Project name: CrimeScout

Project overview: A mobile application that maps real-time crime reports onto a dynamic map interface. Users can seamlessly submit detailed crime reports and view others' submissions, fostering a safer community through transparent information sharing.

Technologies requirements: Android Studio, Flutter, Python 3, Fritzing, Esp32 Cam Module, Sound sensor, AWS, Firebase, Deep Learning

Architecture:

Features: The app has three types of users: citizens, police and admin. The users can submit reports of crime with details such as date, time, place and some media like photos and videos. To protect their identities, they may choose do so anonymously. Users can also view what crimes have been committed in an embedded map inside the app which can also display a heat map based on the number of crimes committed in that area. Users can also be notified about crimes from inside the app.

The police view the reports and change their status after verifying the crime. They also have access to camera feeds around the city inside the app. The police also have access to the same map the citizens do. To make announcements about any kind of criminal activity, the police can also send notifications to citizens and fellow police officers from inside the app.

The admin can view all that the police and citizens can. They can also delete reports or notifications which they deem to fake or unconfirmed.

Technical details:

Database schema:

APIs and integration:

Security and privacy:

Testing and quality assurance:

Deployment and maintenance: