

# Online Police Portal with Face Detection and Recognition

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**Abstract** - A very small number of people in society are alert to criminal activities happening in their neighbourhood and even lesser people have attention to those activities due to not having easy accessibility to information of such kind and folk often hesitate to enquire such type of information from the officials. Online Police Portal will automate this manual system by the help of computerized equipment's and full-fledged computer software, fulfilling the requirements of all cops, so as that their valuable data/information is also stored for an extended period with easy accessing of the identical. the foremost aim of this project is to notify each and every policeman and citizen about the discharge of any criminal, including his/her details, such as, criminal's id, name, form of release so on. Additionally, it also provides the most points of any new rule that has been introduced or any event that's visiting occur. It is often used as an application by the department of authorities to manage the records of varied activities related to First Information Report. during this technique of those activities (like registration of the complaint, appointments, NOC filings, passport verifications, updating information) are managed that saves time. This application is provided for the police stations which provides facilities for reporting crimes, filing FIR and many other things online. It provides better prospective for the Police Officers of organization regarding quality and transparency.

**Key Words:** Portal, Face recognition, Complaints, NOC filing, Mobile Application.

## 1. INTRODUCTION

The purpose of Online Police Portal and Traffic Violation Management is to automate the existing manual system by the help of computerized equipment's and full-fledged computer software, fulfilling the requirements of all police officers, so that their valuable data/information can be stored for a longer period with easy accessing of the same. The required software and hardware for the system is now nearly available with all the users and easy to work with. Our system also maintains online records of all the FIR filed against the crimes. The main aim of this project is to notify each and every policeman about the release of any criminal, including his/her details, such as, criminal's id with names, location of Police Stations and so on. It also provides the

details of any new rule which has been introduced or any event that is going to take place in the state. It can be used as a Website by the police department to manage the records of different activities related to Information Report. In this system all of the activities like registration of the complaint or updating information are managed which will save a lot of time for every user. This Portal is specially made for police stations that provide facilities for reporting crimes, filing FIR and maintaining prisoner records over internet. It provides better prospective for the betterment of organization regarding quality and transparency between the users and the Police Officials. This system will include a face recognition feature which will smartly detect the face of the suspects and comparatively display the results for it. The face recognition systems detect for 80% plus matching with the photos which are present in the database. All the reports will directly affect onto the Police Portal website. Our main priority is to make a time saving project for the public as the police complaint filing is a time engaging process the public can file complaint or request for verification of documents by sitting at home or from anywhere feasible. The people who are afraid or don't have enough time to go police station for complaint about their personal legal issues here they can give their complaint through online to register any type of complaint.

## 2. PROBLEM STATEMENT

Identifying Solution with respect to Inter State & Inter Country/Continent Criminals e.g. Using Identity Inputs such as name, email, Photo, address, present/permanent address, mobile number, ID cards etc. Also, to design tool to generate some alert in facilitating effective policing. Mobile App and Portal for Citizens and Police for management of crime records, beats, resource allocation, form filling, request for NOC, appointments, etc.

## 3. OBJECTIVE

The proposed system can be used in police stations over a city where notifications are sent to the police when the criminal is released from the jail. The main aim was to develop new technologies that include designing new techniques to fight crime and improve criminal justice and

which is very user friendly for any type of user. Plans are afoot to embed multi-purpose technologies such as traffic management, mobile data techniques, warrants, gang activity analysis, field reporting, etc. For the police, initiatives such as Online Police Portal and Traffic Violation Management are designed to improve their long-term relations with the citizens due to effective feedback and faster exchanging of sensitive information between various departments and police stations. Conventional Systems for online sales:

#### 4. PLANNING

The proposed system can be used in police stations over a city where notifications are sent to the police when the criminal is released from the jail. Our aim was to develop new technologies that include designing new techniques to fight crime and improve criminal justice to every citizen. Plans are afoot to embed multi-purpose technologies such as traffic management, mobile data techniques, warrants, gang activity analysis, field reporting, etc. For the police, initiatives such as Online Police Portal and Traffic Violation Management are designed to improve their long-term relations with the citizens due to effective feedback and faster interchange of critical information between various departments and police stations.

#### 5. METHODOLOGY

##### External User Interface –

Online Police Portal will contain a website and an application. The website will include a basic login where the user credentials will be taken for any complaint related verification or for any document verification. The GUI of website will include the FIR reporting NOC section as well Document verification Section like passport verification, etc.

The website will be linked to application provided to the traffic police officer the app will contain section for scanning the number plates of the vehicle the images will be processed and send to the website on which the complaint will be filed or the officer can track the criminal record.

The Website will have a special feature of Face recognition for the suspects which will verify the suspect by comparing from the present database of criminals.

##### Internal Software Interface –

The software interface will include a smartphone running application and a Website which can be operated from browser and the controls will be user specific according to the authority. The Basic Database is also shown here.

##### Communication Interface-

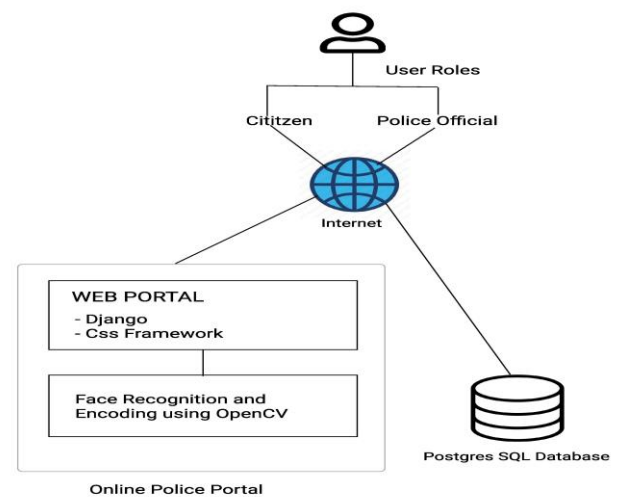
Communication interfaces will include- Smart Phone for running application. A web Browser for accessing the website.

#### 6. ARCHITECTURE

This is the overall system architecture of our project. We can use an Application or Website for accessing Online Police Portal and Traffic Violation Management system.

It also focuses on high-level structure in systems and system elements.

Postgres Database is connected via internet which has the data of the citizens and the police officials. Which is then transferred to the web portal where the specific user can have access to the services provided by the website.



Architecture Diagram:

#### 7. RESULTS

The proposed system can be used in police stations over a city where notifications are sent to the police when the criminal is released from the jail.

The aim was to develop new technologies that include designing new techniques to fight crime and improve criminal justice.

Plans are afoot to embed multi-purpose technologies such as traffic management, mobile data techniques, warrants, gang activity analysis, field reporting, etc.

For the police, initiatives such as Online police portal with face detection and recognition is designed to improve their long-term relations with the citizens due to effective feedback and faster exchange of sensitive information between various departments and police stations.

### 8. FUTURE SCOPE

In Future we can combine multiple states Portal together for keeping the criminal Track of several different states together. As an additional we can add Traffic Violation Management system, which can help Traffic Police for Reporting of the crimes made on roads, The Traffic police can also have access to view the previous records of the suspect which can help Traffic Police to an easier way stop fine the criminals.

### 9. CONCLUSIONS

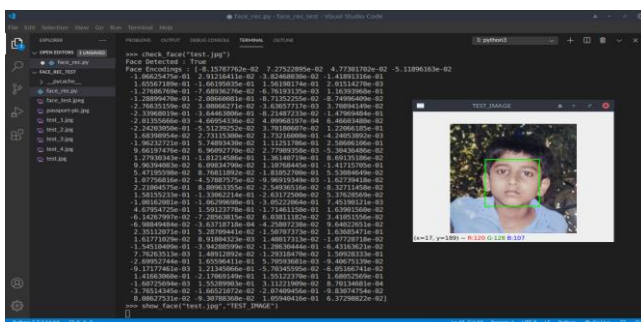
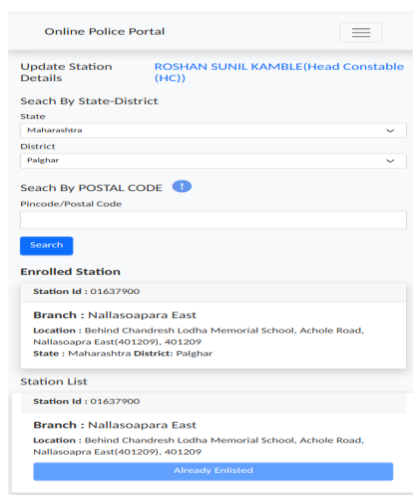
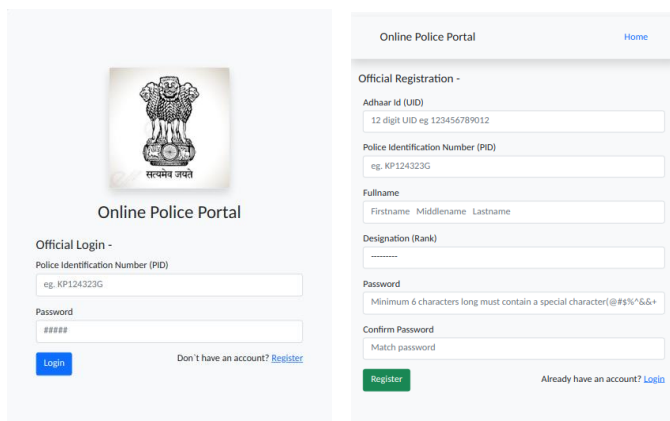
The paper speaks about the project in which we took the idea that the technological benefits of Online Police Portal and Traffic violation management are to maintain information, monitor and nourish the performance of the department, to take a serious look at the existing system, processes and procedures of the department so as to identify and remove the redundancy.

The case registered at one police station can be tracked from police station or anywhere the Police Official login is initiated. This reduces the discretionary dependence of police. Once the case is registered the investigation and follow up activities relating to the case is taken quickly as everything is online and the cases are directly visible to the Police Officials.

All these things have contributed to a higher standard of the police officials at all the levels in police department. This system results in a very great improvement in the organization's functioning by reducing the effort spent by the common man. This system has contributed to a higher moral of the police officials at all the levels in police department.

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