MICHIGAN STATE
U N I V E R S I T Y

Alpha Presentation
Small Object Detection Using CCTV Cameras

The Capstone Experience

Team Moii

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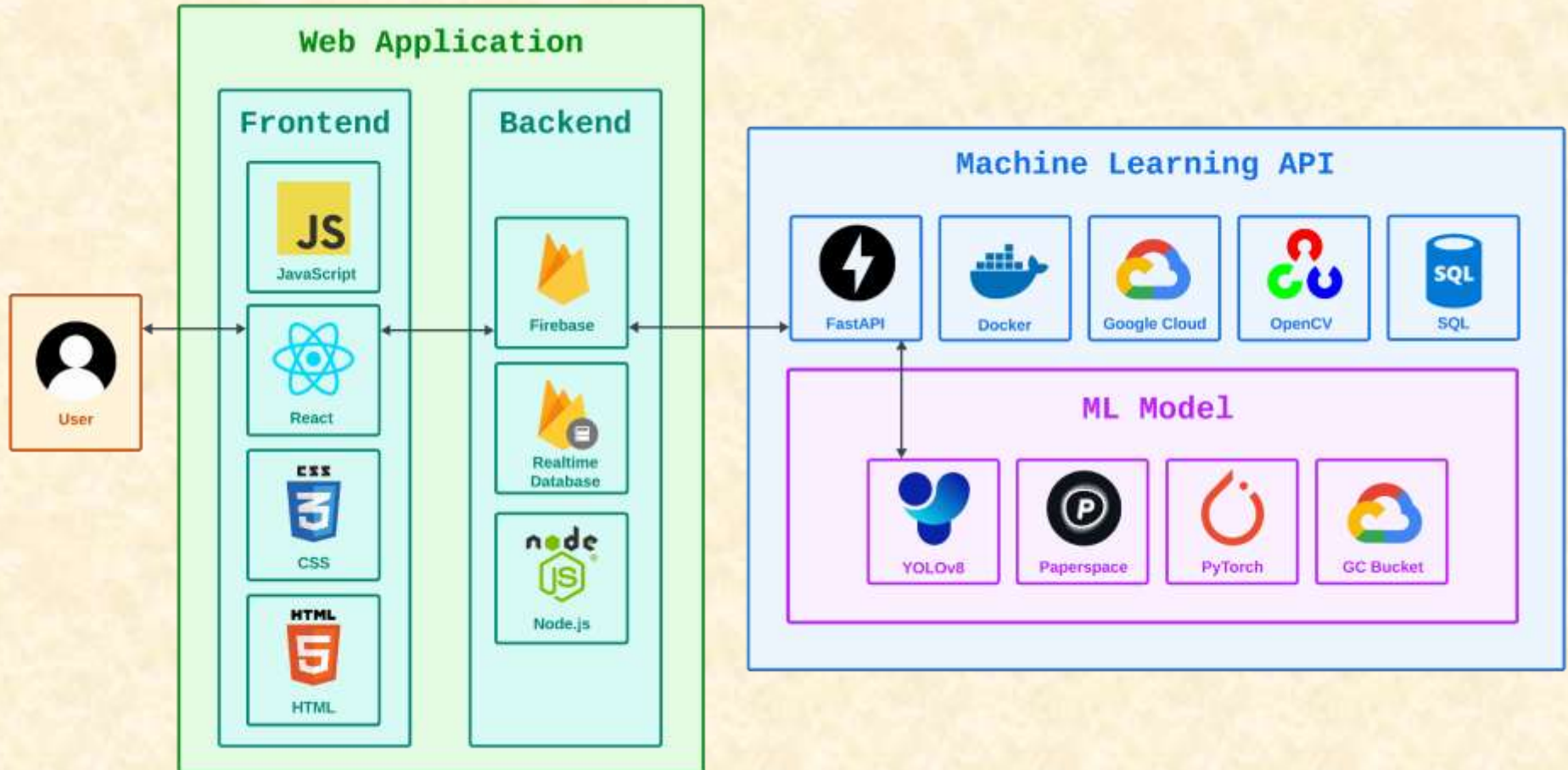Michigan State University

Fall 2023

From Students…
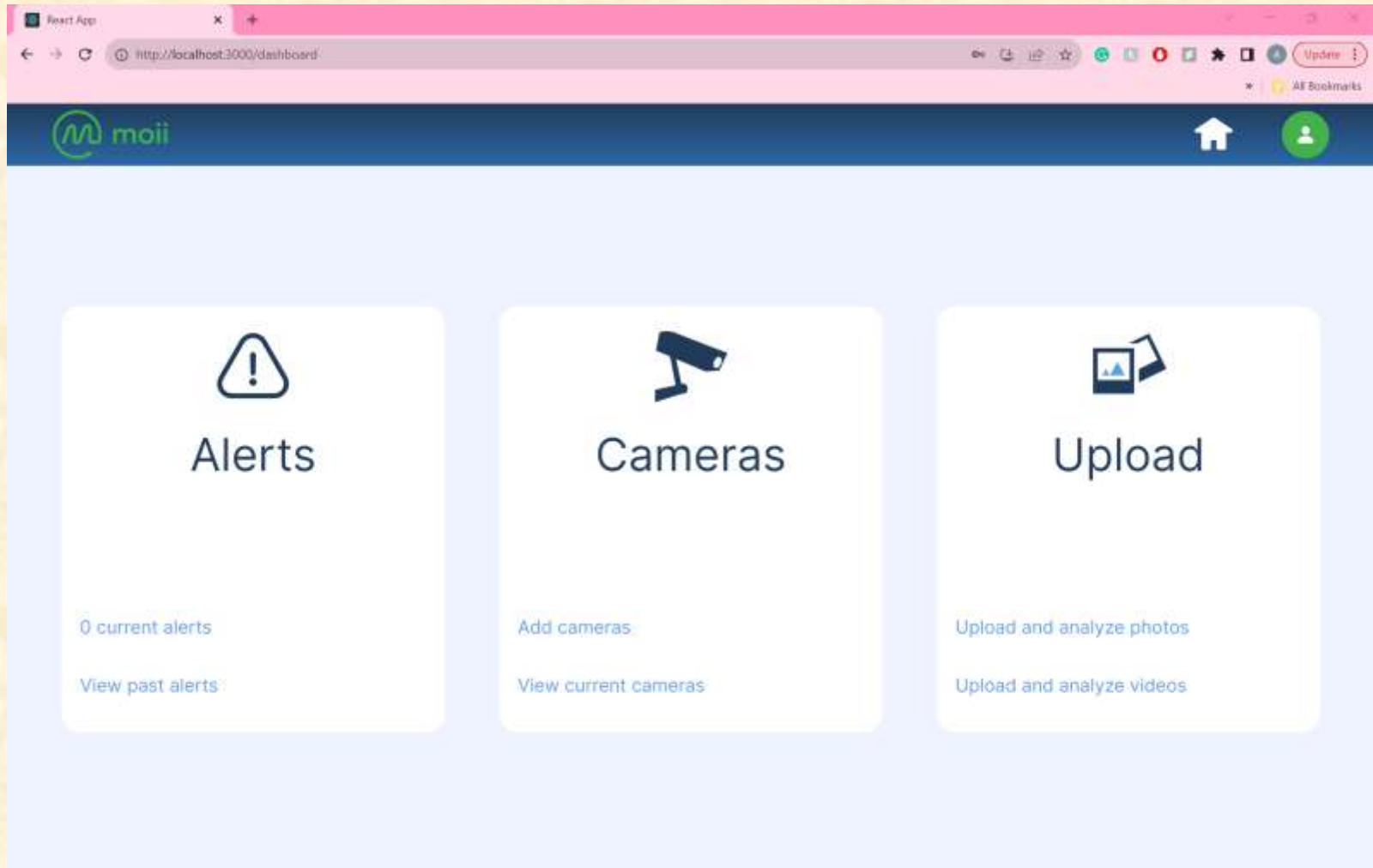*…to Professionals*

Project Overview

- Real-Time CCTV Firearm Detection

- Real-Time Alerts

- User Friendly Interface
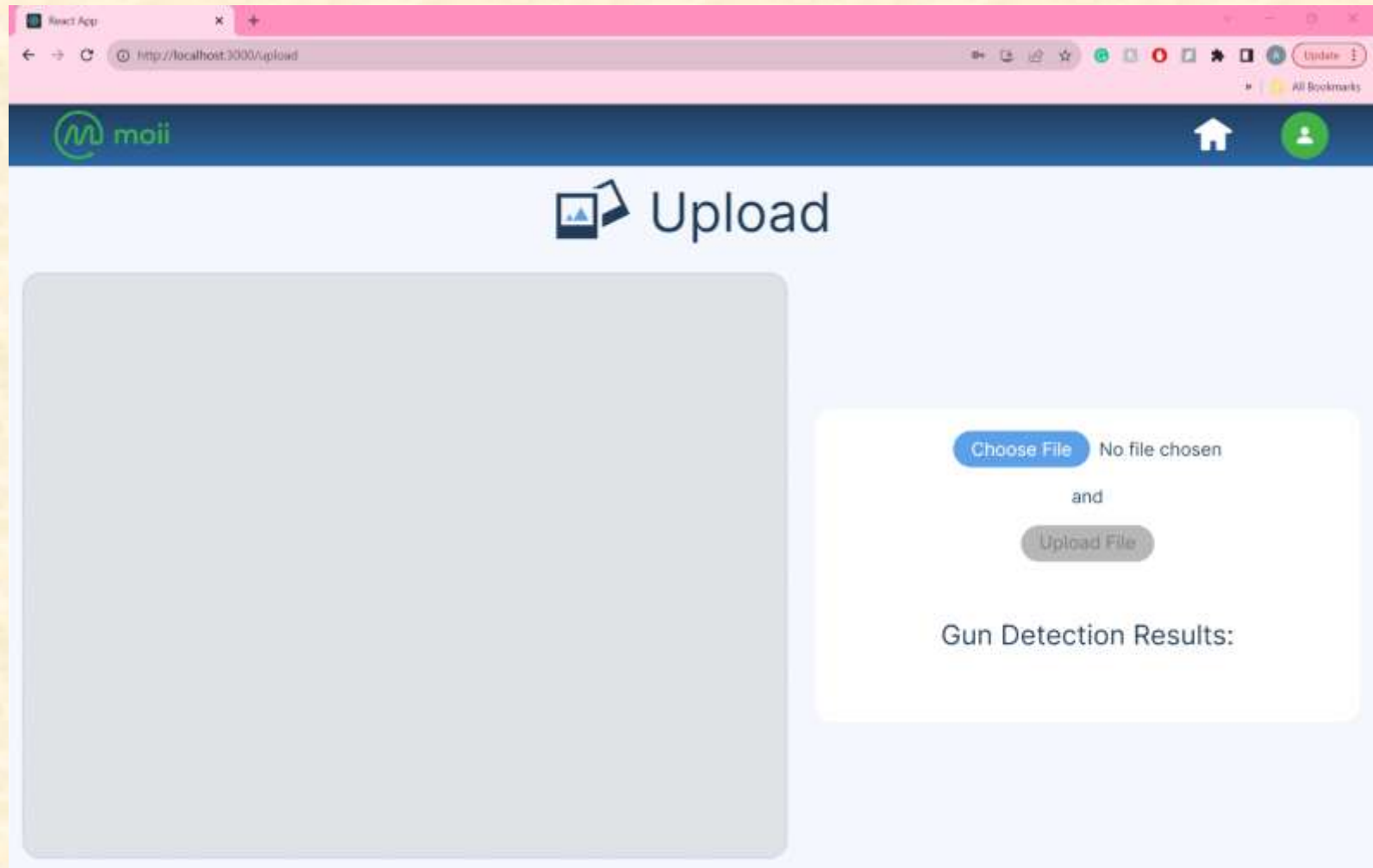
- Minimize Response Times and Save Lives
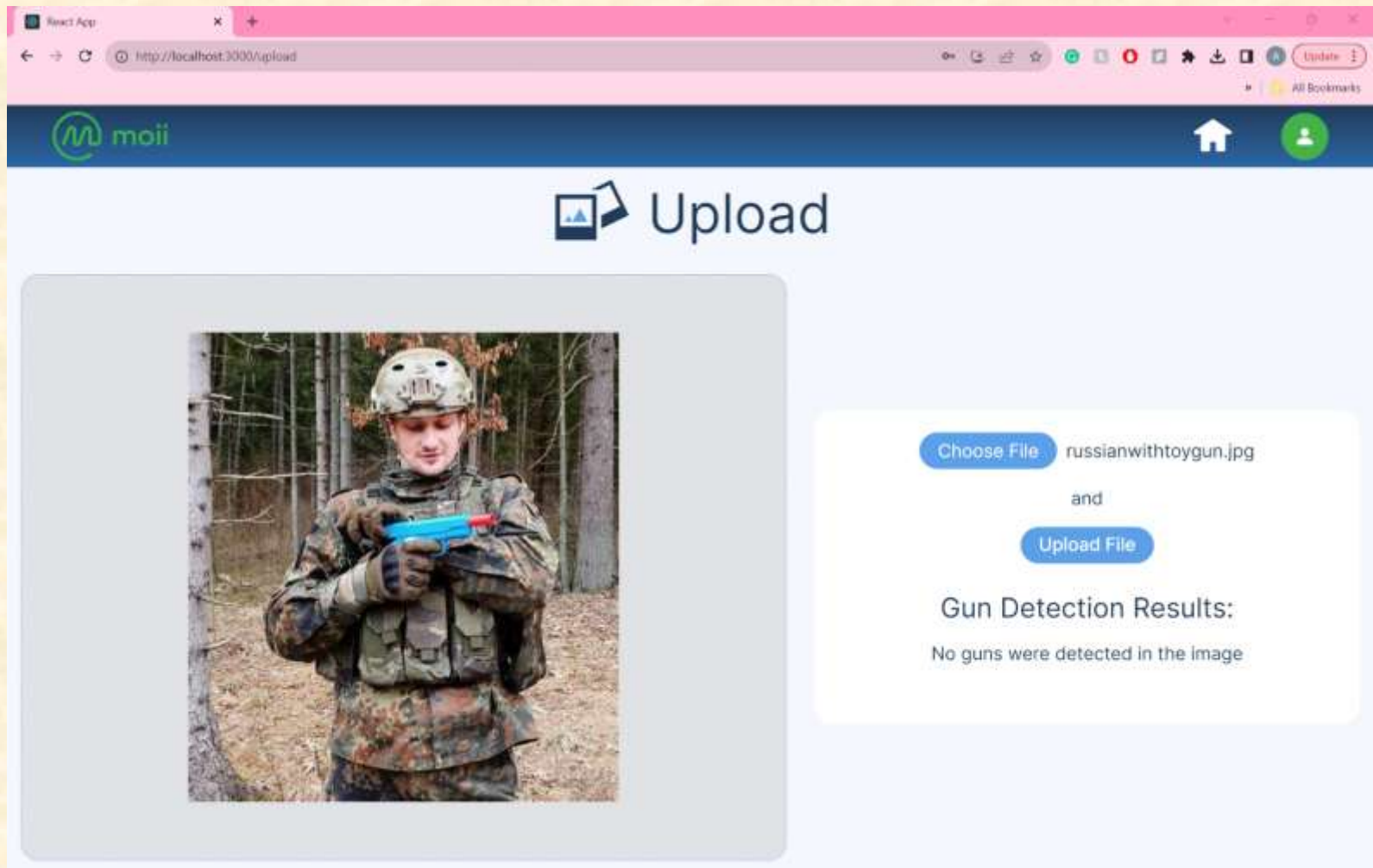
System Architecture

Dashboard Page

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Upload Dashboard w/o Detection

Upload Dashboard with Detection

Upload Dashboard with Detection

What's left to do?

- Trigger Real-Time Alerts

- Camera Dashboard

- Display Real-Time CCTV Footage on Web-App

- Support Simultaneous Detection

- Decrease CCTV Footage Streaming Latency

- Improve Model Accuracy and Speed

Questions?

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