SurveilMap

Seamless Camera Discovery for Smarter Patrols

Overview:

The CCTV Detection Application is a comprehensive solution designed to help law enforcement officers locate and manage CCTV cameras in their jurisdiction. The system consists of two main components: a mobile application for officers in the field and a web-based admin dashboard for central management.

Problem Statement:

Investigating officers often struggle to quickly locate nearby CCTV cameras, delaying critical investigations. An efficient solution is needed to provide real-time access to geo-tagged CCTV data, including owner information and backup duration, based on the officer's current or specified location.

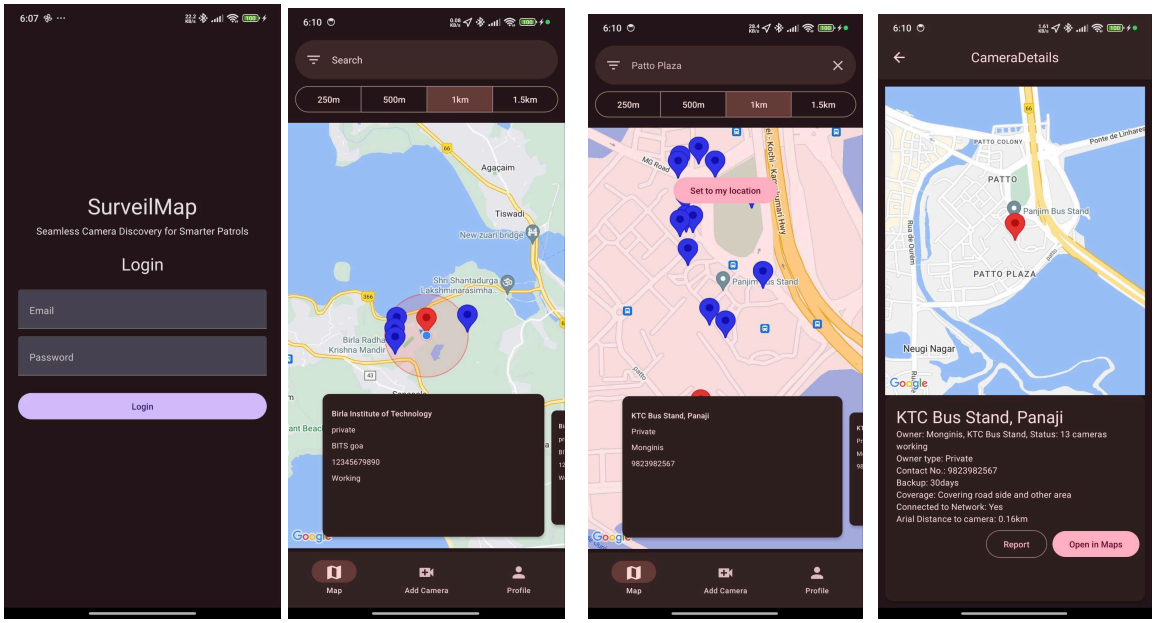
Proposed Solution:

We propose a two-part solution comprising a mobile application for field officers and a web-based admin dashboard. The mobile app will help on-ground personnel locate nearby CCTV cameras using GPS and provide details such as owner information, backup duration, and camera specifications. Officers can view CCTV locations on an interactive map and use navigation features to reach the selected camera location. The web application will serve as an admin dashboard for managing the CCTV database, allowing authorised personnel to add or update CCTV details directly or via an Excel file.

Features:

1. Mobile Application:
    a. Camera Locator: Find nearby CCTV cameras using GPS or a specific address with dynamic radius settings.
    b. Interactive Map: View and select cameras on an easy-to-use map interface.
    c. Navigation Assistance: Get directions to the selected camera location.
    d. Detailed Information: Access comprehensive camera details, including owner contact, backup duration, and specifications.
    e. Reporting System: Report discrepancies or suggest updates using an integrated ticketing system.
    f. Search Capabilities: Can check targeted locations for the cctv cameras

Mobile Application Images:

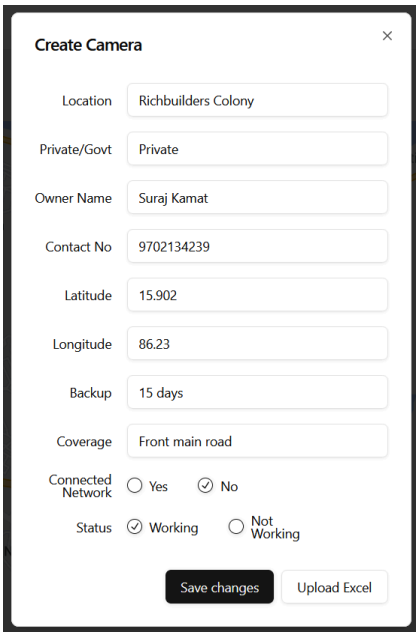


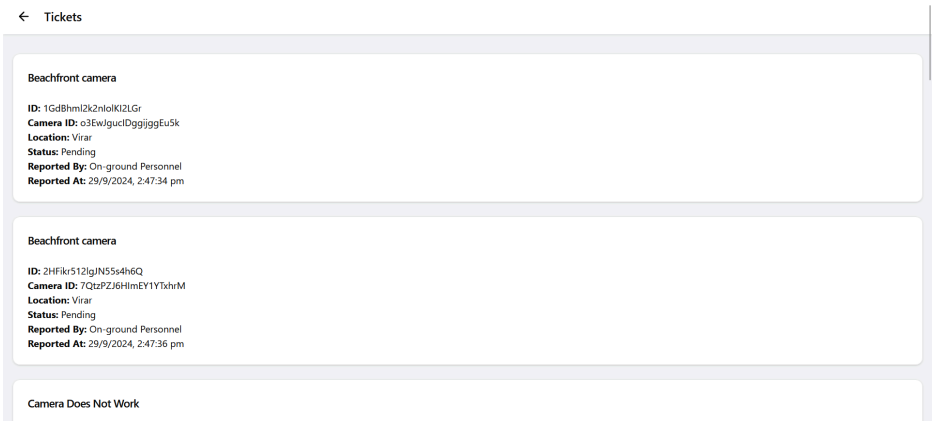
2. Web Application

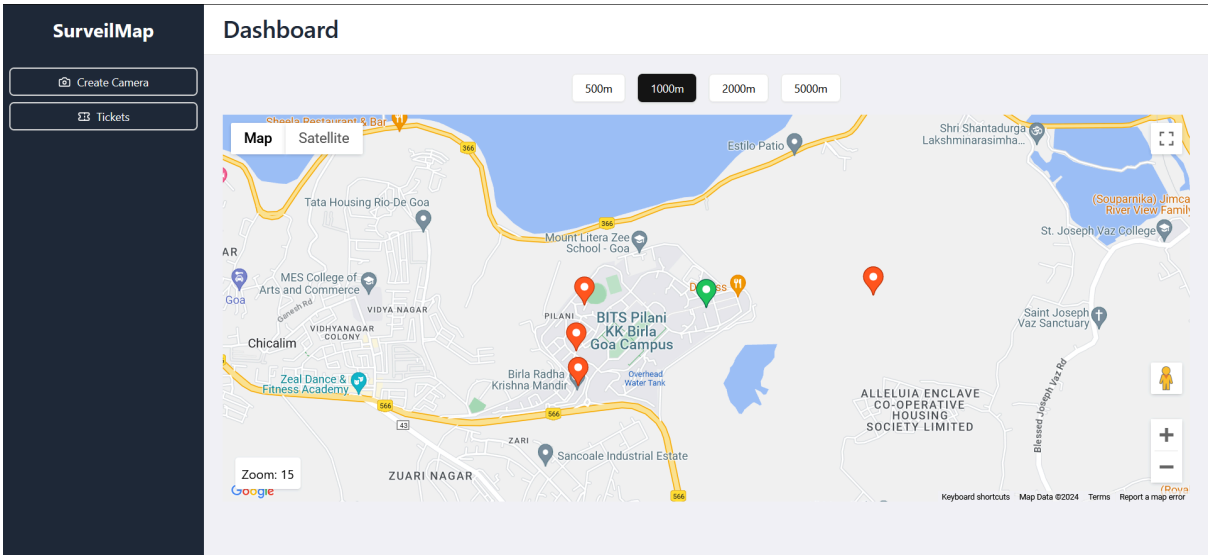
The web-based admin dashboard provides a centralized platform for managing the CCTV database and handling field reports.

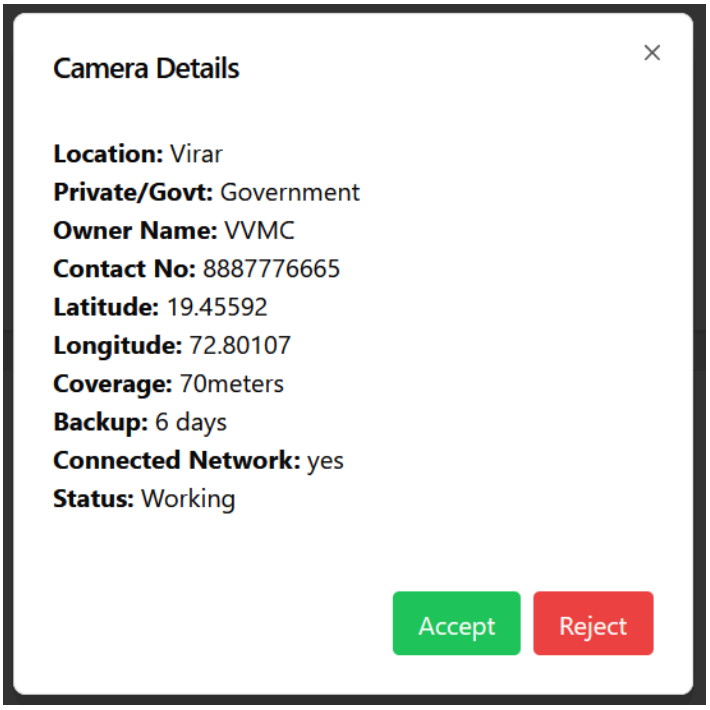
a. Secure Access: Authorized personnel can safely access and manage the CCTV database.
b. Data Management: Add or update CCTV data through direct input or Excel file uploads.
c. Real-time Updates: Instantly update database with corrections based on field reports.
d. Monitoring: Keep track of camera locations, operational status, and ownership details.
e. Ticketing System: Efficiently handle discrepancies reported from the field.

Web Application Screenshots:









Installation:

Individual readme files are placed in the folders of the backend server, the web application and the mobile application.

API Keys have been removed from all our codes as some of it is paid like the Google Maps API and we will be liable to charges if it gets leaked or overused

Citations:

- StackOverflow
- Google Maps Api Documentation
- React Native Documentation
- Github
- React Native Paper
- NPM
- ReactRouter Documentation
- React Documentation
- Tailwind CSS
- FastAPI documentation
- Uvicorn Server documentation
- Google Maps Platform
- Vite
- Ai tools: Gemini, ChatGPT, Claude.ai, V0.dev