ABSTRACT –
We can see that technology is implemented in almost every aspect of our lives and business function. The use of technology is increasing day by day, we all depend on technology, and we use various technologies to accomplish specific tasks in our lives. 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. The major part of our society that remains void of use of technology is Indian Police Department. The Indian Police Department carries out their routine chores manually. The traditional “pen and paper” method is primary method of carrying out the proceedings. These practices were comfortable when population was far less, and crime rates were minimal. But now with rapid development of big cities and towns, the graph of crimes is also on the increase. It has become difficult task to manage the complaints and related documents, manually. Digitalization in Police department is very important. The traditional method is to be replaced with online process of registering complaint. The police officer would register complaint online through application, send complainants data to the Police department on their web portal, and in this way entire interaction occurs online. This PCR system would speed up processing of complaint and save time, energy.

Keywords: PCR, android application, database.

1. INTRODUCTION
This system has been proposed to reduce the difficulties that people face during the registration of complaint at police station. As we know that registering a complaint requires the physical presence of complainant at the police station. Entire manual process is time consuming. It also consumes a lot of money and energy. Other disadvantages include getting harmed from person against whom PCR has been registered, particularly in kidnapping and ransom cases. So, this could be an essential tool to reduce manual work at thana and accelerate further proceedings of complaints.

We have proposed to develop a system which provides an easily accessible android mobile application which allows police to register complaints of complainant through application. Police officials would be provided with username and password for login. The police would be filling up the FIR form; complainant would be providing the necessary details related to the complaint. The complainant can upload images, audio files as proof. The police officials would receive details on the web portal. Further proceedings are carried out by police and details of complaint are stored on back-end server in secured manner. Complainant would be informed about the status of case through message on mobile. Thus the system helps in reducing the pen and paper work.

2. PCR REGISTRATION
2.1 Present Scenario:
In the present scenario all the work of registering complaint is carried out manually by the police officials and takes a lot of time and energy. For any offence, an PCR can be registered either by the victim of the offence or by someone else on his/her behalf. The complaint is orally described by complainant and the report is made in writing to police. PCR is an essential step towards registration of complaint because only after the PCR has been registered the police can start investigation. The present scenario is that any person who is witness of any offence and wants to lodge a complaint need to go from the spot of crime to the police station. Because of this important detail about the culprit is missed out by the witness. Many a times it so happens that important
details about the offender is missed out by the victim. The major issue is availability of police station which might add on to the time between occurrence of the crime and investigation being started on it.

2.2 PCR system over Present System

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

1) Time and Energy Saving:
The system saves time and energy of complainant to go to a police station to file a complaint. With the help of android application police officials can register complaints of people easily. The updates on his/her case would be notified through android application so that the complainant does not have to go to the police station repeatedly.

2) User-Friendly:
The application is very user-friendly that police can use it very conveniently for registering complaints of people.

3) Ease of Accessibility for Public:
In present scenario people desist from going to police station since it is time consuming. Many people hesitate to go to police station due to society. PCR system allows registering complaint by directly contacting police officials.

4) Secure and Transparent Process of Investigation and Tracking:
Since the police officials would have username and password the details of case is secure. No one has the access to get the details of case.

5) Improving the standards of Indian Police system:
Most of countries like USA, UK have a fully functional system of registering complaint online. India must develop PCR system to enhance standards of Indian Police system.

6) No delays in catering the FIR:
Since the application allows police to directly update proceedings about the case over the application. It does not take time and there is no delay in proceedings of the case. The complainant would be informed about it through messages on mobile.

3. TECHNOLOGY USED

3.1 Android
Android is an operating system (OS) designed basically for touchscreen mobile phones. It is based on the Linux kernel and currently being developed by Google. Android's user interface allows direct manipulation, using touch gestures, swiping, tapping and pinching, to manipulate objects on the screen, virtual keyboard for textual input.

Applications that are more popularly known as "apps", extend the functionality of devices. They are written using the Android SDK (software development kit) and mostly use the Java programming language which provides complete access to the Android APIs.

3.2 Android Studio
Android Studio is the official integrated development environment (IDE) for developing for the Android platform. It is a replacement for the Eclipse Android Development Tools (ADT) as primary IDE for native Android application development. Android Studio’s job is to provide the interface for you to create your apps and to handle much of the complicated file-management behind the scenes. The programming language you will be using is Java and this will be installed separately on your machine. Android Studio will give you access to the Android SDK or ‘Software Development Kit’. Java is needed to write the programs, the Android SDK is
needed to make those programs run on Android and Android Studio has the job of putting it all together for you. At the same time, Android Studio also enables you to run your code, either through an emulator or through a piece of hardware connected to your machine. You’ll then also be able to ‘debug’ the program as it runs and get feedback explaining crashes etc. so that you can more quickly solve the problem.

### 3.3 WAMP Server

WampServer (64-Bit) is a Windows web development environment. It allows you to create web applications with Apache, PHP, and the MySQL database. It also comes with PhpMyAdmin to easily manage your databases. WampServer is the only packaged solution that will allow you to reproduce your production server. WAMP server includes Windows, Android, MySQL and PHP(WAMP). WampServer refers to a software stack for the Microsoft Windows operating system, created by Romain Bourdon and consisting of the Apache web server, OpenSSL for SSL support, MYSQL database and PHP programming language. These technologies work together in a convenient way and provide the server facility. The web server Apache handles requests by the browser and sends information across the internet to the browser. PHP is a programming language that has been used for building many sites. It creates dynamic content which is sent to the Apache server. MySQL is the database which saves data for the programs. PHP is used to access this database. WAMP uses MySQL administrative tool called PhpMyAdmin that allows to manage the database using web browser.

### 4. SYSTEM INTERACTION

The PCR system allows the complainant to register an FIR with the police by using the PCR Android application. The police are supposed to create an account to access the application. By creating account the police officials would get username and password. This username and password can be used to login into the system. The complainant would be telling complaint and details about the case. This detail about the case is used by police officials for registering complaint. Once the complaint has been registered the police officials are able to see those on their side of the application. The cases are assigned to different officers. They can make updations and provide details of the progress on a particular case.
Figure 4.1. Flow graph for the officer at application side.

Figure 4.2. Flow graph for the officer at server
5. CONCLUSION

Indian Police System must upgrade itself with advances in digital technology. The traditional method of registering complaint consumes a lot of time and energy as it is being carried out on a pen and paper basis. This paper proposes to clarify and increase the speeds of the process of FIR registration. With the improvement and intangible of internet and web technology into the Indian Police System, it will definitely boost up the proceedings. This paper point to help the public and the police officers uniformly. The updates about case details are reveal directly to the complainant through the application. The ease of access of the android application by the police officers of India will encourage a more judicial and lawful society.

6. REFERENCES


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