Problem ID:		PID084
Challenge Title	:	QR Code-based citizen feedback system for Gujarat Police
Name of the Department	:	Home Department
Challenge Description with context	:	QR (Quick Response) Code-based citizen feedback system.

This project will give solutions to citizens to provide feedback by just scanning a QR code pasted in the Police Station for feedback. Citizens will be required to fill out a feedback form online. Any officer with login rights can directly monitor the public's perception regarding policing in Police Station/Sub Division/District/City.

The application calculates the perception of the public about the Police.

Flow Example: Respondent Scans the QR Code -> Login screen opens on Respondent mobile -> OTP is sent on respondent mobile -> Respondent fills the Feedback form -> Respondent submits feedback.

The QR code pasted will also have instructions/guides regarding the steps. Viz. open the camera, select the type of phone (iPhone/Android) user, and Tap the notification for further action on the Web-based feedback form.

There will be no installation of any App on citizens' mobile phones. Feedback will be taken on the following questions:

1. How did you come to the police station?
   a. Through a person known to a police officer
   b. With a neighbor/ local leader
   c. On your own

2. After how much time you were heard in PS
   a. More than 15 minutes
   b. 15 minutes
   c. 10 minutes
   d. 5 minutes
   e. Immediately

3. How would you describe your experience with police officers in the police station?
   (_____) Maximum 300 characters allowed.

4. Submit

After the submission, there is information about the citizen service app and the contact number of the police control room.

Admin Login

1. Admin Login Screen

2. Admin Overview

3. Admin Detailed

4. Generate QR code

There shall be a website for accessing the feedback management system. Login will be via email id and password. Captcha will be included.

The reports will be

1. The number of feedbacks

2. Total Feedback

3. Police station wise

4. Sub division-wise

5. District wise

6. Responses

This will be shown in a bar/pie/histogram color chart format. The data should be able to be viewed in tabular format and downloaded in excel format.

Users	:	Citizens, Officers, and Personnel of Gujarat Police
Expected Outcomes	:	Citizens can easily give feedback. Mobile web browser-based interface. Officers can get details of the quality of service of any police station by analysis of related data. Web/App based interface for Police Officers.
Impact	:	Citizens will get better behavior from police and faster response from police in due course of time.

Abstract

Service satisfaction surveys have become an important tool for Government to measure their service effectiveness,i.e the feedback system. When a citizen gives feedback at a bottom level using a conventional paper-based system, it is so difficult to reach a higher official in time. Quick Response (QR) code based feedback system has been introduced that opens up the possibility of conducting public service satisfaction at a lower cost and the way feedback is directly routed to the police department according to their hierarchical level and get real-time feedback using a specific smartphone application. It is an android application that provides the facility to scan a QR code that has been put for a particular police station, through the phone's camera. Then it displays a feedback form and citizens can fill it up and submit it using OTP received on phone number. After the submission, there is information about the citizen service app and the contact number of the police control room.

Literature Review/Existing Innovation-technology to address related to your problem

->The paper base feedback system are takes more time to reaching the head department

-> It is waste of papers and it is not eco-friendly.

-> It takes more time to reaching it place so the problems are not solved at their time.

-> Delhi police has already developed a system to take feedback using QR code.We are trying to make such system for our state also.

-> Android based feedback system provides low cost and effective feedback system that can reach to the higher authorities at correct time which is not possible in existing paper-based feedback system.

What would be your approach to solve the problem

->We are making a system in which Qr code is provided to each police station

-> Citizen who have been served can provide feedback by Scanning the QR code available at that station. First the feedback form is displayed. Citizen fill that feedback form and then while submitting OTP is sent to his/her phone number. After entering the OTP , citizen is allowed to submit the form.

-> The final data is derived such as total number of feedbacks and police-station , district wise feedback.

-> All the responces are summerized and will be sent to the higher authority.

ER Diagram
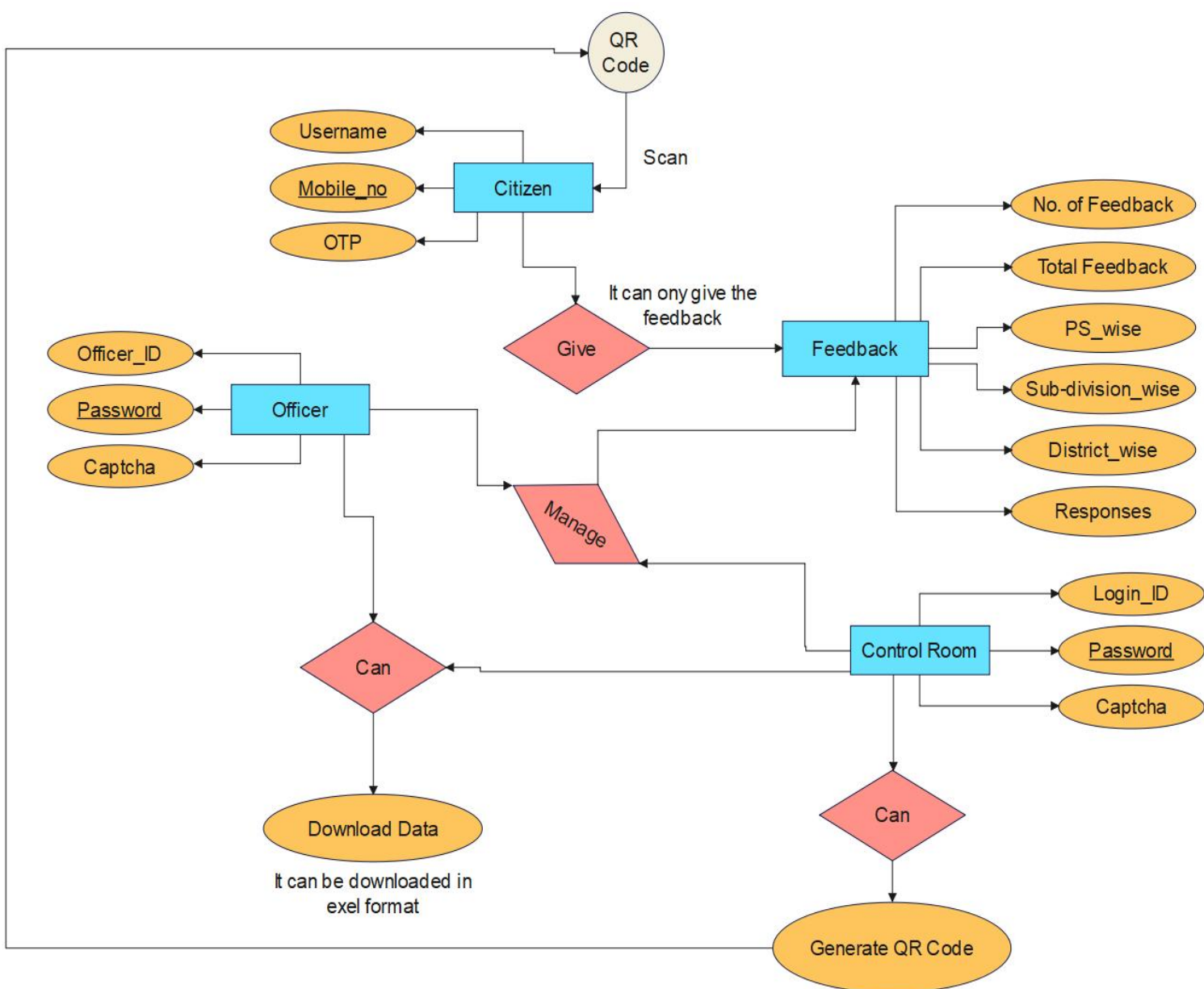
Activity Diagram
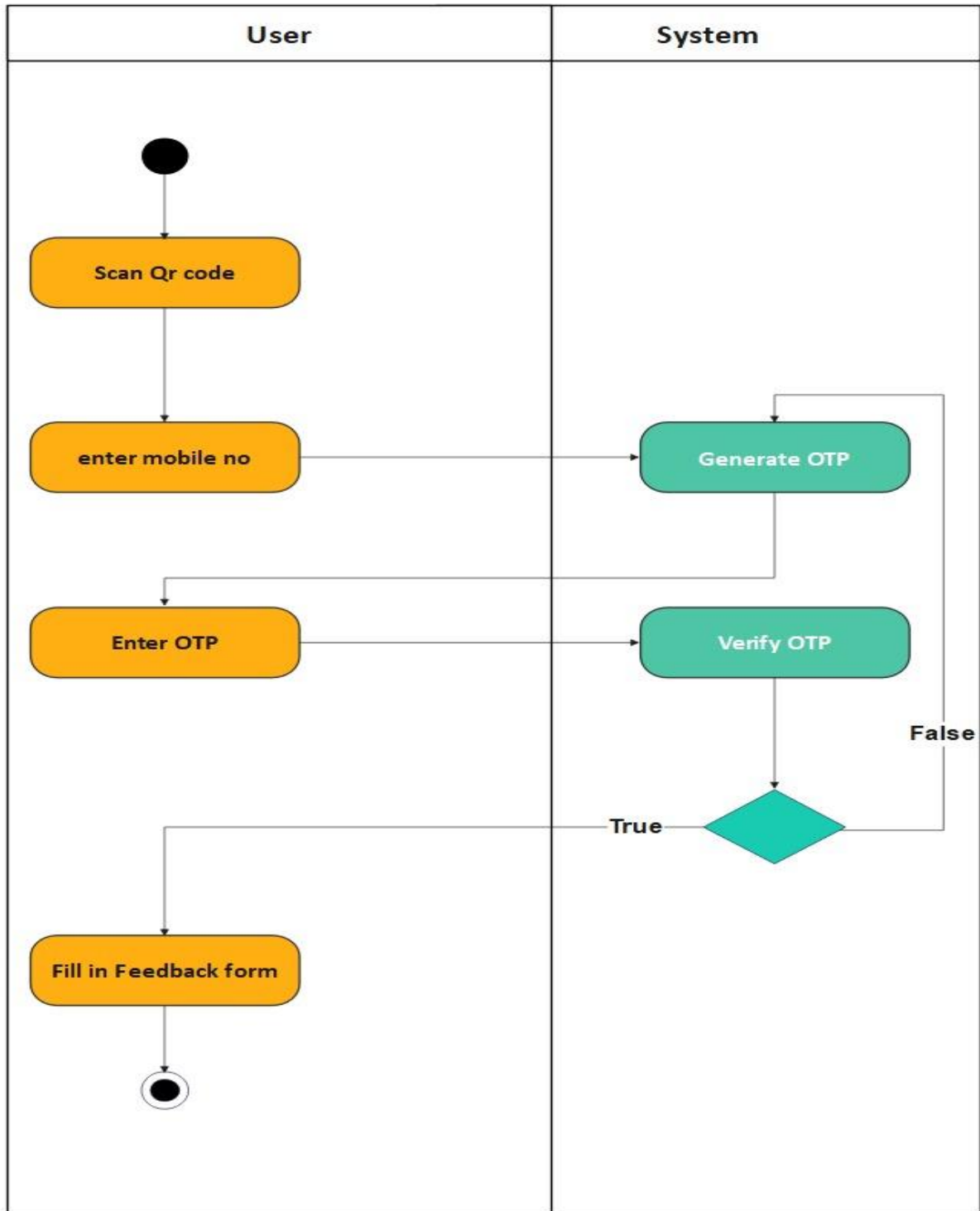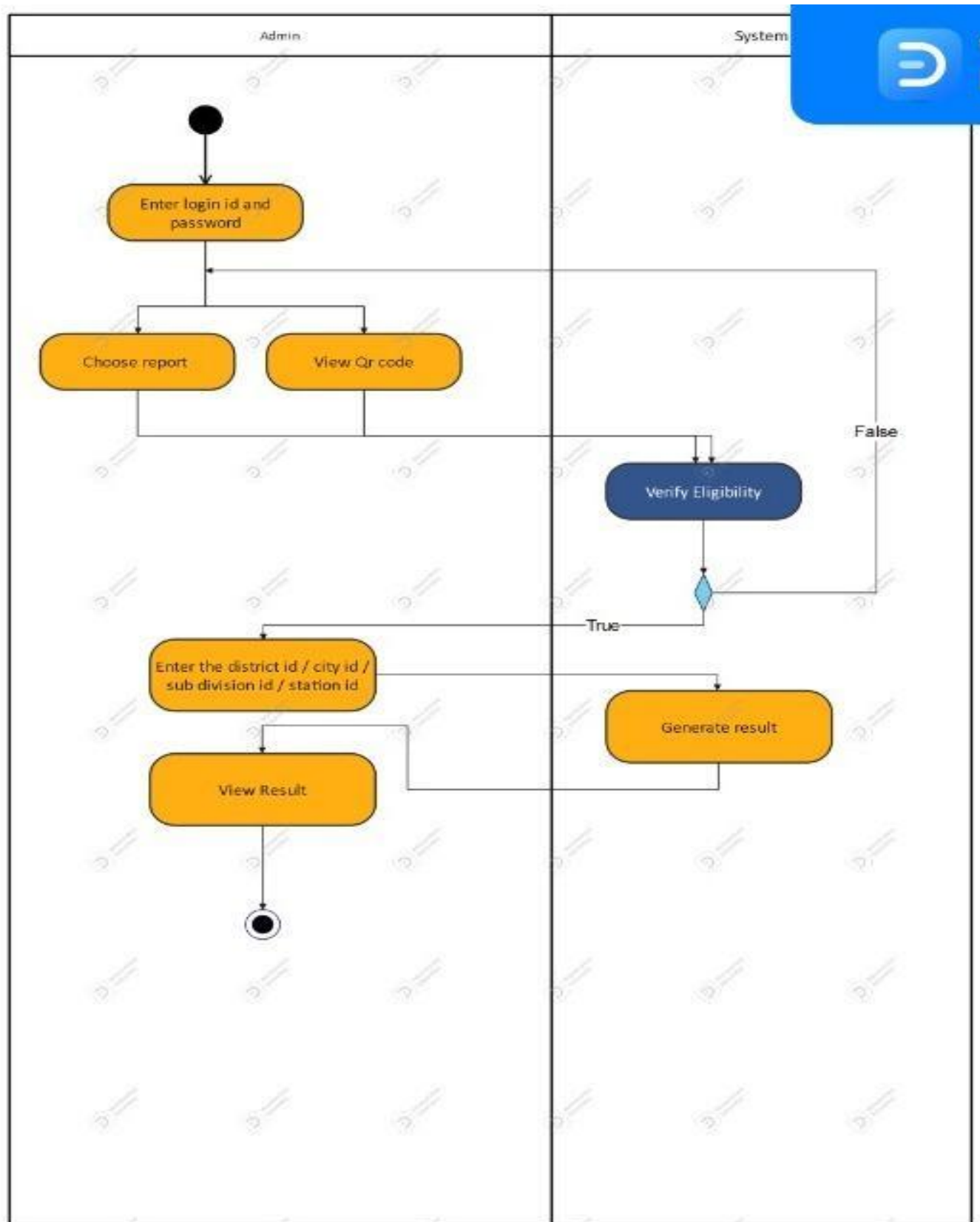
Tools and technologies to be used to solve the problem

- Android Studio
- QR code Generator
- MySQL Database
- Mobile phone, Tablets: Devices used to scan the QR code to give Feedback.

Challenges/Risk in implementing your Final prototype

- First, we had to learn Android in order to develop our solution
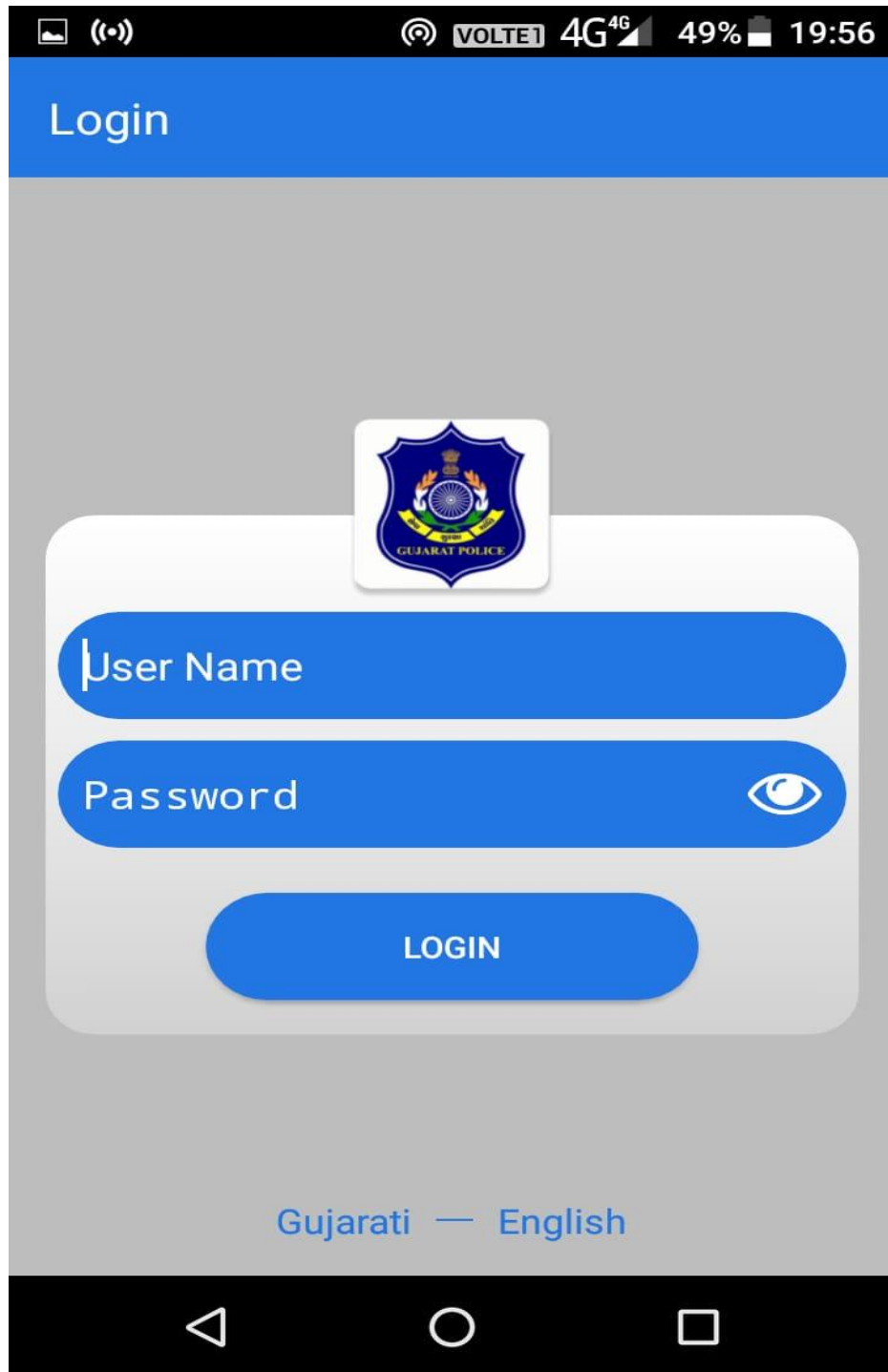- We had limited time period to learn & develop our solution using new technology.

Possible outcome of your work

- Our final product will be a system through which citizens can scan QR code and relevant feedback form will open. Citizens can then provide their feedback which will be sent to the higher authorities directly through email. A final report of total number of feedbacks and analysis of overall feedbacks will be prepared.

Work done till date

- We have made Login page for admin and citizen .
- A page on which citizen can select their city.

Image/Screenshot of Solution (1)

Image/Screenshot of Solution (2)