IOT Project Evaluation

Public space surveillance system

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Introduction

Surveillance in public spaces has become mandatory because of the threat of terrorist attacks.

- The effect of surveillance systems does not seem to reduce crime.
- Watching and evaluating monitor screens by individuals is mostly below acceptable levels.
- People with previous criminal records are not easily identified.

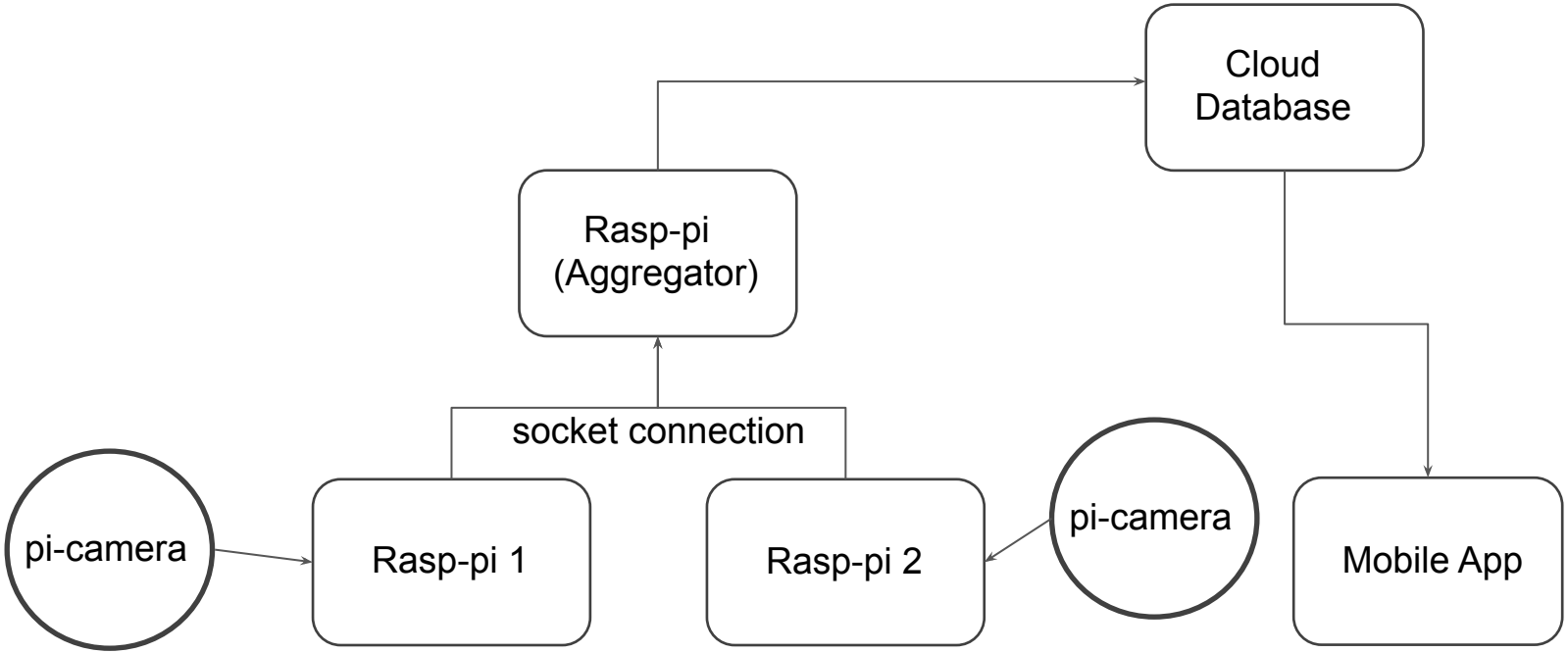
Project idea

- To monitor public spaces and equip the surveillance system with facial recognition.
- To match faces of the people with that in the criminal records and record their timings.
- To make an application to remotely monitor the activities in the public space.

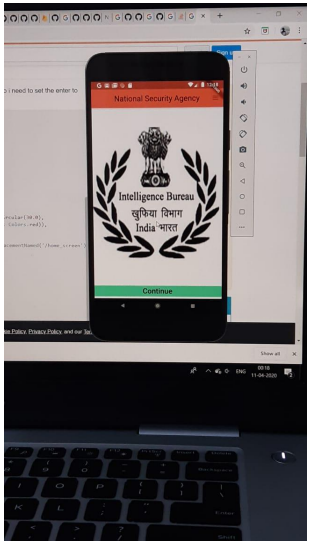
Architecture

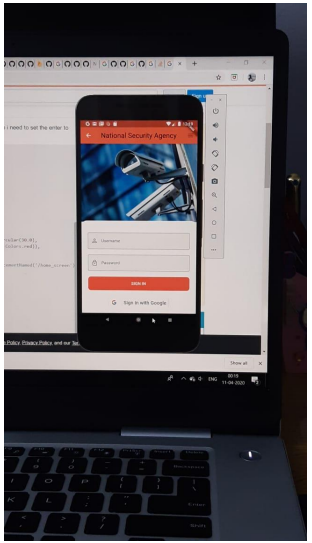
- To set up 2 Raspberry pi with Camera and capable of transfering images over wi-fi using sockets.
- facial recognition on the output from cameras.
- To set up another Raspberry pi to aggregate all the data of images etc. and send it to cloud.
- To build a mobile application that retrieves data from the cloud and display the record of people recognized by the surveillance system.

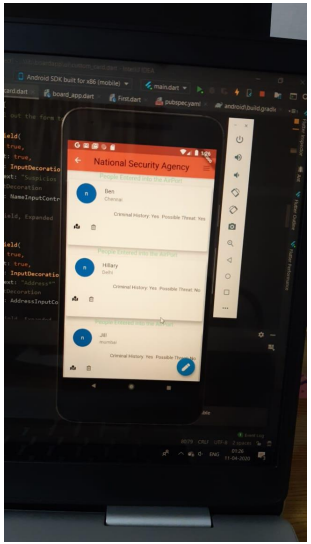
Architectural Block Diagram



Images of the app







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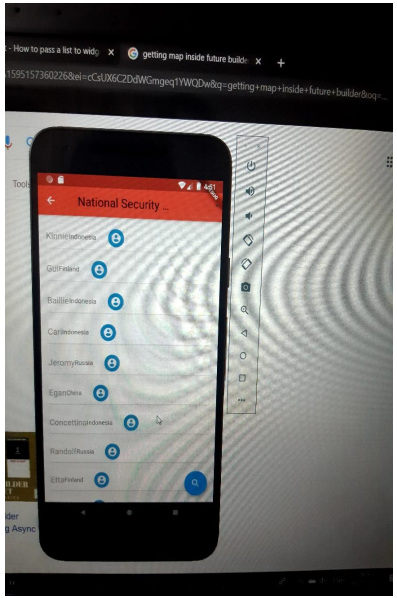

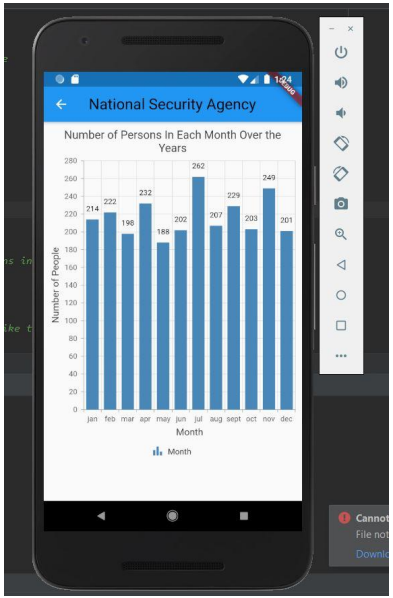

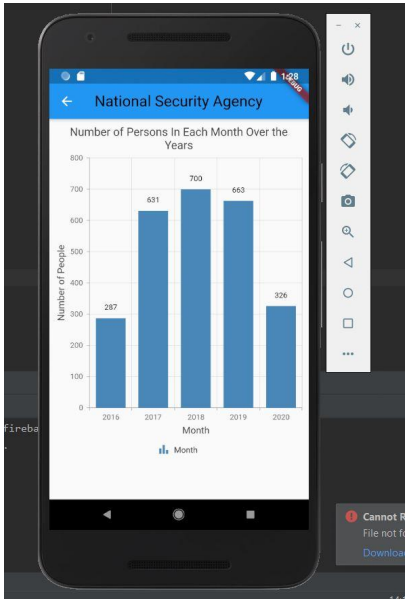

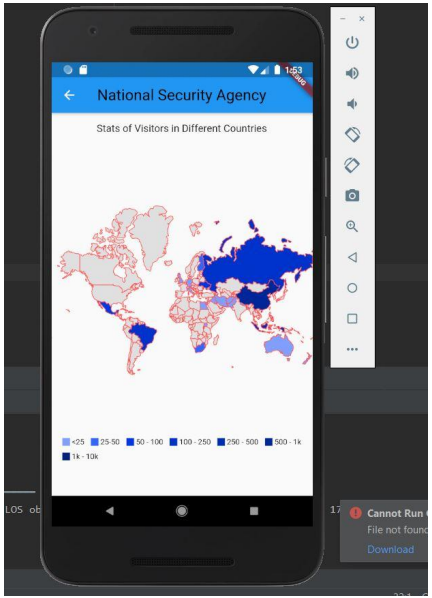

Work Done so far

- ✔ Establishing socket connection between the Raspberry-pis for the transfer of Images.
- ✔ Facial recognition in python.
- ✔ Mobile app to display the record of people in the public space.
- ✔ To show the graph of number of visitors in the public space.
- ✔ To show the number of visitors from every country.