

MICHIGAN STATE

UNIVERSITY

Beta Presentation

Small Object Detection Using CCTV Cameras

The Capstone Experience

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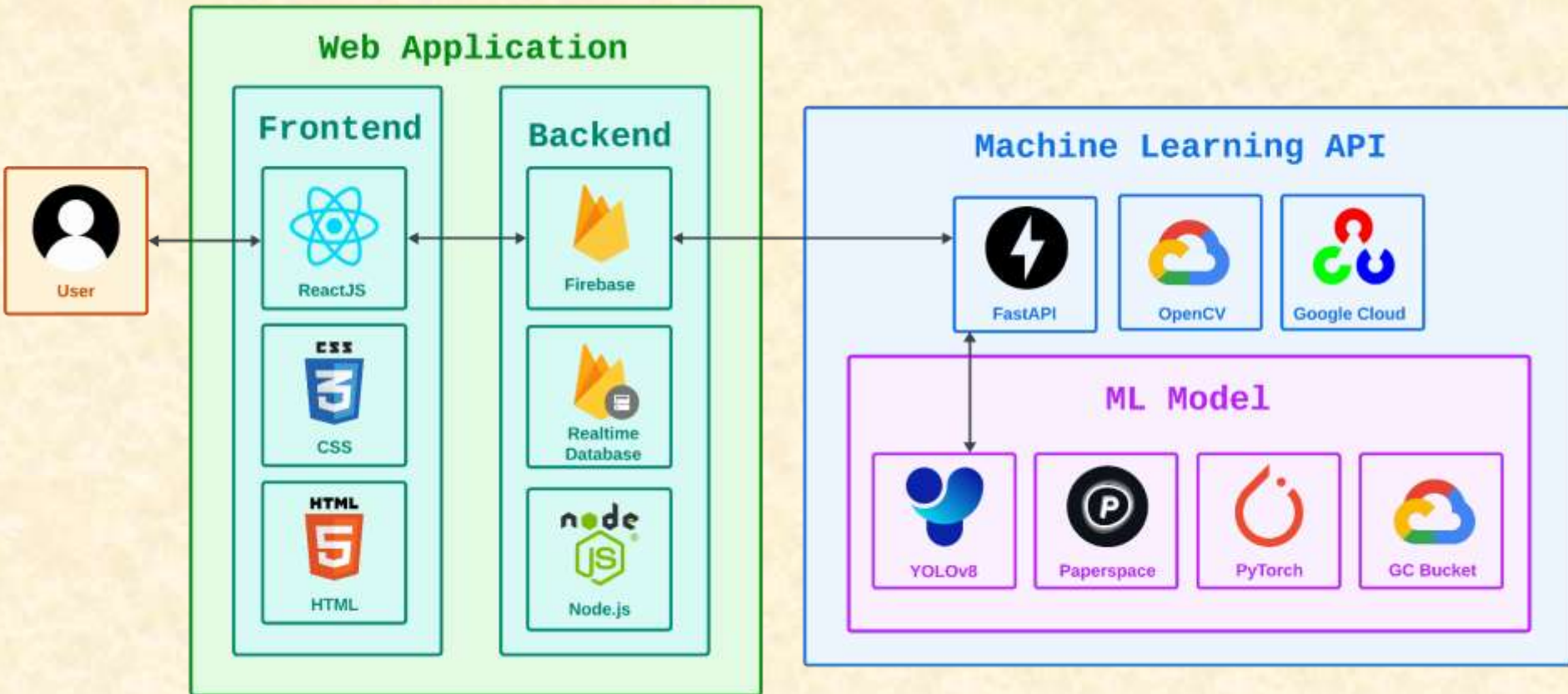
*From Students...
...to Professionals*

Project Overview

- Real-Time CCTV Firearm Detection
- Real-Time Alerts
- User Friendly Interface
- Minimize Response Times and Save Lives



System Architecture



What's left to do?

- Features
- Stretch Goals
 - 3 Images for each alert
- Other Tasks
 - Clean up code
 - About Page
 - Expand Documentation
 - Enhance UI



Questions?

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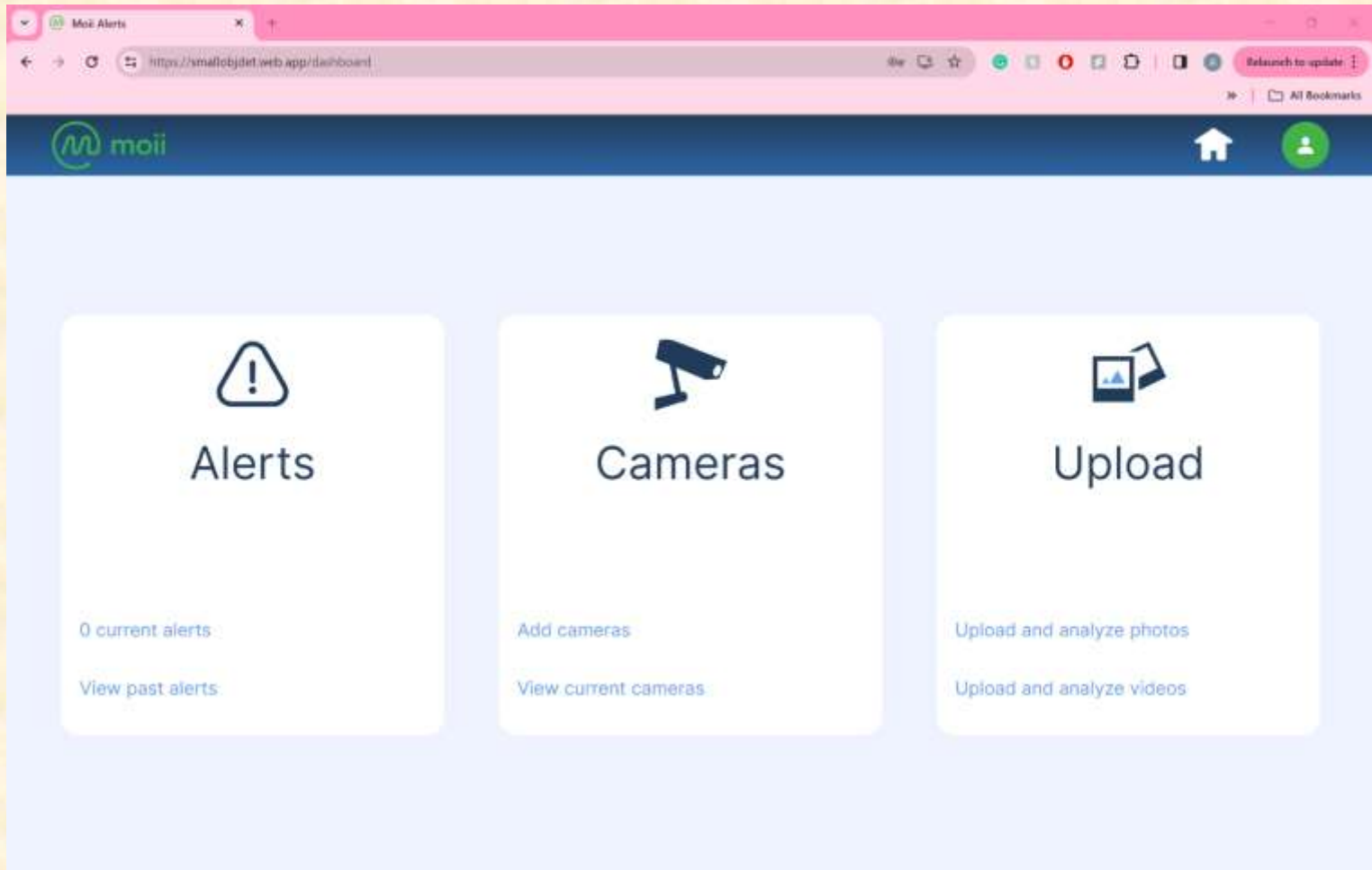
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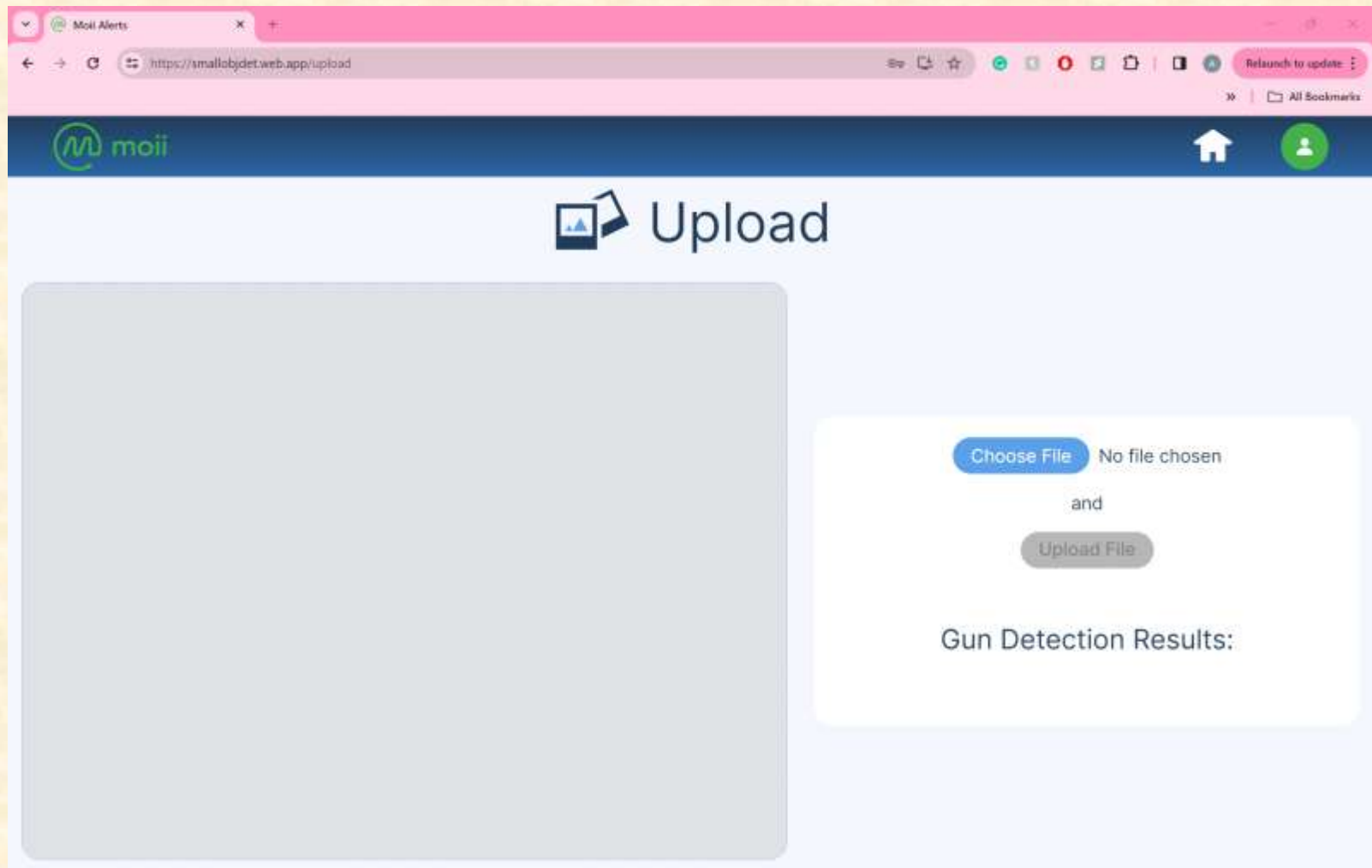
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Dashboard Page



Upload Dashboard w/o Picture



Upload Dashboard w/Detection

Moi Alerts

https://smallobjdet.web.app/upload

moii

Upload

gun 0.89

gun 0.85

Choose File guywithagun.jpg

and

Upload File

Gun Detection Results:

GUN DETECTED



Camera Dashboard

The screenshot shows a web browser window with the URL `https://smallobjectdet.web.app/cameras`. The page features a dark blue header with the Moii logo, a home icon, and a user profile icon. The main content area is light blue and titled "Cameras" with a camera icon. It contains four white cards: "Back Lot 1", "Back Lot 2", "FOH 1", and "Add Camera". Each card displays a streaming link and a description, with "View", "Edit", and "Delete" buttons. The "Add Camera" card includes input fields for "Location", "Streaming Link", and "Description", along with an "Add Camera" button.

Back Lot 1
Streaming Link: `https://smallobjectdetection/stream`
Description: West side of the parking lot
View Edit Delete

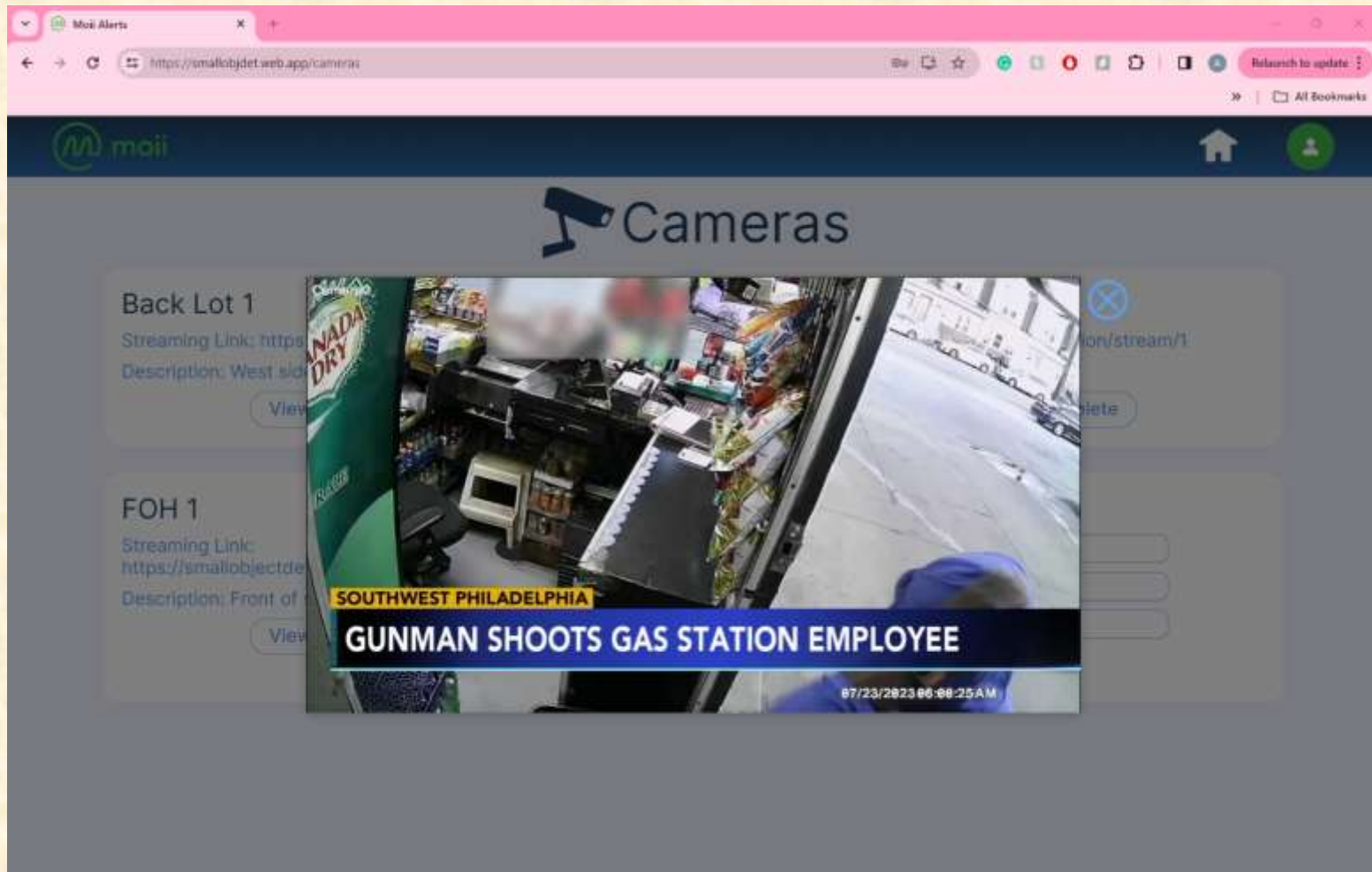
Back Lot 2
Streaming Link: `https://smallobjectdetection/stream/1`
Description: East side of the parking lot
View Edit Delete

FOH 1
Streaming Link: `https://smallobjectdetection.bigdaddys.cyou:8556/stream`
Description: Front of store facing door
View Edit Delete

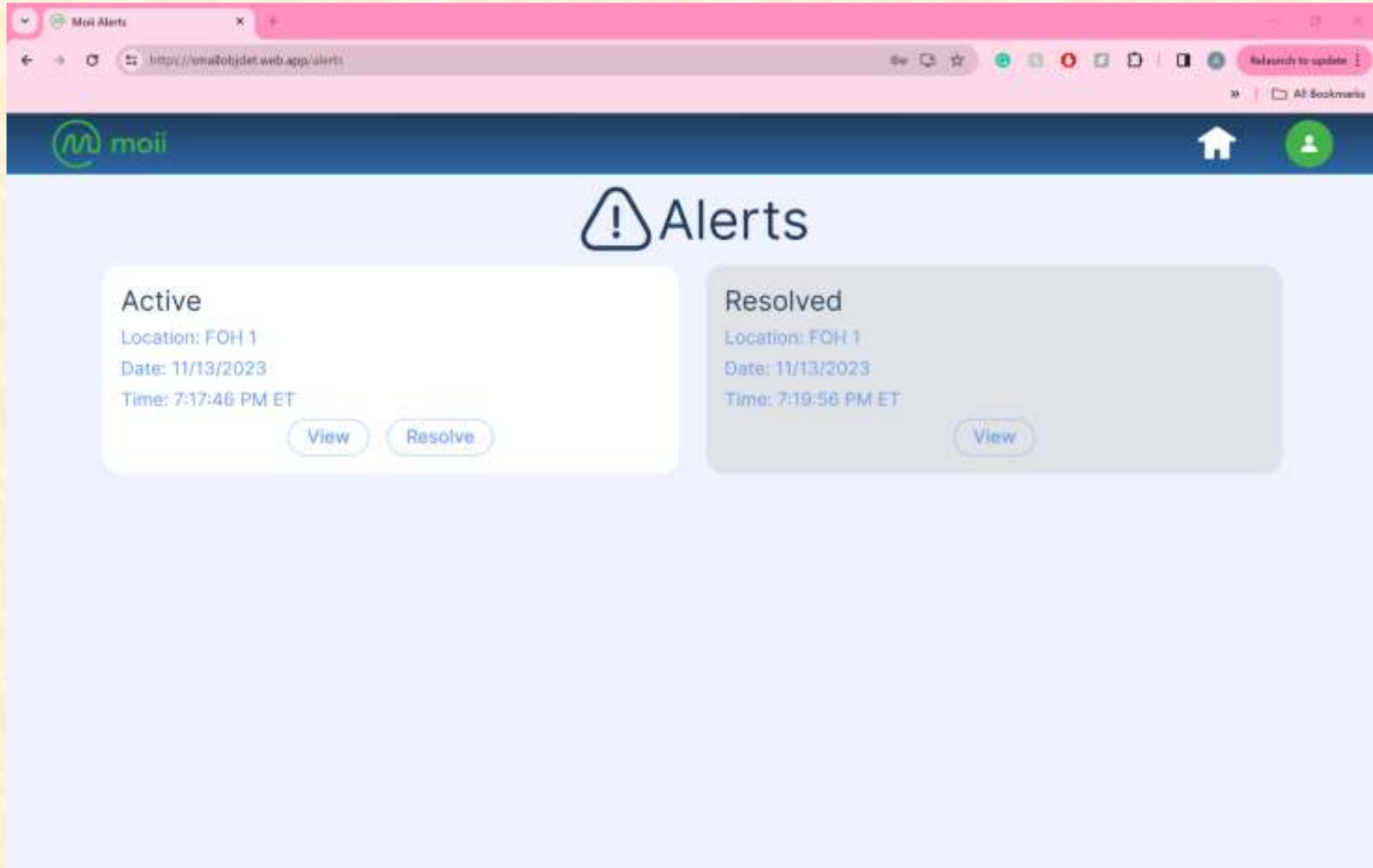
Add Camera
Location
Streaming Link
Description
Add Camera



Real Time Footage Shown



Alerts Dashboard



Alerts w/Detection

