ABSTRACT

We see that when a group or society is formed then some rules and laws are made by the people for the people and to the people. The purpose of these rules and laws are to give a comfortable life to all who are living in that society. Whenever any law is violated by anyone then we say that crime is committed and who break that law is called CRIMINAL and to realize that person his/her mistake, there is also a criterion of punishment.

Sometimes these crimes are committed by same/different people in same/different manner repeatedly. So, we have to manage a record of such type of people so that when any special type of crime is committed then that criminal can easily trace out and punish them so that they do not do that crime in future.

It is an era of computerization and data security. To combat with increasing rate of crimes and criminals Criminal record Management is introduced. This web-based application helps in managing the data and various information about the criminals and their crime. The system stores all the details of the criminal along with his crime and helps in faster and easier searching of a criminal's record.

Due to its easily accessible quality and complete Database this system helps the Police Force in collecting information of crime occurred, helps IO in his/her investigation by giving records of old criminal and crime occurred and helps Police Force to control on the occurrence of crime.

The overall advantage of this System is basically for Police Force in achieving her objectives i.e., maintain peace in society by proper following of rules and laws.

INTRODUCTION

✓ Purpose

This project is aimed at developing a criminal record management system that is a collection of records of criminals for the effective management. Through this system police and government officials can use to see criminals reports for their purpose. This system will also provide transparency.

This Software Requirements document is intended for:

- Developers who can review project's capabilities and more easily understand where their efforts should be targeted to improve or add more features to it such as design or code the application. It also sets guidelines for future development.
- End users are belonging to police department

✓ Product scope

The system that can be used by police department to view the record of criminals, for updating any record or adding a new record. The system provides an interface to store criminal details and allows the user to search and view records. The system has should have login. Police officers should only have a read only access to the information of criminals. Only criminal data service bureau (CDSB) can update or add data of criminals.

At the system's core, it should offer following basic functionalities:

- The system requests that the administrator to enter his/her name, password.
- The administrator enters his/her name, password.
- The system validates the entered name, password from the database of system.
- The system maintains the information about the logged-in user
- the administrator maintains the record of criminal
- If administrator enters invalid details, the system prints error message.

OVERALL DESCRIPTION

Product Perspective

The proposed system is used to maintain the record of crimes across the country. It is well understood that Crime Prevention. Detection and Conviction of criminals depend on a highly responsive backbone of Information Management. The efficiency of the police function and the effectiveness with which it

tackles crime depends on what quality of information it can derive from its existing records and how fast it can have access.

It is proposed to centralize Information Management in Crime for the purposes of fast and efficient sharing of critical information across all Police Stations across the territory. Initially, the system will be implemented across Cities and Towns and later on, be interlinked so that a Police detective can access information across all records in the state thus helping speedy and successful completion to cases.

In the system the user is allowed to view the details of criminal. The user can search the records via name.

date of crime, jail, physical appearance, health issues, etc.

The system aims at making the store records of crime cashier. The system provides an easy way to admin to keep track of record of all crimes and saves him lots of manual work. The system makes updating of records cases by both user and admin and provides updated information about the current crime status in happening.

Software Requirement Specification

Overview Purpose: The main purpose for preparing this document is to give a general insight into the analysis and requirements of the existing system or situation and for determining the operating characteristics of the system.

Developer Responsibilities Overview: The developer is responsible for:

- Developing the system, which meets the SRS and solving all the requirements of the system?
- Demonstrating the system and installing the system at client's location after the acceptance testing is successful.
- Submitting the required user manual describing the system interfaces to work on it and also the documents of the system.
- Conducting any user training that might be needed for using the system.
- Maintaining the system for a period of one year after installation.

Hardware Requirements:

- PIV 2.8 GHz Processor and Above
- RAM 512MB and Above
- HDD 20 GB Hard Disk Space and Above

Software Requirements:

• WINDOWS OS (XP / 2000 / 200 Server / 2003 Server or newer)

Performance Requirements: Performance is measured in terms of the output provided by the application. Requirement specification plays an important part in the analysis of a system. Only when the requirement specifications are properly given, it is possible to design a system, which will fit into required environment. It rests largely in the part of the users of the existing system to give the requirement specifications because they are the people who finally use the system. This is because the requirements have to be known during the initial stages so that the system can be designed according to those requirements. It is very difficult to change the system once it has been designed and on the other hand designing a system, which does not cater to the requirements of the user, is of no use. The requirement specification for any system can be broadly stated as given below:

- The system should be able to interface with the existing system
- The system should be accurate
- The system should be better than the existing system The existing system is completely dependent on the user to perform all the duties.

System design

Introduction

Software design sits at the technical kernel of the software engineering process and is applied regardless of the development paradigm and area of application. Design is the first step in the development phase for any engineered product or system. The designer's goal is to

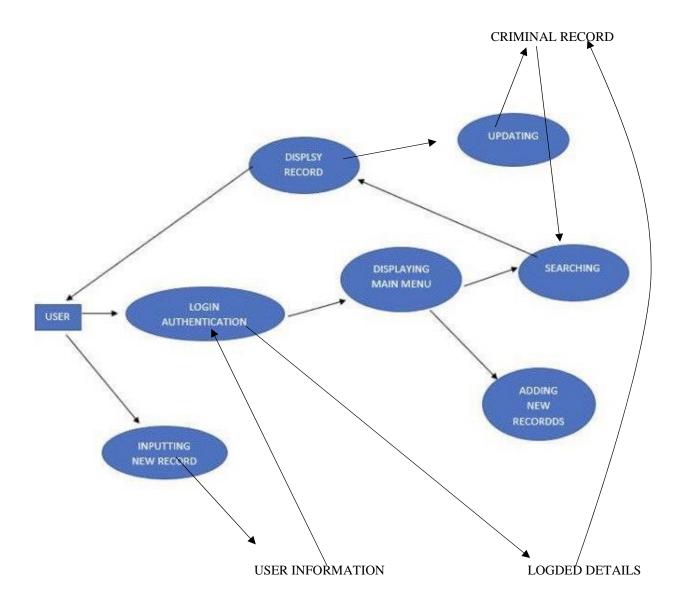
produce a model or representation of an entity that will later be built. Beginning, once system requirement has been specified and analyzed, system design is the first of the three technical activities -design, code and test that is required to build and verify software.

The importance can be stated with a single word "Quality". Design is the place where quality is fostered in software development. Design provides us with representations of software that can assess for quality. Design is the only way that we can accurately translate a customer's view into a finished software product or system. Software design serves as a foundation for all the software engineering steps that follow. Without a strong design we risk building an unstable system – one that will be difficult to test, one whose quality cannot be assessed until the last stage. During design, progressive refinement of data structure, program structure, and procedural details are developed reviewed and documented. System design can be viewed from either technical or project management perspective. From the technical point of view, design is comprised of four activities – architectural design, data structure design, interface design and procedural design.

Data Flow

- 1) A Data Flow has only one direction of flow between symbols. It may flow in both directions between a process and a data store to show a read before an update. The latter is usually indicated however by two separate arrows since these happen at different type.
- 2) A join in DFD means that exactly the same data comes from any of two or more different processes data store or sink to a common location.
- 3) A data flow cannot go directly back to the same process it leads. There must be at least one other process that handles the data flow produce some other data flow returns the original data into the beginning process.
- 4) A Data flow to a data store means update (delete or change).
- 5) A data Flow from a data store means retrieve or use. A data flow has a noun phrase label more than one data flow noun phrase can appear on a single arrow as long as all of the flows on the same arrow move together as one package.

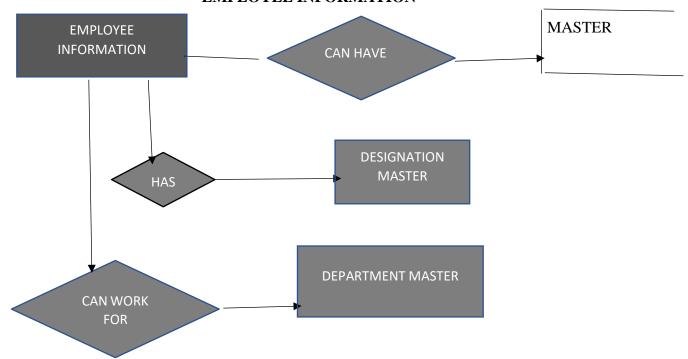
DATA FLOW DIAGRAM FOR OUR SYSTEM



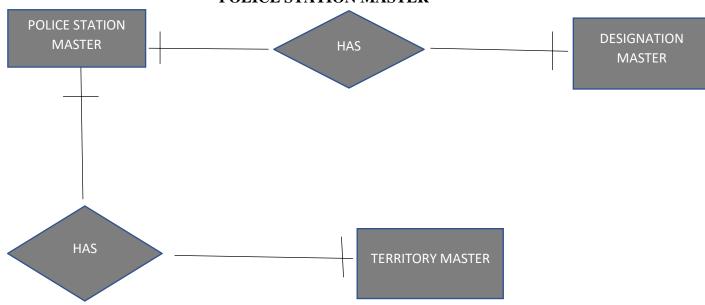
ER-Diagrams

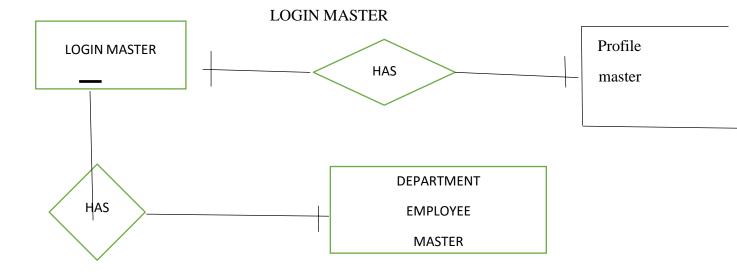
- The entity Relationship Diagram (ERD) depicts the relationship between the data objects. The ERD is the notation that is used to conduct the date modeling activity the attributes of each data object noted is the ERD can be described resign a data object description.
- The set of primary components that are identified by the ERD are
 - ✓ Data object
 - ✓ Relationships
 - ✓ Attributes
 - ✓ Various types of indicators.
- The primary purpose of the ERD is to represent data objects and their relationships.

EMPLOYEE INFORMATION



POLICE STATION MASTER





UNIFIED MODELING LANGUAGE DIAGRAMS

- The unified modeling language allows the software engineer to express an analysis model using the modeling notation that is governed by a set of syntactic semantic and pragmatic rules.
- A UML system is represented using five different views that describe the system from distinctly different perspective. Each view is defined by a set of diagrams, which is as follows.
- User Model View i. This view represents the system from the user's perspective. ii. The analysis representation describes a usage scenario from the end-user's perspective.

Structural model view

- ❖ In this model the data and functionality are arrived from inside the system. Login Master Profile Master Department Employee Master Has
- This model view models the static structures.

Behavioral Model View

❖ It represents the dynamic of behavioral as parts of the system, depicting the interactions of collection between various structural elements described in the user model and structural model view.

Implementation Model View

❖ In this the structural and behavioral as parts of the system are represented as they are to be built. Environmental Model View In these the structural and behavioral aspects of the environment in which the system is to be implemented are represented.

UML is specifically constructed through two different domains they are

✓ UML Analysis modeling, which focuses on the user model and structural model views of the system.

✓ UML design modeling, which focuses on the behavioral modeling, implementation modeling and environmental model views.

USE CASE DIAGRAMS

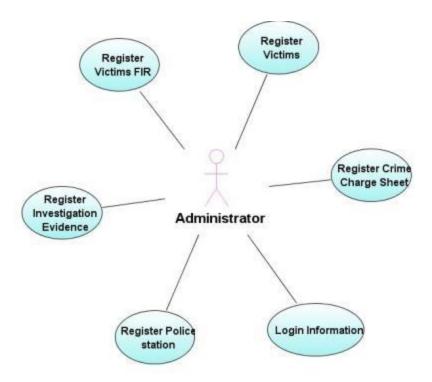
The actors who have been identified in the system are as follows:

- 1. Investigating officer
- 2. Administrator
- 3. Writer

Investigating officer: He is the actor who can practically work upon the existing data in the police station only for view purpose.



Administrator: He is the actor who has the full-length potentiality and privilege to carry out transactions upon the system. He is authorized to maintain consistency within the information.

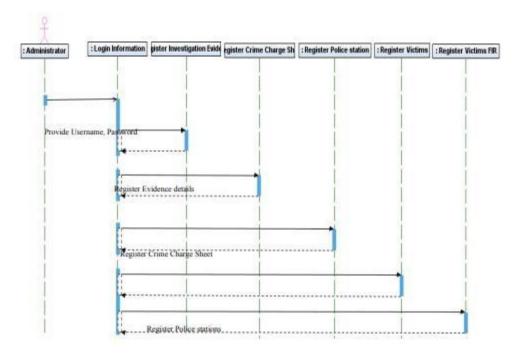


Writer: He is the actor who can enter all the details of the crime or evidence. Once entered cannot be edited. Only the administrator can edit or delete the record from the database.

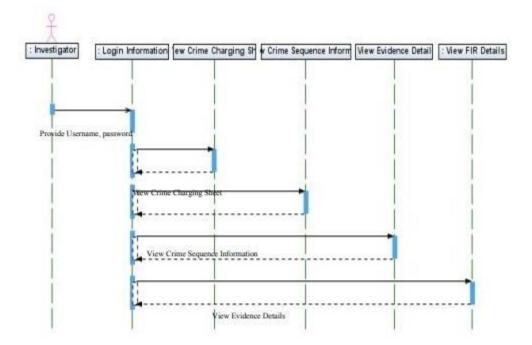


SEQUENCE DIAGRAM

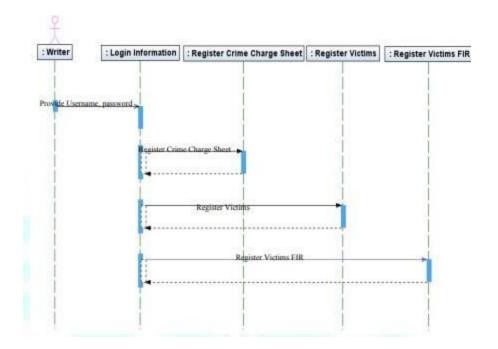
The Administrator



The investigator:



The writer:



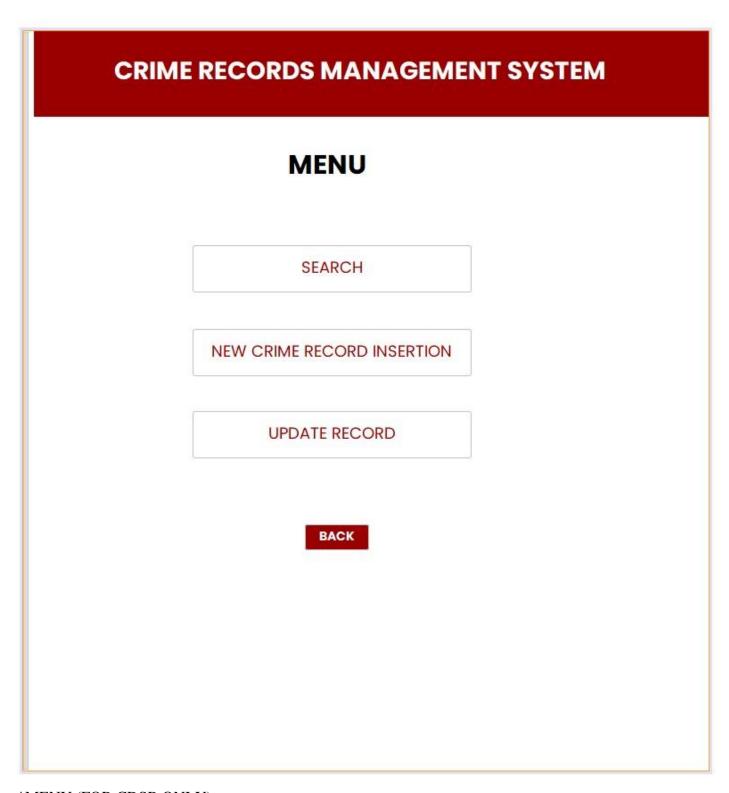
RESULTS

SNAPSHOT OF THE MODULE



*THE LOGIN SCREEN:

Enter your id and password (for police officers, BNI, CDSB) to login. System maintains the information of logged in users. It checks your record if exist then display menu interface otherwise prints error message.



*MENU (FOR CDSB ONLY):

This interface provided to only to NCRB- for searching any record Inserting new record of criminal or updating any existing record.

CRIME RECORDS MANAGEMENT SYSTEM

SEARCHED RECORD:

NAME:	EVANS
AGE:	24
DOB:	03-03-1999
GENDER:	MALE
RESIDENTIAL ADDRESS:	SCHOOL BUS ROAD -UCC
CRIME:	MURDER
COURT:	SUPREME COURT
FATHER'S NAME:	NATHAN
MOTHER'S NAME:	MARY
PINCODE:	124569
BLOOD GROUP:	O+
PHONE NO.:	0546406319
OCCUPATION:	TEACHER
WEIGHT:	60.5
HEIGHT:	2.5
SKIN TONE:	BROWN
EYECOLOUR:	WHITE
JAIL_ID:	104
ACCUSSED_ON:	04-06-2023
CELL_NO:	3

*SEARCHED RECORD:

After searching interface will be like the same including all the criminal information

NEW RECORD INSERTION		
POLICE NO:		
NAME:		
DESIGNATION:		
GENDER:		
DATE OF BIRTH:		
DATE OF JOINING:		
PHONE NO:		
EMAIL:		
STREET:		
CITY:		
REGION:		
COUNTRY:		
PIN CODE:		
FLAT NO:		

*NEW CRIMINAL RECORD:

This interface provides the form for new criminal to be registered it database by CDSB.

CRIME RECORDS MANAGEMENT SYSTEM

UPDATE THE RECORDS YOU WANT: NAME: **EVANS** UPDATE RECORD AGE: 24 UPDATE RECORD DOB: 03-03-1999 UPDATE RECORD GENDER: MALE RESIDENTIAL SCHOOL BUS ROAD -UCC UPDATE RECORD ADDRESS: CRIME: MURDER COURT: SUPREME COURT FATHER'S NAME: NATHAN MOTHER'S NAME: MARY PINCODE: UPDATE RECORD 124569 BLOOD GROUP: 0+ PHONE NO.: 0546406319 UPDATE RECORD OCCUPATION: TEACHER UPDATE RECORD UPDATE RECORD WEIGHT: 60.5 HEIGHT: 2.5 UPDATE RECORD SKIN TONE: **BROWN** EYE COLOUR: WHITE 104 UPDATE RECORD JAIL_ID: UPDATE RECORD ACCUSSED_ON: 04-06-2023 CELL_NO: 3 UPDATE RECORD

UPDATING RECORDS:

Records can be updated only by the CDSB (criminal data service bureau)

CONCLUSION

The need for a computerized platform for crime record management cannot be overemphasized.

The Criminal Record Management System enhances proper and efficient management of criminal records by the CDSB thereby helping in making informed decisions and improving reliability thus improving law enforcement operations. This results in lower crime rate in the country thereby increasing national security.

The Software developed is found to be working efficiently and effectively. It is built with all the all the options such as searching record of criminal either by name, finger print, crime, jail, health issues or physical appearance. It results in regular and timely action against crime reported. It can be observed that the information can be obtained easily and accurately. The Software is made user friendly to the maximum so that any lay man can run the software provided he could access to the system via the login password.