

# Online Police Complaint Register (PCR) System through Android Application

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**Abstract:-**This paper is on the project “Online PCR System through Android Application”. We can see that technology has touched many spheres of our lives in India. There is technology in business, in education, in socializing and maintaining human relations, in purchasing, in agriculture, in banking, communication, and almost every part of our lives. This intrusion of technology has aided the work in all these sections, and has proved beneficial, and time and effort saving. This system is designed to bridge the gap between the police constables and the common people. There are lot of applications for the shopping, booking tickets and many more. But there is no application for the purpose of registering the PCR through android application. We intend to create a system where the user could register a PCR under various sections and inform the police constables whenever in an emergency situation from their current location. This system will helps citizens as well as police constables to easily handle the emergency situations. It will also prevent the accidents. We believe that this system will be the widely used in the future and will also help to bridge the gap between the police department and the people and also highly reduces the scopes of false promises.

*Keywords:-*PCR Tracking, e-governance, android application, web application, database.

## I. INTRODUCTION

The purpose of developing Online PCR System is to computerized the traditional way of registering the complaints and helps the police constables in registering the PCR easily without any burden. It also helps to give the present status of the case to the complainants through the notifications. The Higher Authorities of the Police Department monitoring all the records of the police constables whether they doing their work properly or not. According to the work done by the police constables the gift cards will be given to them.

Another purpose of developing this application is to generate the reports in Graphical as well as in Statistical way in monthly and yearly pattern. According to this, the pattern and the prediction of the crimes will be done which helps to provide more security and to overcome the crime rates in a particular area where it happened more.

Another feature is added to this system is to track the current location of the complainant. To use this application, first the GPRS could be activated by the complainant otherwise it will not move to the PCR form. It is recommended to activate the GPRS for registering the complaint.

The major modules in this application are,

- Graph and Statistics
- Crime Pattern Recognition
- Crime Prediction Recognition
- Feedback of Higher Authorities

## II. PCR REGISTRATION

### A. Existing System

There are no such existing technical systems in our country for the purpose of registering a case. The victims have to go the police stations personally to register the case. This can lead to slow registration of PCR. In accidents and assault cases is also one of the biggest problems of the existing system. Unless the PCR has been registered the treatment of the victims would not be started. The slow registrations of PCR leads to loss the precious time by which they can also lost their lives sometimes.

### B. Present Scenario

According to the Indian Jurisdiction and Law, a citizen can register a complaint for a cognizable offence. For any such offence, a PCR will be registered by the victim or by the victim behalf. PCR is a crucial first step towards registration of complaint because the police constables start investigation on the committed offence after the PCR has been registered. A physical transfer of the person is required from the spot of crime to the police station. Many a times it happens that important details about the offender is missed out due to this shuttle. Moreover there are many problems resides in availability of the nearby police stations.

### C. Online PCR System over Present System

The following are the advantages of Online PCR system over the present manual system:

- *Time and Energy Saving*

The system prevents the police constables to manually go to a police station to register a complaint. Using this android application in his/her mobile phone, one can easily register a complaint from their current location. The complainant does not need to repeatedly go to the police station for getting the updates on his/her case. This application helps police constables and complainants to save their time and energy.

- *Ease of Accessibility for Public:*

Now a days it is observed that people abstain from going to police stations. Many of them think that it is time consuming and that they would have to bribe the police to get the work done. While many of them are simply hesitant to lodge a complaint due to political and societal factors. But this system allows anybody to lodge complaint and communicate directly with the police authorities without any hesitation.

- *Promotion of E-Governance:*

Now the Police Database have many recent advancements of creation and maintenance of the records, Indian government is now planning to maintain database of 1.5 Crore criminals. The Online PCR System will provide an additional facility and also the process of record maintenance with e-documents.

- *Secure and Transparent Process of Investigation and Tracking:*

All the investigating officers have their personal PCR id, by which only they can access their particular PCR id. According to this the information is private and secure. All the process done through online, in full knowledge of the complainant ensures transparency.

- *Improving the standards of Indian Police system:*

With many countries like USA, Singapore and many other developed countries in the world already having a fully functional e-police system, India must also develop up to the world standards.

- *No delays in catering the PCR:*

As the police constables has to directly update the details of the complaint over the application. The processing of the case with the proofs, and any delay in work is also noticed by the higher authorities as well as the citizens. Thus it highly reduces the scope of false promises

### III. TECHNOLOGY USED

#### A. Android

Android is a mobile operating system developed by Google, based on a modified version of the Linux Kernel and other open source software and designed primarily for touchscreen mobile devices such as smart phones and tablets. Variants of Android are also used on game consoles, digital cameras, PCs and other electronics.

Android's default user interface is mainly based on direct manipulation, using touch inputs that loosely correspond to real-world actions. The response to user input is designed to be immediate and provide haptic feedback to the user. Applications ("apps"), which extend the functionality of devices, are written using the Android software development kit (SDK) and, often, the Java programming language.

#### B. Eclipse

Eclipse is an integrated development environment (IDE) used in computer programming, and is the most widely used Java IDE. It contains a base workspace and an extensible plug-in system for customizing the environment. Its primary use is for developing Java applications, but it may also be used to develop applications in other programming languages.

Eclipse software development kit (SDK) is free and open-source software, released under the terms of the Eclipse Public License. It was one of the first IDEs to run under GNU Classpath and it runs without problems under IcedTea.

#### C. Hostinger Server

Hostinger was created in 2004 and since then, we have been on an epic ride. The idea of Hostinger is to let people create a website for free. It includes MySQL and PHP, cPanel and no ads policy which have created a complete freedom online. It allows to host the web application on Cheap VPS hosting cloud servers. Hostinger uses MySQL administrative tool called PhpMyAdmin that allows to manage the database using web browser.

#### D. PHP

PHP is a server-side scripting language designed for web development but also used as a general-purpose programming language. MySQL is the database which saves data for the programs. PHP is used to access this database. PHP is compatible with almost all servers used today.

### IV. MODULES DESCRIPTION:

#### A. Graph And Statistics:

Complaints should be represented in the form of Graphical as well as Statistical form. It is easy to identify the current scenario.

#### B. Crime Pattern Recognition:

Here the criminals are characterized according to the criminal offenses over an extended period of time.

#### C. Crime Prediction Recognition:

In this module, the police department easily identify which type of crime offence, where it can be happened and when this type of crimes can be done are monitored. Based on this the crime predictions can be done and helps to overcome these crimes.

#### D. Feedback of Higher Authorities:

Here the higher authorities like DCP sir monitored all the Head Constables whether they do their job properly or not. Based on this, the gift cards will be given to them.

**V. DFD AND FLOWCHARTS**

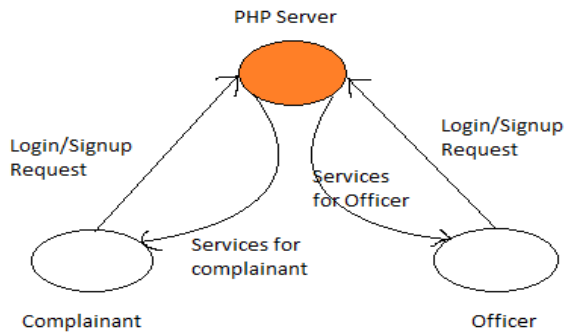


Fig. 1:- Server-App Interaction

Figure 1 shows the interaction between the android application and the back end server i.e. php server. The php server contains the database where all the data of the officers and complainants are stored. The complaints will also stored in the database. To get interact, the officer or complainant have to register first. After that, by doing login process they can view the services provided to them.

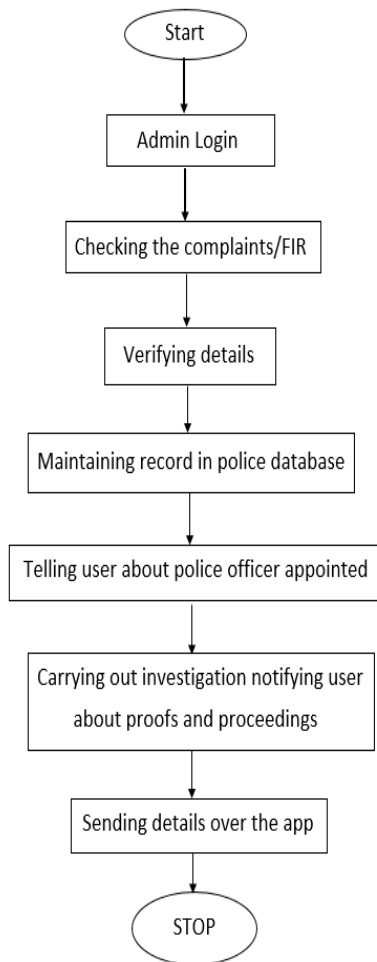


Fig. 2:- Flow graph for the Higher Authorities

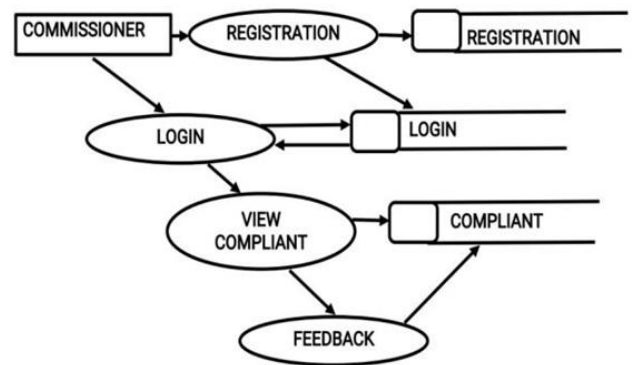


Fig. 3:- DFD for Higher Authorities

The working process of the Higher Authorities can be given in flow graph and DFD as shown in Figure 2 and Figure 3. The Higher Authorities firstly register their account and then they do login to view the details of the police record and monitoring the police constables. After that the feedback will be given.

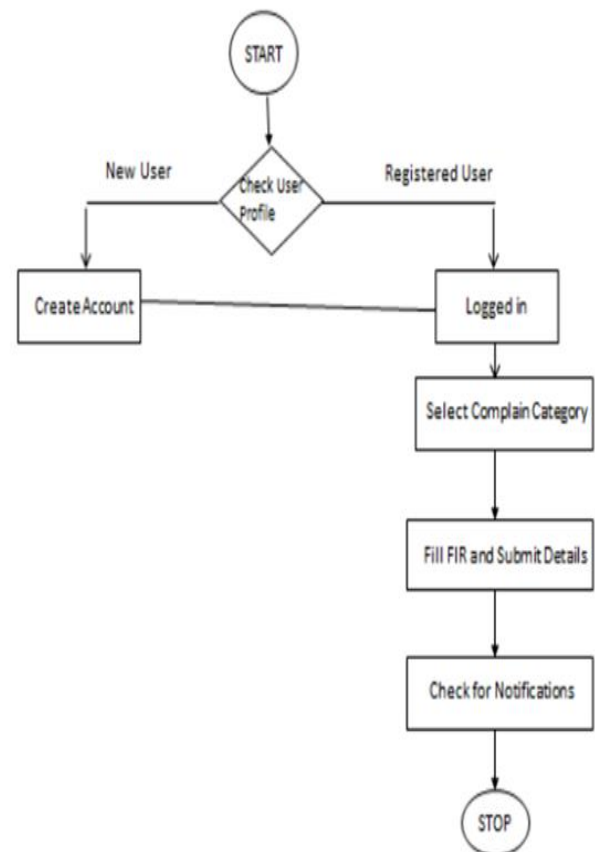


Fig. 4:- Flow graph for Constables

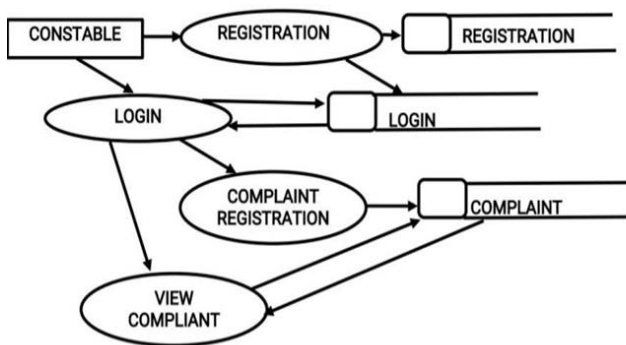


Fig. 5:- DFD for Constables

The Flow graph and DFD for the police constables are given in the Figure 4 and Figure 5. Firstly, the constables have to do registration. After that, they have to login with their login id and password to access the services. They will register the complaint in the PCR database and also view the PCR database record and update it as per the investigation done.

### VI. CONCLUSIONS

In this project, a completely integrated and compact system is developed that can be used by the higher authorities as well as the police constables. This paper proposes to simplify and speed up the process of PCR registration.

This project will prove to be widely used system in the future which could be used by the police department. The greatest strength is that it offers new features as well as provides different modules by which crime predictions will be done and also Higher authorities feedback will be recorded.

### VII. ACKNOWLEDGEMENT

We feel privileged to express our deepest sense of gratitude and sincere thanks to our project guide Prof. Mahesh Panjwani sir for his stimulating guidance, continuous encouragement and supervision throughout the course our project work. We would like to place on record our deep sense of gratitude to Prof. Nita Thakre mam, Head of the Department, Computer Technology, PCE for the generous guidance, valuable suggestions and information provided towards this project.

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