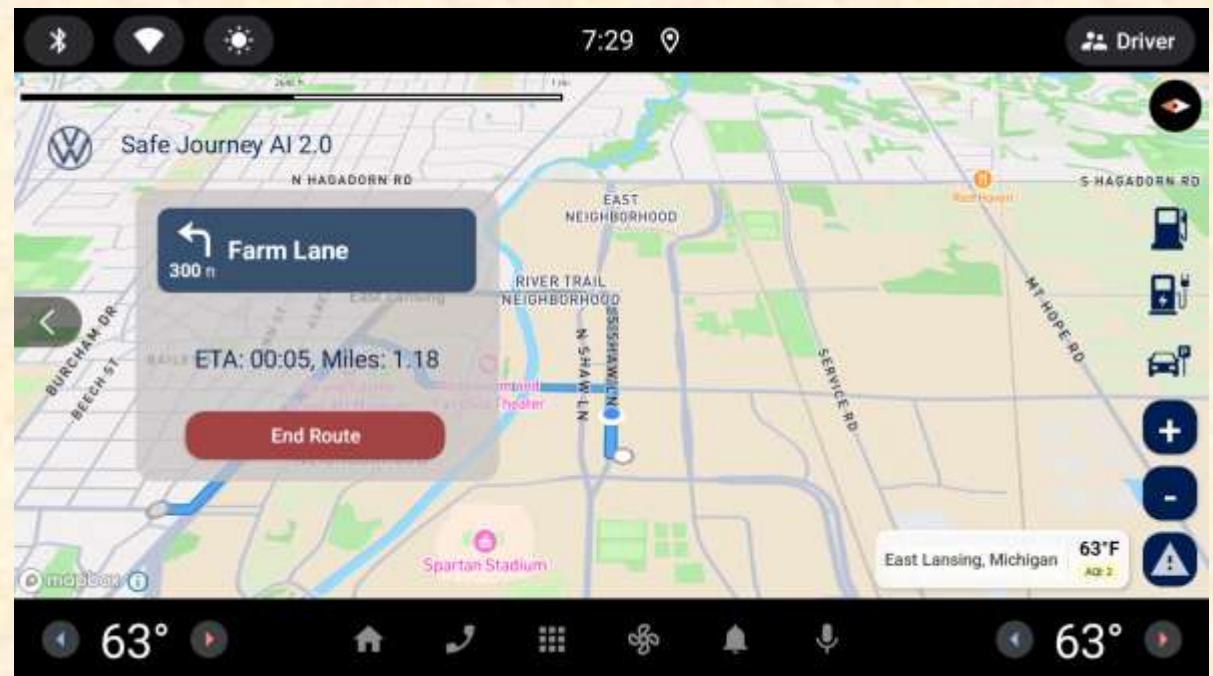
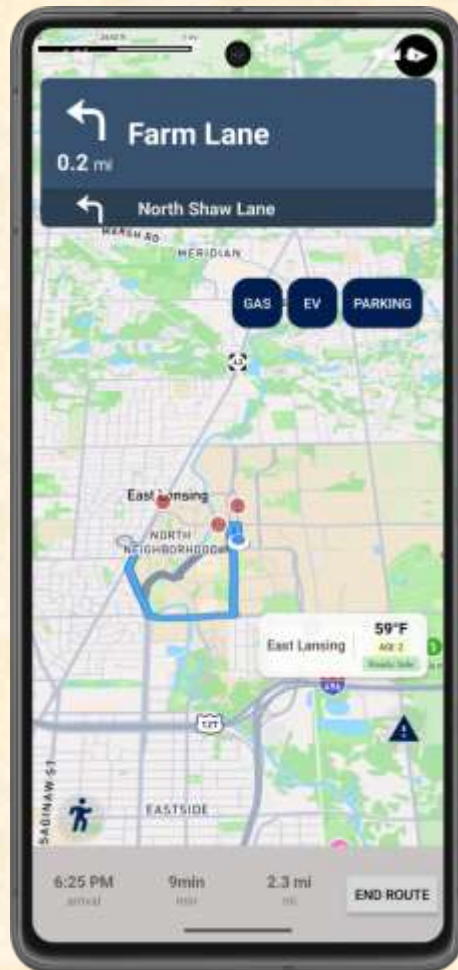


# Map Routing Screen

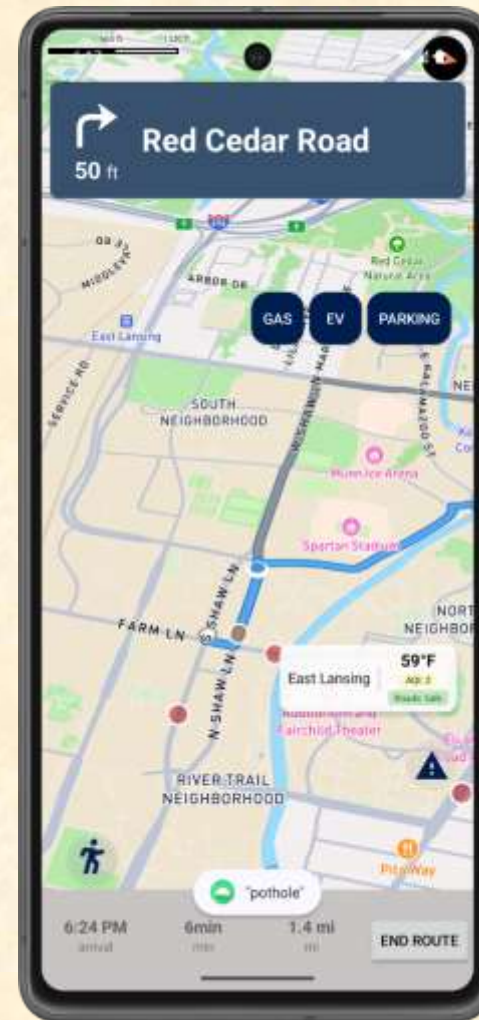




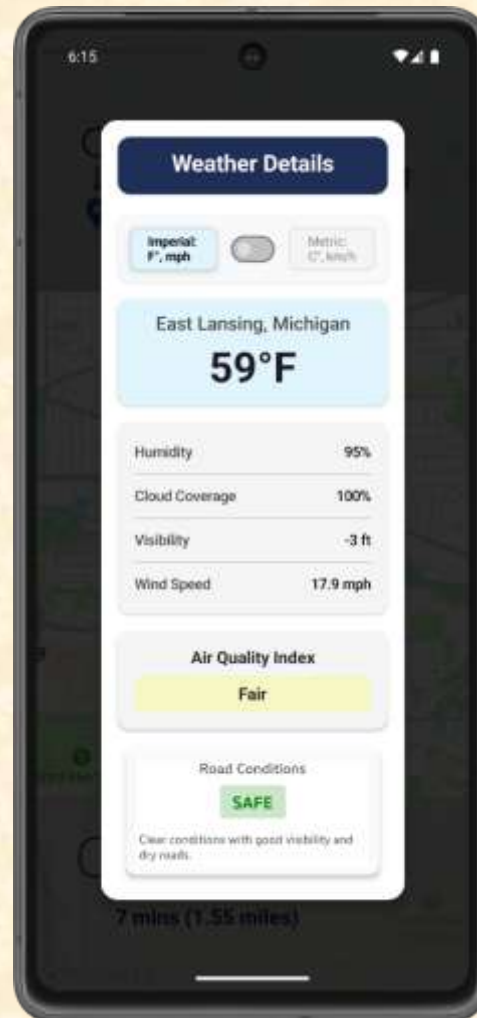
# Route Simulation Screen



# User Reported Hazard Screen



# Weather Info Screen



# Safe Walk Screen



# What's left to do?

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- Features
- Stretch Goals
- Other Tasks
  - Polish UI
  - Bug Fixes



# Questions?

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