

MICHIGAN STATE

UNIVERSITY

Beta Presentation

Safe Journey AI

The Capstone Experience

Team Volkswagen

Ricardo Quinonez

Pranav Premchand

Shashank Jayaram

Navya Singh

Maui Baba

Sudhanv Komanduri

Department of Computer Science and Engineering

Michigan State University

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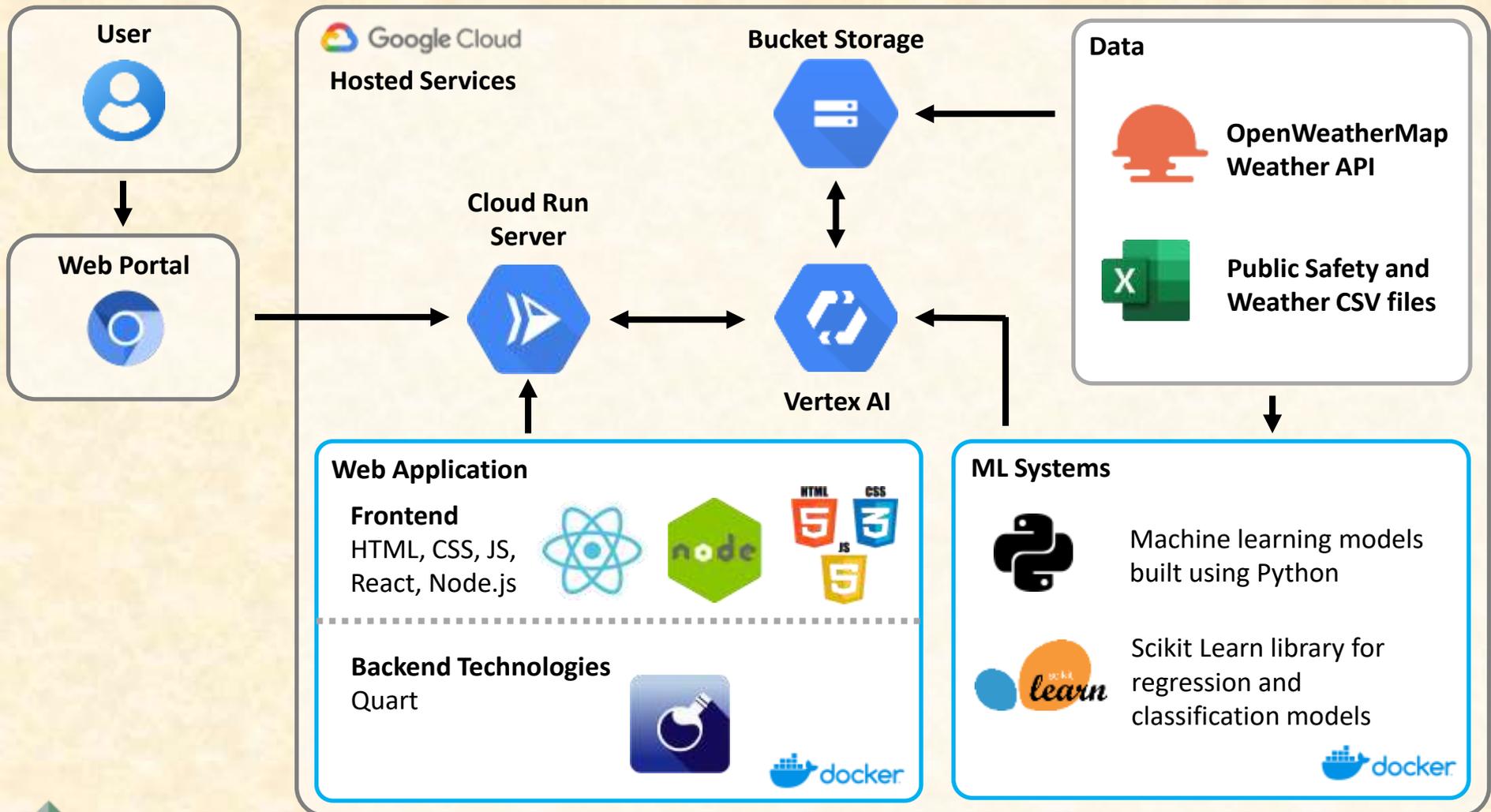
*From Students...
...to Professionals*

Project Overview

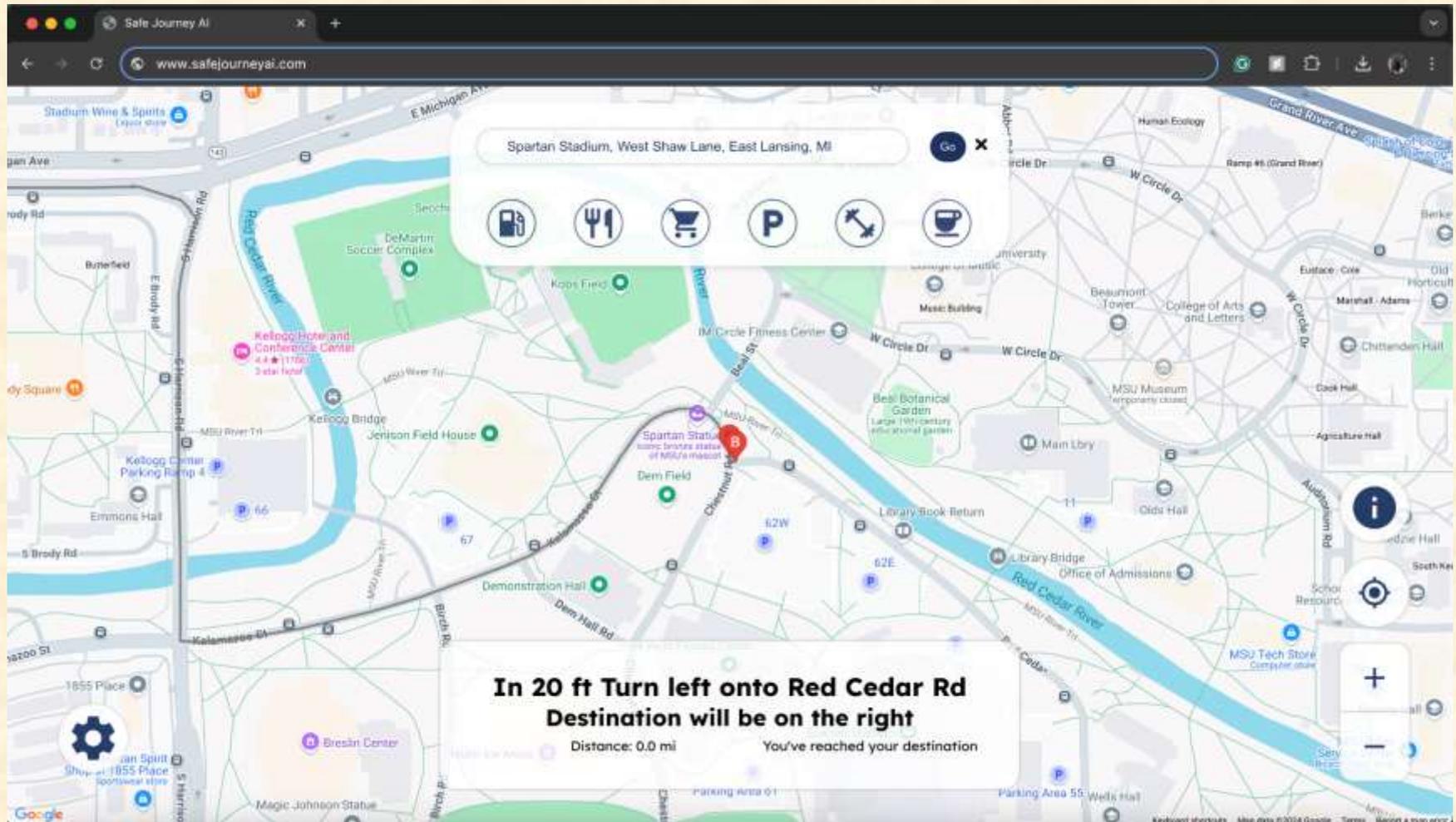
- Safety-oriented vehicle navigation system that leverages machine learning
- Builds upon conventional routing by considering crime, weather, and traffic
- Provides alerts and rerouting based on reported hazards
- Displays nearby refueling stations and parking with calculated safety ratings



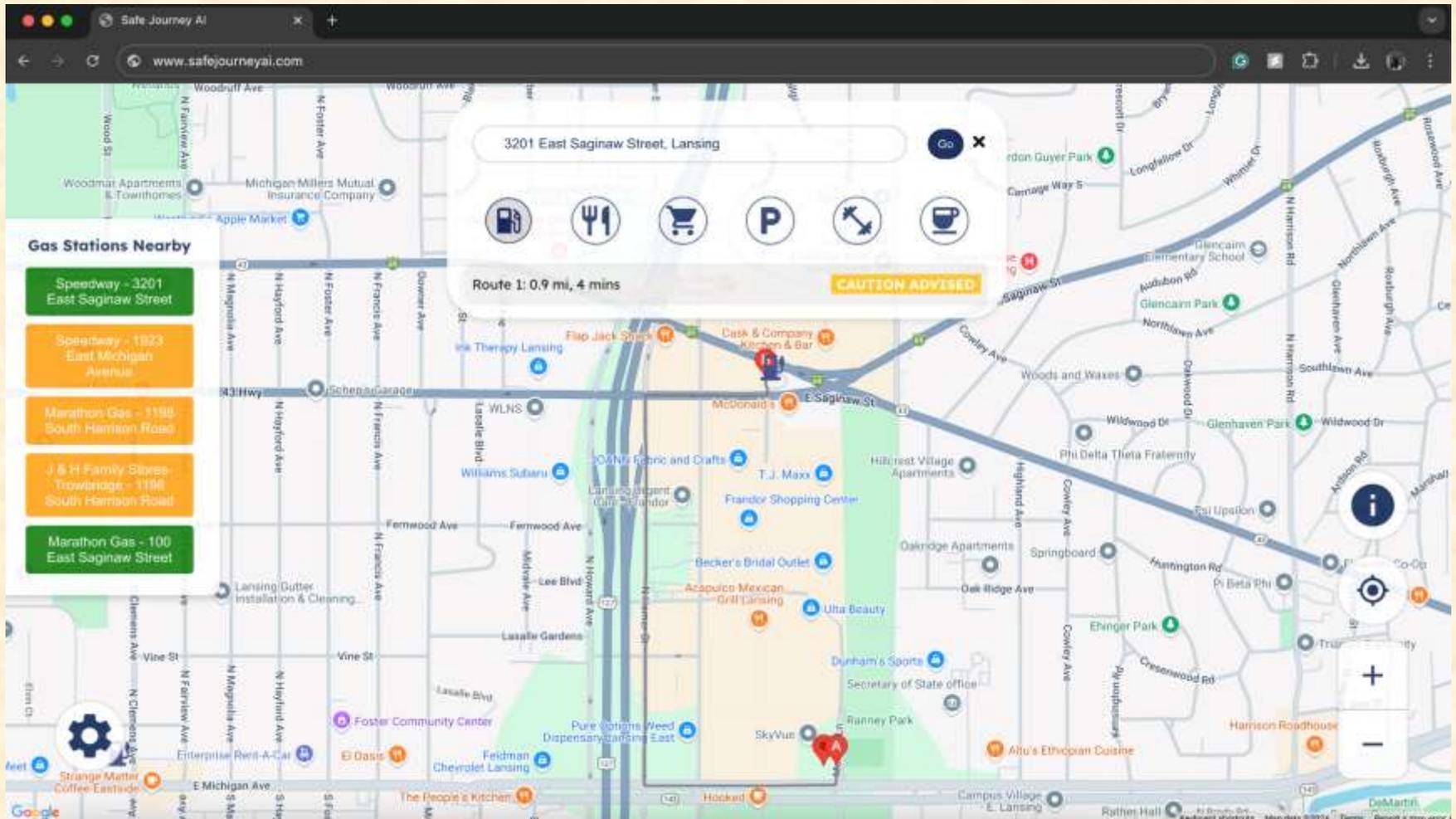
System Architecture



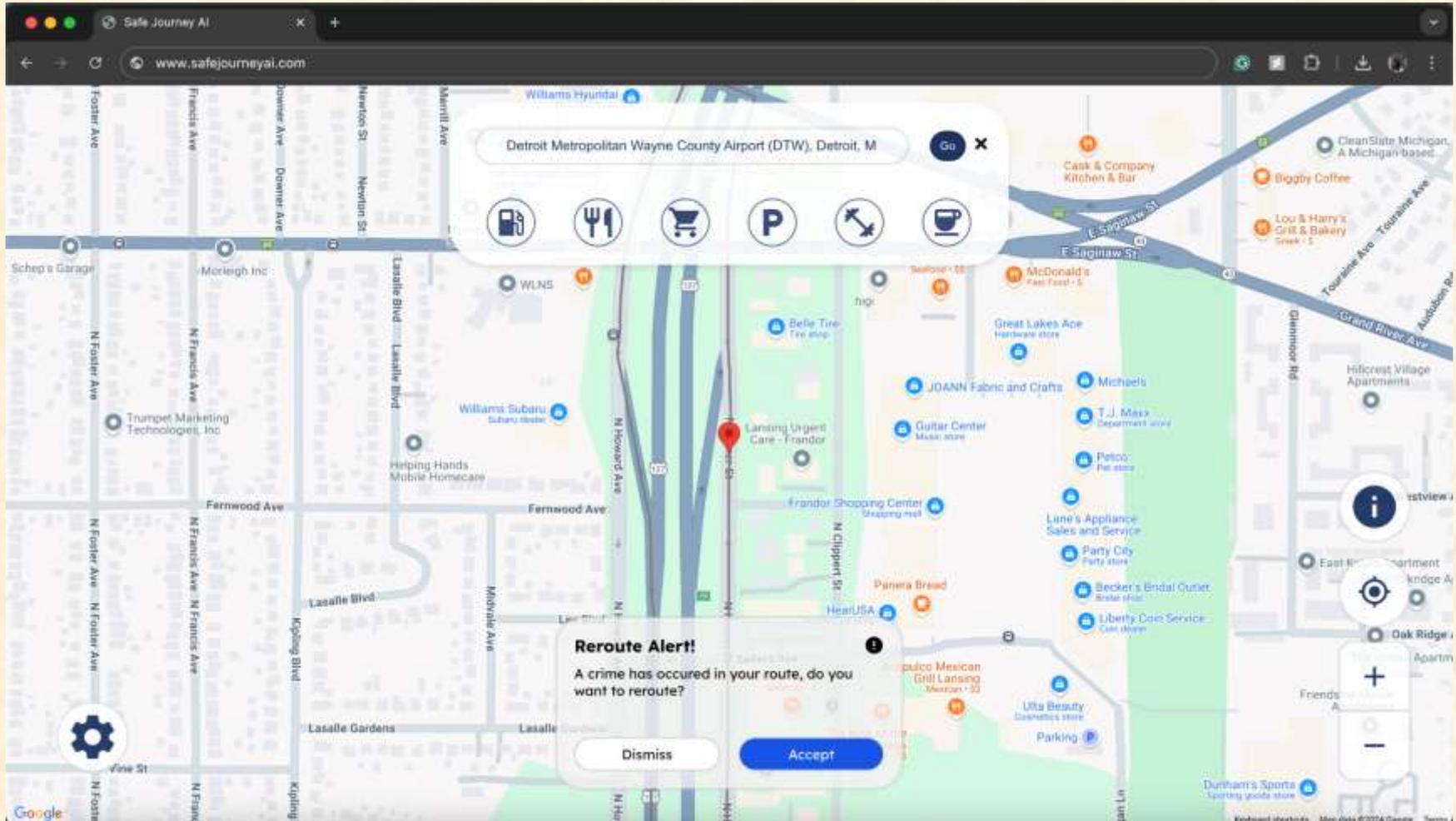
Directions with ETA Display



Nearby Gas Stations with Safety Ratings



Rerouting Alert



Safety Ratings with Weather Info

The screenshot displays the Safe Journey AI web application interface. The browser address bar shows the URL www.safejourneyai.com. The main map area shows a route from Lansing, MI to Detroit, MI. A search bar at the top of the map contains the text "Detroit Metropolitan Wayne County Airport (DTW), Detroit, MI". Below the search bar, there are icons for gas, dining, shopping, parking, navigation, and coffee. Three route options are listed:

- Route 1: 86.7 mi, 1 hour 18 mins **SAFE**
- Route 2: 94.6 mi, 1 hour 25 mins **SAFE**
- Route 3: 89.4 mi, 1 hour 21 mins **SAFE**

A "Settings" panel is open on the left side of the map, showing options for "Gas Vehicle", "Day Mode", "Safe Journey AI", and a "Safety Threshold" slider. A weather information panel is also visible, showing:

- Current Location:** 46.17°F Clear, Feels Like: 40.77°F
- Destination:** 48.72°F Clouds, Feels Like: 43.97°F

The map includes standard navigation controls like zoom in (+) and zoom out (-) buttons, and a location pin icon. The Google logo is visible in the bottom left corner of the map area.



What's left to do?

- Stretch Goals
 - Alert notifications with descriptions minimized in the info menu pop-up
 - Interactions with user-reported hazards
- Other Tasks
 - Make incremental improvements in ML models
 - Update cloud infrastructure with newest code
 - Refactor and comment codebase and add documentation



Questions?

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