

Architecture of a Crime management system for future digital country is proposed in this paper. The architecture is divided into four main components: Police Station, Server, Internet and Citizen of country. Citizen of a country can use any type of microcomputer such as: smart phone, tablet, laptop or desktop to register a case from online. Specification of server to make it secure and reliable is listed in this paper. Investigation center is equipped with Forensic Services, Artificial intelligence and Analytics module and connected with the main server. All information related to investigation and criminals can be stored in this system for further proceeding. At present, part of the proposed architecture is designed and implemented which is also described in this paper.

Nowadays, much of the crimes committed were unreported to the authorities. Given this fact, the study presents the development of a Crime Management and Reporting System through online and even offline and at the same time is the active participation of the citizens. The idea draws its motivation from the inconvenience of going to the police station and personal belief of the weak investigative capabilities of the authorities to resolve petty crimes and limited spreading of crime information to the community. The project specifically looks into the crime detection and prevention. This study aims to provide an overview of the investigative process and, in doing so, identify effective and efficient approaches to the investigation and detection of the volume of crimes. The review is particularly aimed to highlight the research evidence those investigative practices and actions that are likely to lead to a positive outcome.

Motivation

In modern days crime is increasing day by day. To combat such crimes and to provide safety to citizens, police department plays a vital role. It always is a vital responsibility arresting criminal who is threat for the safety of society. After registering the FIR from any citizen, police starts investigation from them, after getting all the proofs against the criminal, It is the duty of the police to present all the proofs honestly to the court so that the right man can get right punishment. The true and right information provided by the people to police helps a lot in arresting the criminals who try to spoil the peaceful environment of society. Along with low salary scale, facilities of modern technology such as computerized system of keeping records are not provided to police department which cause low efficiency. As it is the age of computers, all the organization today use computers to maintain their records, so this facility should be given to police department. In order to increase their efficiency and to save their time, in our project we are going to implement a CRMS (criminal record management system). This is an online web application with database system in which police will keep the record of criminals who have been arrested. This will help the police department to manage their records easily.

The objective of this system can broadly be listed as follows:

- To keep record of the criminals
- To record improvement and decline the rules and regulation activities of the Country.
- To keep record of criminals details for future investigation
- To keep record of criminal's crime activities
- Reduce manual and redundant records keeping
- Facilitate interaction and sharing of information among police departments, districts, state/headquarters and other police agencies
- Building security and monitoring control to ensure only authorized personal have access to the criminal information

The phase of design process is given below:

- Architectural design: the design of system architecture which describes the structure behavior.
- Logical design: it's an abstract representation of the data flows, inputs and outputs of the system, the requirements about the system are described.
- Input requirements
- Output requirements
- Storage requirements
- Processing requirements
- System control and backup or recovery

Another way the physical portion of system design can generally be broken down into three sub tasks:

- User interface design.
- Data design.
- Process design.

SRS should come up with the following features:

- User requirement are expressed in natural language.
- Technical requirement are expressed in structured language, which is used inside the organization.
- Design description should be written in Pseudo code.
- Format of forms and GUI screen prints.
- Conditional and mathematical notations for DFDs etc.

A feasibility Study aims to reveal in an objective and rational way the strength and weaknesses of a current or proposed company, the opportunities and threats present in the environment, the necessary assets to be implemented and, ultimately, the prospective for success. A feasibility study is a study that incorporates software analysis in case it is economically advantageous, In case it can satisfy the technical requirement and if it is adoptable in the required environment. It

also condition the basic work and decides whether to accept the project. Finally, the final result will be a hard plan to continue with the project.

A feasibility study assesses the potential for progress of the project, therefore, objectively perceived is an imperative factor in the validity of the study for potential investors and lenders.

Objective of feasibility study:

- Technology and system feasibility
- Legal feasibility
- Operational feasibility
- Schedule feasibility

This major objectives of system analysis are to find answers for each business process:

- What is being done?
- How is it being done?
- Who is doing it?
- When is he doing it? Why is it being done?
- How can it be improved?