

# **CRIME MANAGEMENT SYSTEM**

A PROJECT REPORT

*Submitted by*

**S SRIWANTH [Reg No: RA2112703010022]**

*Under the Guidance of*

**Dr. K. Kalaiselvi**

Associate Professor, Department of Networking and Communications

*in partial fulfilment of the requirements for the degree of*

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**KATTANKULATHUR – 603 203**

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**SRM INSTITUTE OF SCIENCE AND TECHNOLOGY**

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**BONAFIDE CERTIFICATE**

Certified that this M.Tech Integrated project report titled “**CRIME MANAGEMENT SYSTEM**” is the bonafide work of **Mr. S SRIWANTH** who carried out the project work under my supervision. Certified further, that to the best of my knowledge the work reported herein does not from any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion for this or any other candidate.

**Dr. K. Kalaiselvi**

Associate Professor

Department of Networking  
and Communications

**Dr. Annapurani K**

HEAD OF THE DEPARTMENT

Department of Networking  
and Communications

**SIGNATURE OF INTERNAL  
EXAMINER**

**SIGNATURE OF EXTERNAL  
EXAMINER**

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**S SRIWANTH [RA2112703010022]**

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# **ABSTRACT**

The “Crime Management System” is for online complaining and computerized management of crime records.

Here in this website a person who wishes to file a complaint or report an incident must register before log in and once the admin authenticates the user, he or she can login into the website and file a complaint. This complaint will be received by police and police can send a message regarding status of the complaint to the user who filed the complaint. Police can use this software to manage different crimes and some of the works which is done in police station manually.

Police gets their login password from admin directly. Some of the modules like unidentified dead bodies, missing persons, and most wanted criminals can be viewed through the website without logging in. So, this website helps police to find out the problems in the society without them actually coming to the police station. Key Words: FIR-First Information Report

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# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 OVERVIEW**

The crime management system can help in storing the records related to the criminals, cases, complaint record, case history and so on. This can allow a person to enter or delete the records if necessary. All these records can be maintained in a single database.

Security is maintained so as to ensure that only the authorized users will have access to the system. This application will be one of the useful projects that the police can rely on. This website can help in getting the information of the criminals of many years back. It can also help in minimizing most of the work of the police.

The features that can be included in this website are as follows:

- 1.1.1 Criminal record: This website can contain the details related to the criminals in the particular case.
- 1.1.2 Complaint registration: The details of the complaints that are registered can also be stored through this website.
- 1.1.3 Police database management: The details of the police can be maintained through this website

## **1.2 INNOVATION OF PROJECT**

Real-time crime mapping: A real-time crime mapping system can be used to visualize crime data and help law enforcement agencies identify crime hotspots. This can help them allocate resources more effectively and prevent crimes before they happen.

Mobile crime reporting: A mobile crime reporting system can allow citizens to report crimes and suspicious activities directly from their mobile phones. This can help law enforcement agencies respond more quickly to incidents and gather more accurate information.

## **1.3 PURPOSE OF PROJECT**

The purpose of a crime management system project is to develop a comprehensive system that can help law enforcement agencies manage and respond to crimes effectively. The system should be designed to improve the efficiency and effectiveness of crime management by providing tools for crime detection, investigation, evidence management.

The main objectives of a crime management system project include:

- Crime prevention: The system should help prevent crimes by identifying and analyzing crime patterns and trends. It should also allow law enforcement agencies to allocate their resources more effectively to prevent crime.
- Crime detection: The system should help law enforcement agencies detect crimes by providing tools for surveillance, investigation, and evidence collection.

## **1.4 SCOPE OF PROJECT**

The scope of a project for a crime management system can vary depending on the specific needs of the law enforcement agency and the resources available for the project. However, some general aspects that can be included in the scope of the project are:

- **Requirements analysis:** This involves understanding the needs and requirements of the law enforcement agency to identify the specific features and functionalities that the crime management system should have.
- **System design:** This involves designing the system architecture, user interfaces, and other technical aspects of the system.
- **Software development:** This involves coding, testing, and integrating the various components of the system.
- **Maintenance and support:** This involve providing ongoing maintenance and support to the system to ensure that it continues to function properly and meets the evolving needs of the law enforcement agency

## **1.5 PROBLEM STATEMENT**

- The problem statement for a crime management system project would be to design and develop a comprehensive system that helps law enforcement agencies to manage and track criminal activities efficiently.
- The system should enable the authorities to identify, record, and store criminal incidents and related information in a secure and organized manner. The crime management system should have features to assist with investigations.
- The system should also allow the authorities to generate reports, analyze crime trends, and collaborate with other agencies. The goal of the crime management system is to enhance the effectiveness of law enforcement.

# CHAPTER 2

## LITERATURE SURVEY

A literature survey for a crime management system involves conducting a systematic review of existing academic and research literature on the topic. This review aims to identify the latest and most relevant information related to crime management systems, including their design, implementation, and evaluation.

The search results are then screened based on inclusion and exclusion criteria to select the most relevant articles. The exclusion criteria may include articles that are not in English, not peer-reviewed, or not directly related to the research question.

- T.M. Lwin, N.K.M. Lee and K.W. (2019) Wong developed a Crime Prediction and Analysis Using Data Mining Techniques [1] to analyze Crime patterns and predict future crimes using data mining technique
- E.I. Achumba and F.N. Nweke (2019) developed a Design and Implementation of a Crime Management System [2] for Nigeria to design and implement a web-based crime management system
- J. Chen, Z. Liu and Q. Chen (2021) developed a GIS- based Crime Analysis and Management System [3] to develop a GIS-based crime analysis and management for the city in a China
- A.V. Kolhe, P.M. Deshmukh and S.R. More (2020) developed a Mobile-Based Crime Reporting and Management System [4] to easily operate using mobile in the city in India

The inclusion criteria may include relevance to the research question, publication date, research methodology, and academic rigor as shown in Table 2.1

**Table 2.1 Literature Survey**

<b>Sl No.</b>	<b>Title</b>	<b>Authors</b>	<b>Year</b>	<b>Objective</b>	<b>Advantages</b>	<b>Disadvantages</b>
1	"Crime Prediction and Analysis Using Data Mining Techniques"	T. M. Lwin, N. K. M. Lee, and K. W. Wong	2019	To analyze crime patterns and predict future crimes using data mining techniques	Helps in identifying high-risk areas and allocating resources accordingly; facilitates effective crime prevention	Limited accuracy due to the unpredictability of human behavior; requires large datasets for analysis
2	"Design and Implementation of a Crime Management System for Nigeria"	E. I. Achumba and F. N. Nweke	2019	To design and implement a web-based crime management system for Nigeria	Improves the efficiency of crime reporting and investigation; provides real-time updates to law enforcement agencies and the public	Limited access to technology and internet connectivity in some parts of Nigeria may hinder adoption; may require significant financial investment
3	"A GIS-Based Crime Analysis and Management System"	J. Chen, Z. Liu, and Q. Chen	2021	To develop a GIS-based crime analysis and management system for a city in China	Enables visual analysis of crime patterns and identification of high-risk areas; provides valuable information for law enforcement and urban planning	Requires a significant amount of data collection and processing; may require specialized knowledge and training to use effectively
4	"Mobile Based Crime Reporting and Management System"	A. V. Kolhe, P. M. Deshmukh, and S. R. More	2020	To develop a mobile-based crime reporting and management system for India	Facilitates easy and quick crime reporting by the public; enables real-time updates and coordination among law enforcement agencies	May require significant investment in mobile infrastructure and training for the public and law enforcement agencies; potential for misuse or false reporting

# CHAPTER 3

## IMPLEMENTATION

### 3.1 ARCHITECTURE DIAGRAM

The diagram provides a high-level overview of the system and shows the different components and how they interact with each other. Here is a description of the components that may be included in a crime management system project architecture diagram:

User Interface: The user interface component provides an interface for users to interact with the system. It may include forms for data entry, tables for displaying data, and charts for data visualization as mentioned in Figure 3.1

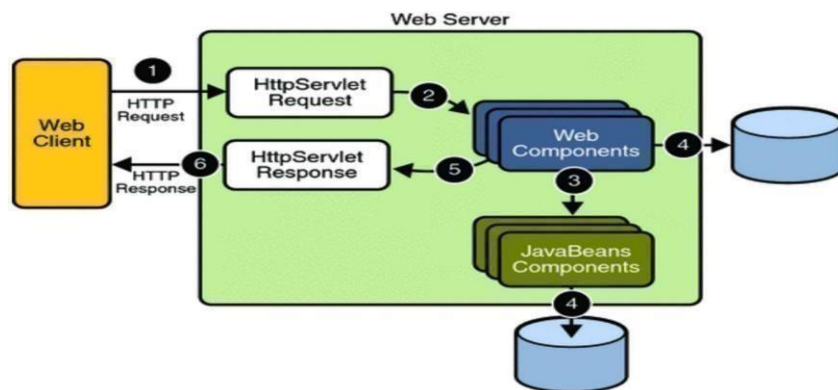


Figure 3.1 Architecture Diagram

### 3.2 ENTITY RELATION DIAGRAM

There is an entity called "Crime" which has attributes such as "Crime ID", "Time", "Location".

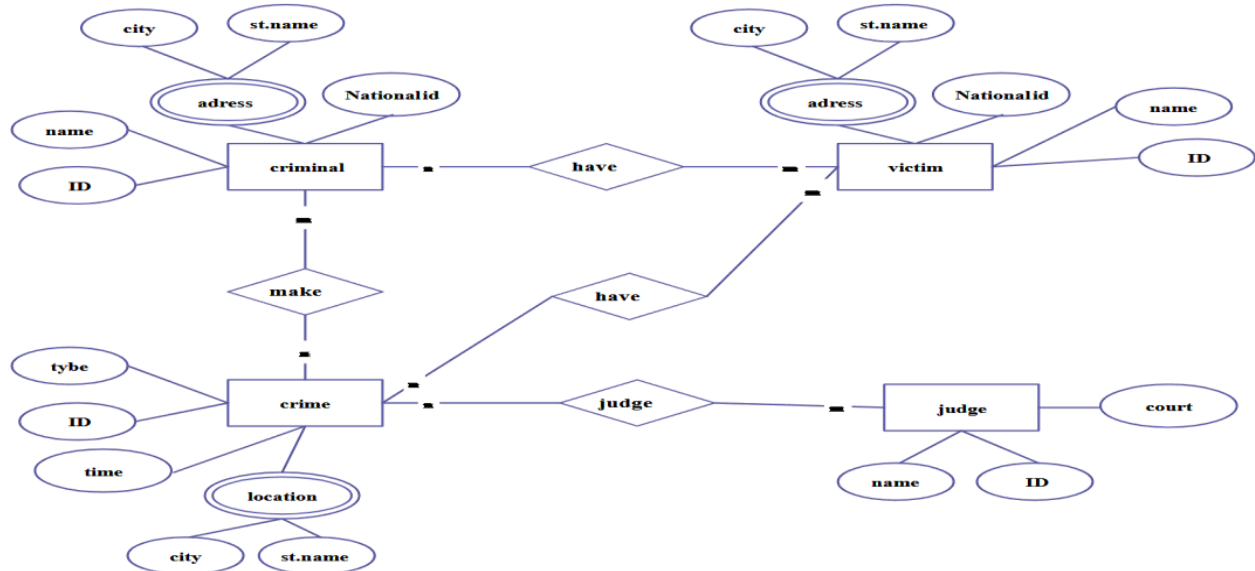
There is an entity called "Criminal" which has attributes such as "ID", "Name", "Address"

There is an entity called "Victim" which has attributes such as "Victim ID", "Name", "Address".

There is a relationship between "Crime" and "Suspect" called "Commits" which represents the fact that a suspect can commit one or more crimes.

There is a relationship between "Crime" and "Victim" called "Involves" which represents the fact that a crime can involve one or more victims.

It would typically include the following entities as shown in Figure 3.2



**Figure 3.2 ER Diagram**

### 3.3 USE CASE DIAGRAM

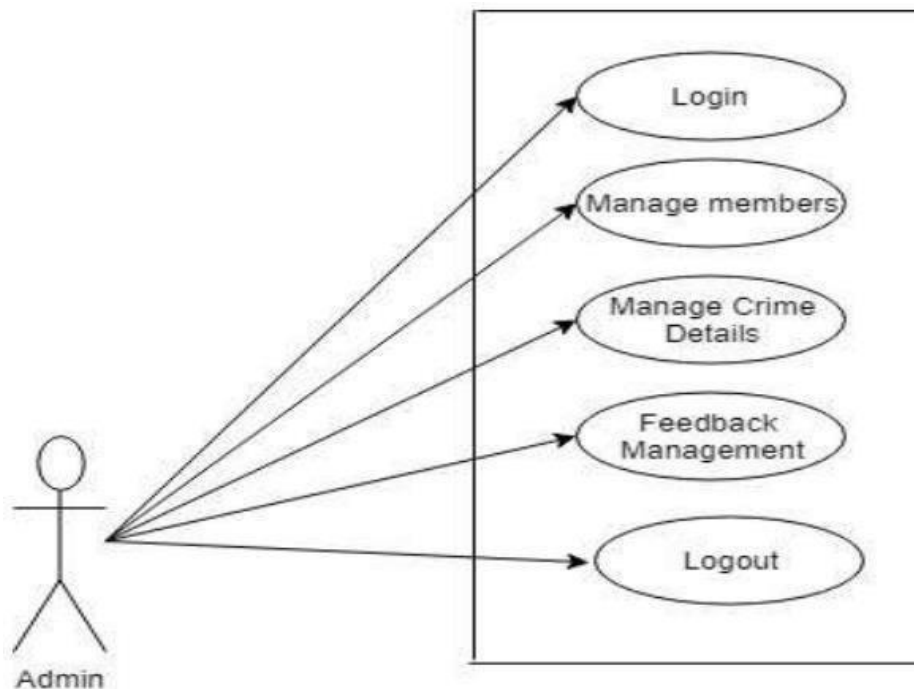
The "Login" use case allows authorized users to login.

The "Manage Members" use case allows to enroll specific officers for specific case.

The "Manage Crime Details" use case allows to check the activity of crime cases.

The "logout" use case allows to logout.

The Case Diagram is shown as mentioned in the Figure 3.3



**Figure 3.3 Use Case Diagram**



### **3.4 MODULE DESCRIPTION:**

A crime management system is a software application designed to manage and trace the data of criminal activities. The module would typically include the following functionalities:

- Registered Users
- Administrator
- Development Setup

#### **3.4.1 The registered user module includes:**

- Add Complaint: This module helps the user to report online complaints.
- Add Crime report: This module helps the user to report online crimes.
- Edit Complaint: This module helps the user to edit his complaint details.
- Edit Account: This module helps the user to update his or her profile.
- View complaint status: This module allows us to view the status of all complaint thatyou have posted earlier.
- View crime status: This module allows us to view the status of the all crimes that you have posted earlier.
- Add and View feedback: This module helps the user to add and view feedbacks

### **3.4.2 The administrator module includes:**

- View and reply user complaint: This module helps the admin to view and reply user's complaint details
- View and reply user crimes: This module helps the admin to view and reply user's crimes details
- New admin: This module used for add new admin
- View and delete user's feedback: This module helps the admin to add and delete user's feedback
- Add, delete and view most wanted persons: This module helps the admin to add, delete and view most wanted person details
- Add, delete and view missing persons: This module helps the admin to add, delete and view missing person details
- Add and view FIR: This module helps the admin to add and view Fir reports
- View and delete all complaint reply: This module helps the admin to view and delete complaint reply.
- Add and view prisoner report: This module helps the admin to add and prisoner reports

### 3.4.3 Development Setup:

The setup that we used to implement our software is as follows:

- Programming Language:

For this we decided to go with JAVA, as it is not only cross-platform

- Frontend:

For the frontend, we decided to use FXML as it is not only easy to use but also easy to adjust.

- Hardware Interface:

The interface of our hardware was Windows 10.

- Database:

The database that we used was MySQL.

- Framework:

We used Java FX and HTML for our front end and as our framework.

- Tools:

We used IntelliJ IDEA 2020.3 by JetBrains as it is very responsive and easy to use.

- Libraries Included:

We used java sdk 15.0.1, Jfoenix 7.0.10 and MySQL java connector 8.0.22, javax.servlet-api-4.0.1.jar, servlet.jar, jakarta.servlet-api-6.0.0.jar

Crime management system project report would typically include an overview of the system's performance and effectiveness in managing and preventing crime. This might include data on crime rates before and after the implementation of the system, the number of crimes reported, the types of crimes reported, and the speed and accuracy of the system's response to reported crimes.

Crime management system project report would typically provide a detailed analysis of the results and their implications for crime management and prevention. This might include an assessment of the strengths and weaknesses of the system, as well as suggestions for future improvements and modifications.

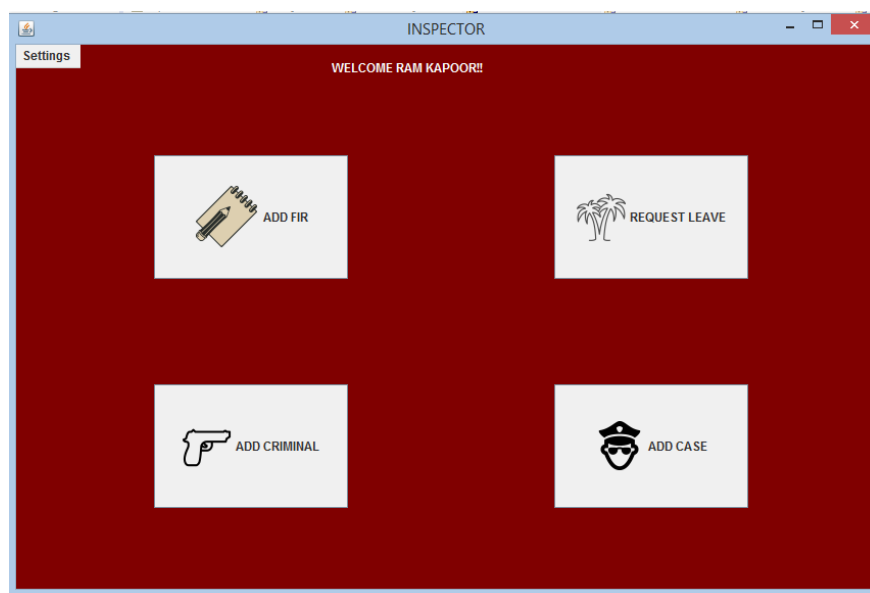
This is the home page as mentioned in the Figure 3.4



**Figure 3.4 Home Page**

TABLE	OFFICERS	Search	Show All	Add	Duplicate	Edit	Delete
ID	NAME	SURNAME	USERNAME	PASSWORD	RANK	DATE	
1	ANKITESH	GUPTA	ankitesh	gupta	COMMISSIONER	10/11/2015	
3	KARAN	PATIL	karan	patil	INSPECTOR	10/11/2015	
4	RAM	KAPOOR	ram	kapoor	INSPECTOR	10/11/2015	
5	VIRAT	KOHLI	virat	kohli	INSPECTOR	10/11/2015	
6	ANIL	KUMBLE	anil	kumble	INSPECTOR	13/11/2015	

Suppose an Inspector inputs his credentials into the system. He would be taken to the following page as mentioned in the Figure 3.5

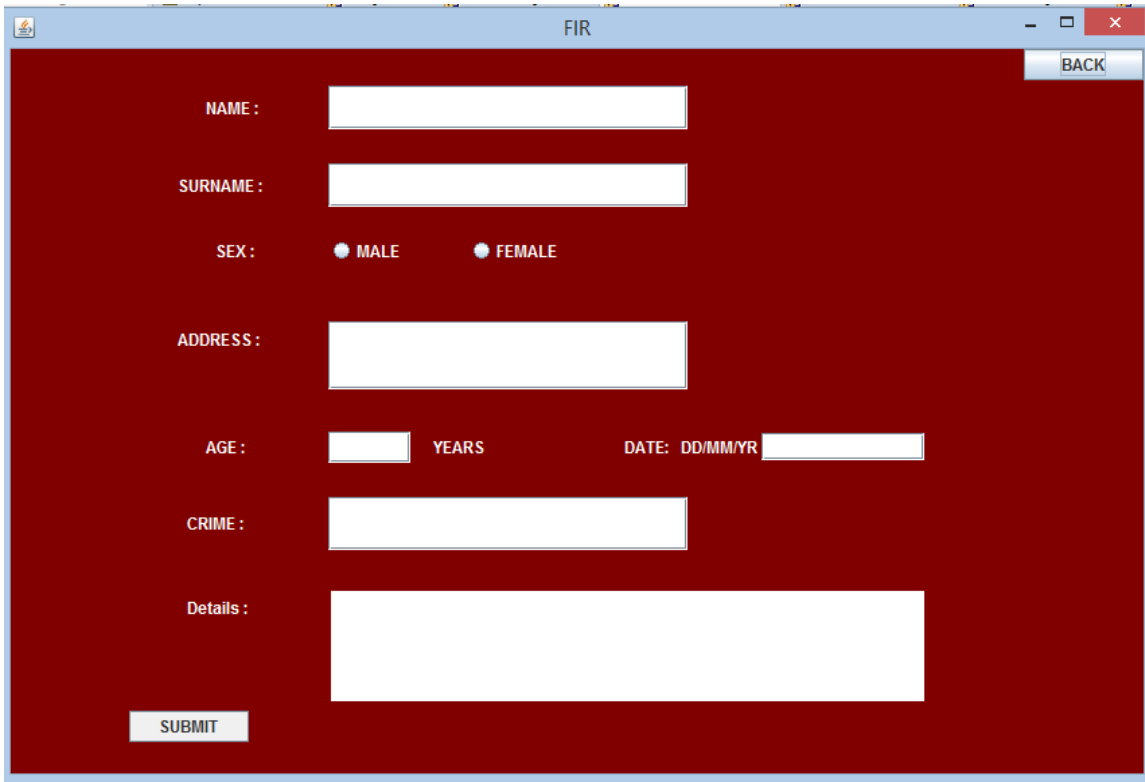


**Figure 3.5 Dashboard**

Here he can do any of the four tasks which are very essential in every police station.

- 1) ADD FIR
- 2) Request leave
- 3) ADD criminal: he can enter criminal Details
- 4) Or he can add a new case.

Add FIR: We can add FIR here using add FIR section as mentioned in the Figure 3.6

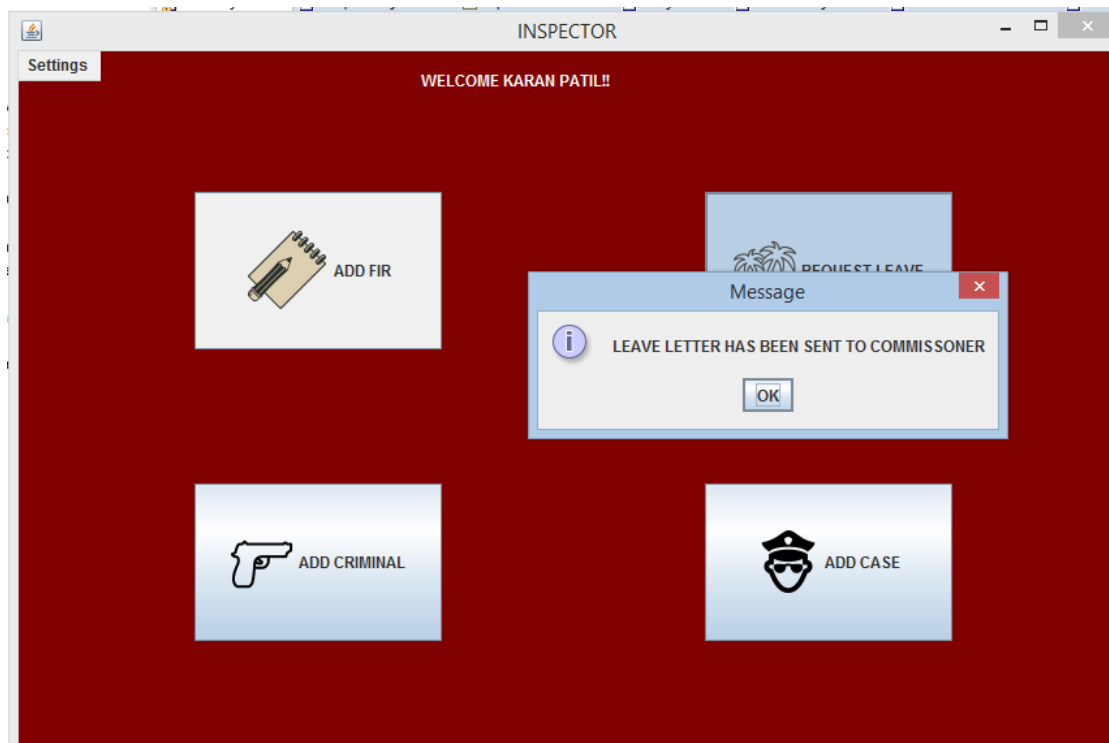


The screenshot shows a web application window titled "FIR". The form is set against a dark red background. It includes the following fields and controls:

- NAME :** A text input field.
- SURNAME :** A text input field.
- SEX :** Two radio buttons labeled "MALE" and "FEMALE".
- ADDRESS :** A text input field.
- AGE :** A text input field followed by the text "YEARS".
- DATE:** The text "DD/MM/YR" followed by a text input field.
- CRIME :** A text input field.
- Details :** A large text area for additional information.
- BACK :** A button in the top right corner.
- SUBMIT :** A button at the bottom left.

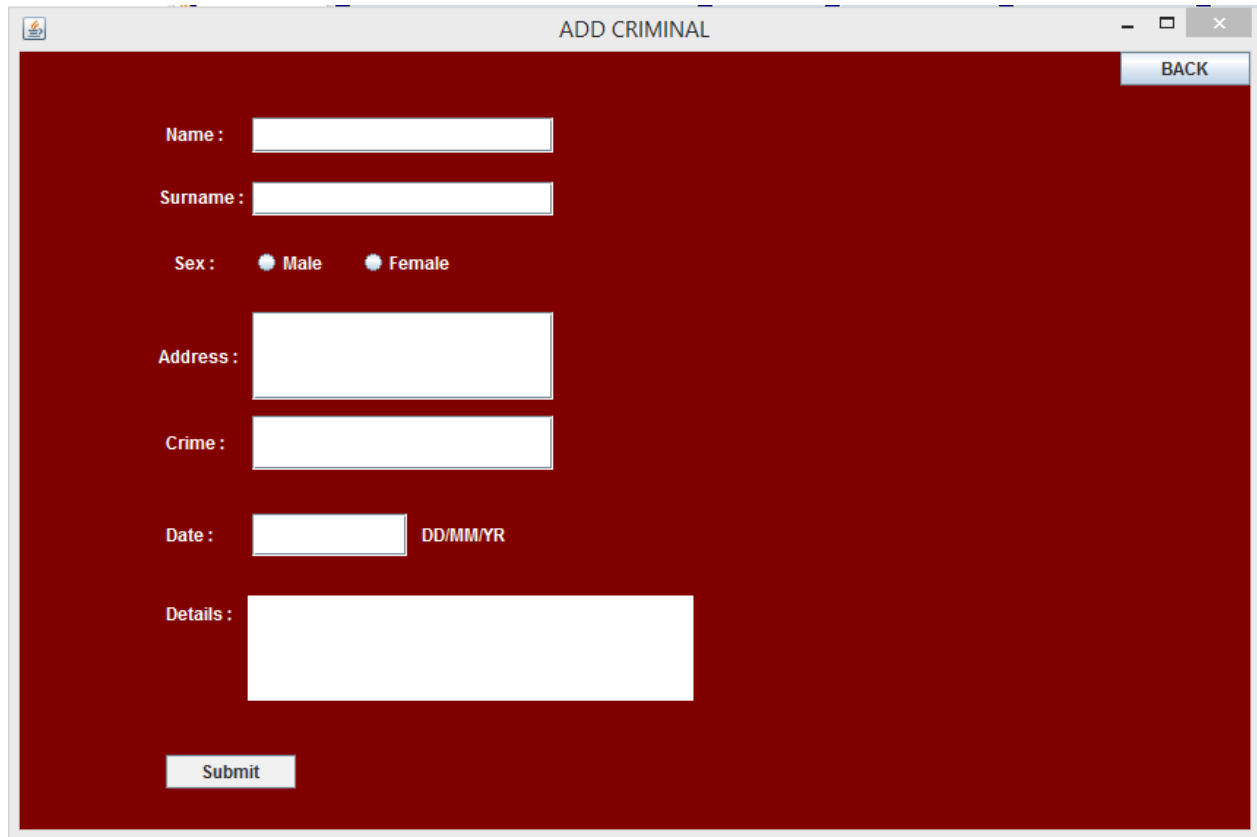
**Figure 3.6 Add FIR**

Request Leave: We can make Request Leave as mentioned in the Figure 3.7



**Figure 3.7 Request Leave**

Add Criminal: We can add Criminal in the add criminal section as mentioned in the Figure 3.8

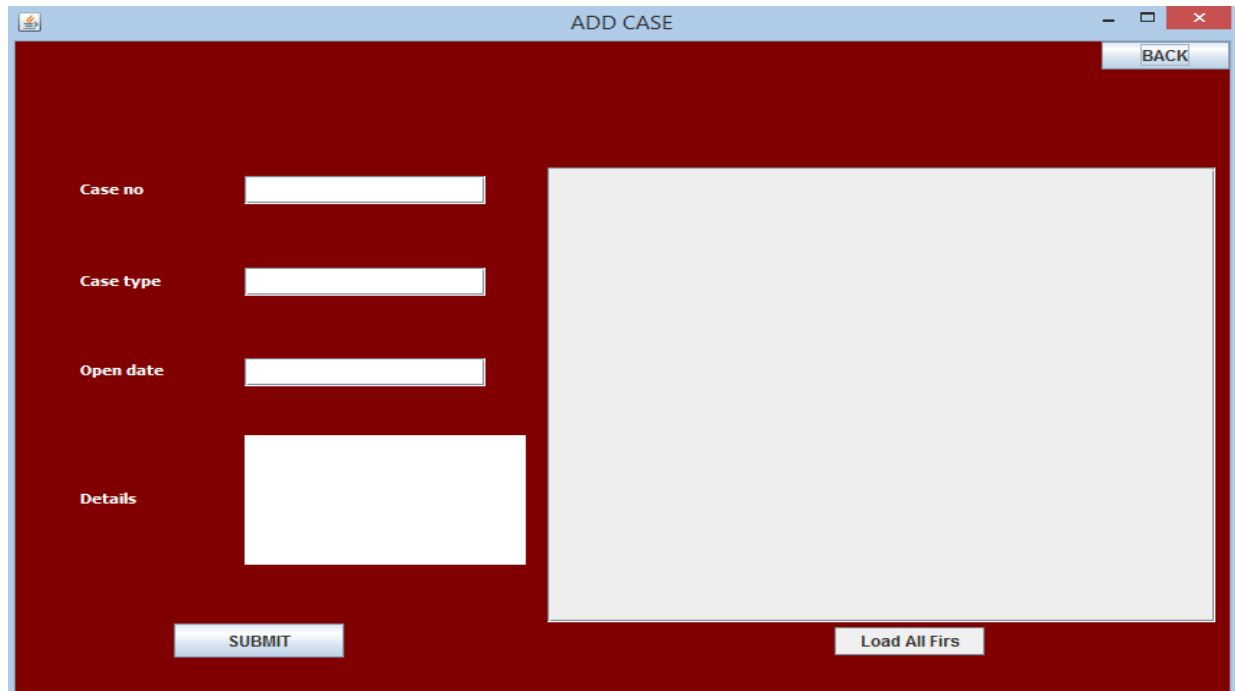


The screenshot shows a web application window titled "ADD CRIMINAL". The window has a dark red background. In the top right corner, there is a "BACK" button. The form contains the following fields and controls:

- Name :** A text input field.
- Surname :** A text input field.
- Sex :** Two radio buttons labeled "Male" and "Female".
- Address :** A text input field.
- Crime :** A text input field.
- Date :** A date input field with a placeholder "DD/MM/YR".
- Details :** A large text area for additional information.
- Submit** button at the bottom left.

**Figure 3.8 Add Criminal**

Add Case: We can add Case in the add case section as mentioned in the Figure 3.9 & 3.9.1



The screenshot shows a web application window titled "ADD CASE". The window has a dark red background. In the top right corner, there is a "BACK" button. The form contains the following fields and controls:

- Case no** : A text input field.
- Case type** : A text input field.
- Open date** : A text input field.
- Details** : A large text area for additional information.
- SUBMIT** button at the bottom left.
- Load All Firs** button at the bottom right.

**Figure 3.9 Add Case**

NO	CRIME	DETAILS	DATE
1	FORGERY	AQUIRED PROPET...	10/11/2015
2	Robbery	Gold chain snatchi...	12/11/2015
3	KIDNAPPING	MY DAUGHTER HA...	15/11/2015

**Figure 3.9.1 Add Case**

A commissioner at the police station is required to monitor all the cases at the police station. His main tasks include closing a case, to add a new police officer, to transfer an officer or to search the database for any other investigations.

When a commissioner signs in into the system he is taken to the following page as shown in the Figure 3.10





**Figure 3.10 Commissioner Portal**

On clicking case approval:

Here he can close a case by referring to the file or by simply clicking load all cases.

After all cases are presented to him, he can see the status as C or O describing closed or open respectively.

On finding his intended case, he can enter the case number and close the case as mentioned in the Figure 3.11

NO	CASE_TYPE	OPEN_DATE	STATUS	CLOSED_DATE	DETAILS	WITH
1	MURDER	20/04/06	C	20/06/14	SENTENCED TO DE...	KARAN PATIL
2	ROBBERY	14/11/2015	C	16/11/15	snatched gold ch...	VIRAT KOHLI
3	KIDNAPPING	15/11/2015	C	17/11/2015	IT IS A CASE	KARAN PATIL

Enter Case Number :

**Figure 3.11 Case Approval**

As stated earlier, the commissioner can also transfer officers in the hierarchy lower to him as Mentioned in the Figure 3.12

ID	NAME	SURNAME	RANK	DATE
3	KARAN	PATIL	INSPECTOR	10/11/2015
4	RAM	KAPOOR	INSPECTOR	10/11/2015
5	VIRAT	KOHLI	INSPECTOR	10/11/2015
6	ANIL	KUMBLE	INSPECTOR	13/11/2015

Enter ID Of Officer To Transfer

Enter Place

**Figure 3.12 Transfer Office**

Or look for Criminal Records as mentioned in the Figure 3.13

NO	NAME	SURNAME	SEX	ADDRESS	CRIME	DATE	DETAILS
1	OSAMA	BILADDIN	M	SAUDI	TERROR	21/02/2012	TERROR ATT...
2	MANYA	SURVE	M	WADALA	MURDER	12/11/2012	MURDERED ...
3	PARDESHI	SIR	M	ANDHERI	KIDNAPPING	15/11/2015	KIDNAPPED D...

Type The Name To Search(CAPS)

**Figure 3.13 Criminal Record**

And he can also make an entry for a new hired police officer as mentioned in the Figure 3.14

NAME :

SURNAME :

USERNAME :

PASSWORD :

RANK :

DATE of JOINING :

INSPECTOR/COMMISSONER

DD/MM/YR

SUBMIT

**Figure 3.14 Add Officer**

## **CHAPTER 4**

### **RESULTS AND DISCUSSION**

The result and discussion section for a crime management system is where the findings of the study are presented and analyzed. This section typically includes a detailed description of the system's performance, accuracy, and effectiveness in meeting the objectives of the project.

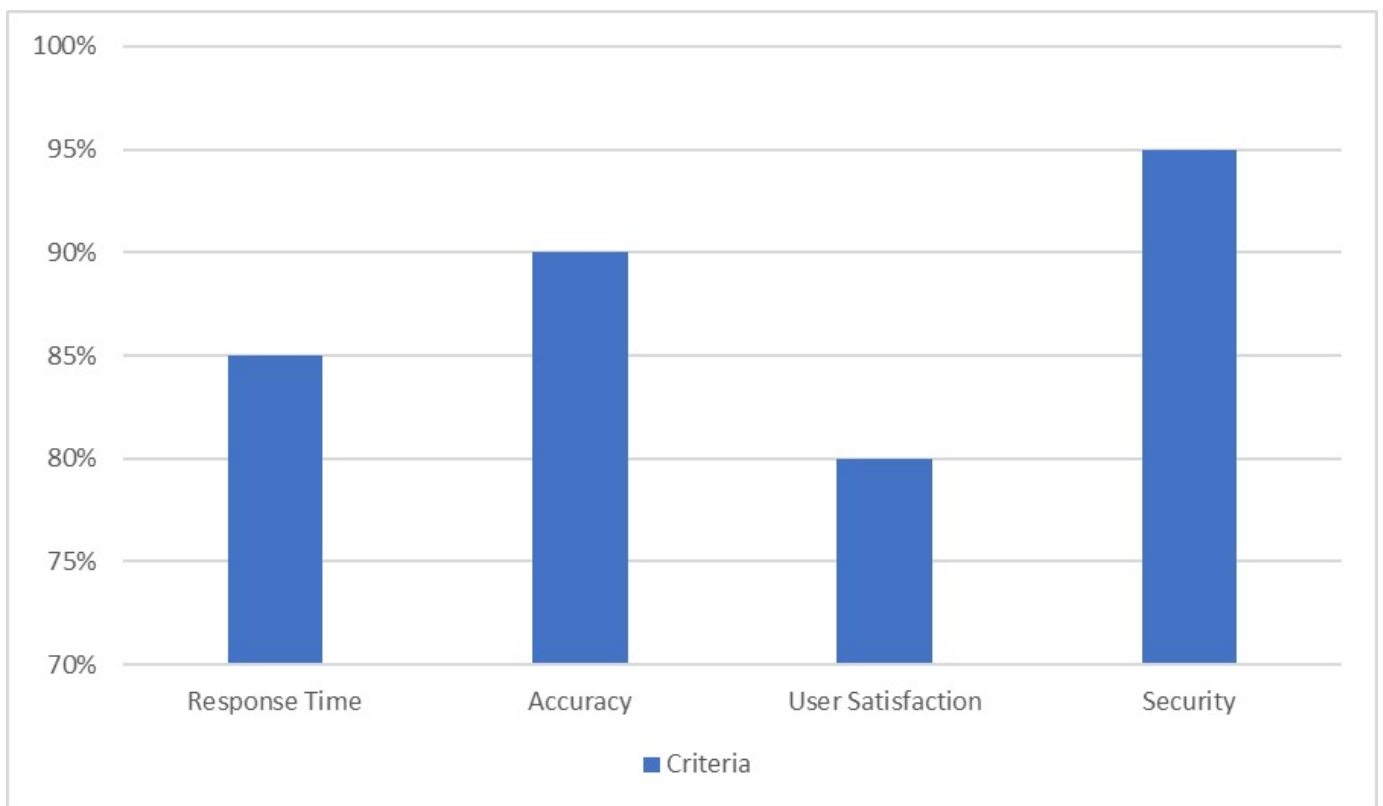
#### **4.1 Success Criteria**

A Success criteria table is a useful tool for measuring the success of a crime management system. It outlines the specific goals and objectives that the system is designed to achieve and provides a benchmark for evaluating its performance. The table typically includes a list of success criteria, which can be quantitative or qualitative in nature, and the corresponding metrics used to measure the system's success in achieving each criterion. The Success criteria table serves as a roadmap for the development of the system and provides a framework for evaluating its effectiveness in meeting the goals and objectives of the project. The below is consolidated success criteria for the crime attendance management system in Table 4.1.

**Table 4.1 Performance Factors**

<b>Sl No.</b>	<b>Criteria</b>	<b>Efficiency Percentage</b>	<b>Limitations</b>
1	Response Time	85%	Limited by the speed of the hardware and network infrastructure, as well as the complexity of the software
2	Accuracy	90%	Limited by the quality and accuracy of the data input into the system, as well as the algorithms used to analyze and process that data
3	User Satisfaction	80%	Limited by the user interface design and usability, as well as the availability and accessibility of support and training resources
4	Security	95%	Limited by the level of expertise and resources available to maintain and update the system's security features, as well as the potential for human error and external threats

Converting tabular results to a graphical representation in the Figure 4.1 is an effective way to visualize data and gain insights into trends and patterns. In the context of the Crime Management System, converting records from a tabular format to a graph can help and make data-driven decisions to improve. Additionally, graphs can be used to track and compare rates across different departments, providing valuable insights into overall patterns. Overall, converting tabular results to graphs is an essential tool to make informed decisions and improve the overall efficiency and effectiveness of their crime management system.



**Figure 4.1 Success Criteria**

# **CHAPTER 5**

## **CONCLUSION AND FUTURE WORK**

### **5.1 Conclusion**

Now-a-days everything is getting computerized. Manual work usually consumes a lot of time and is error prone. To make complaining easy and manage crime records this application is very helpful. Thus, Crime Management System overcomes most of the limitations of the existing system along with being very user-friendly application

The Crime Management System project is an essential tool that helps law enforcement agencies to manage and track crimes effectively. It is a computer-based system that provides features such as crime reporting, investigation, and case management. The system helps to improve the efficiency of crime management by automating several processes, reducing paperwork, and enabling quick access to information.

Overall, the Crime Management System project is a significant step towards modernizing law enforcement and enhancing public safety. It provides a streamlined approach to crime management, leading to improved crime-solving rates and a safer community

## 5.2 Future Work

The scope of the project includes that what all future enhancement scan be done in this system to make it more feasible to us:

- Databases for different products range and storage can be provided.
- Multilingual support can be provided so that it can be understandable by the person of any language.
- More graphics can be added to make it more user friendly and understandable.
- Manage & backup versions of documents online



## REFERENCES

- [1] T.M. Lwin, N.K.M. Lee and K.W. (2019) Wong developed a Crime Prediction and Analysis Using Data Mining Techniques to analyze Crime patterns and predict future crimes using data mining technique
  
- [2] E.I. Achumba and F.N. Nweke (2019) developed a Design and Implementation of a Crime Management System for Nigeria to design and implement a web-based crime management system
  
- [3] J. Chen, Z. Liu and Q. Chen (2021) developed a GIS- based Crime Analysis and Management System to develop a GIS-based crime analysis and management for the city in a China
  
- [4] A.V. Kolhe, P.M. Deshmukh and S.R. More (2020) developed a Mobile-Based Crime Reporting and Management System to easily operate using mobile in the city in India

# APPENDICES

## Source Code:

Add Case:

```
package police;

import java.awt.BorderLayout;
import java.awt.EventQueue;
import java.sql.Connection;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JOptionPane;
import javax.swing.JTable;
import javax.swing.JScrollPane;
import javax.swing.JButton;
import javax.swing.JTextField;
import javax.swing.JTextPane;
import javax.swing.JLabel;
import net.proteanit.sql.DbUtils;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.awt.Color;
import java.awt.Font;
import java.awt.event.KeyAdapter;
import java.awt.event.KeyEvent;
import java.awt.event.FocusAdapter;
import java.awt.event.FocusEvent;

public class Addcase extends JFrame {

    private JPanel contentPane;

    Connection connection = null;
    private JTable table;
    private JTextField no;
    private JTextField type;
    private JTextField date;
    JTextPane details = new JTextPane();

    /**
     * Create the frame.
     */
}
```

```

public Addcase() {
    setTitle("ADDCASE");
    connection = sqliteconnection.dbconnector();
    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    setBounds(100, 100, 858, 571);
    contentPane = new JPanel();
    contentPane.setBackground(new Color(128, 0, 0));
    contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
    setContentPane(contentPane);
    contentPane.setLayout(null);

    JScrollPane scrollPane = new JScrollPane();
    scrollPane.setBounds(369, 103, 463, 372);
    contentPane.add(scrollPane);

    table = new JTable();
    table.setFont(new Font("Tahoma", Font.BOLD, 11));
    scrollPane.setViewportView(table);

    JButton fir = new JButton("Load All Firs");
    fir.addMouseListener(new MouseAdapter() {
        @Override
        public void mouseEntered(MouseEvent e) {
            fir.setBackground(new Color(250,235,46));
        }
        @Override
        public void mouseExited(MouseEvent e) {
            fir.setBackground(new Color(240,240,240));
        }
    });

    fir.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            try {
                String query = "SELECT NO,CRIME,DETAILS,DATE FROM FIR ";
                PreparedStatement pst = connection.prepareStatement(query);
                ResultSet rs = pst.executeQuery();
                table.setModel(DbUtils.resultSetToTableModel(rs));

            } catch (Exception e1) {
                e1.printStackTrace();
                System.exit(1);
            }
        }
    });
    fir.setBounds(568, 479, 104, 23);
    contentPane.add(fir);

    no = new JTextField();
    Hover.effect(no);

    details.addFocusListener(new FocusAdapter() {

```

```

@Override
public void focusGained(FocusEvent e) {
    details.setBackground(new Color(250,235,46));
}
@Override
public void focusLost(FocusEvent e) {
    details.setBackground(new Color(240,240,240));
}));

no.setBounds(159, 110, 167, 23);
contentPane.add(no);
no.setColumns(10);

type = new JTextField();
Hover.effect(type);
type.addFocusListener(new FocusAdapter() {
    @Override
    public void focusGained(FocusEvent e) {
        type.setBackground(new Color(250,235,46));
    }
    @Override
    public void focusLost(FocusEvent e) {
        type.setBackground(new Color(240,240,240));
    }
});

type.setBounds(159, 185, 167, 23);
contentPane.add(type);
type.setColumns(10);

date = new JTextField();
Hover.effect(date);

date.setBounds(159, 259, 167, 23);
contentPane.add(date);
date.setColumns(10);

details.setBounds(159, 322, 195, 106);
contentPane.add(details);

JLabel lblNewLabel = new JLabel("Case no");
lblNewLabel.setFont(new Font("Tahoma", Font.BOLD, 11));
lblNewLabel.setForeground(new Color(255, 255, 255));
lblNewLabel.setBounds(45, 114, 65, 14);
contentPane.add(lblNewLabel);

JLabel lblNewLabel_1 = new JLabel("Case type");
lblNewLabel_1.setForeground(new Color(255, 255, 255));
lblNewLabel_1.setFont(new Font("Tahoma", Font.BOLD, 11));
lblNewLabel_1.setBounds(45, 189, 65, 14);
contentPane.add(lblNewLabel_1);

```

```

JLabel lblNewLabel_2 = new JLabel("Open date");
lblNewLabel_2.setFont(new Font("Tahoma", Font.BOLD, 11));
lblNewLabel_2.setForeground(new Color(255, 255, 255));
lblNewLabel_2.setBounds(45, 262, 76, 14);
contentPane.add(lblNewLabel_2);

```

```

JLabel lblNewLabel_3 = new JLabel("Details");
lblNewLabel_3.setForeground(new Color(255, 255, 255));
lblNewLabel_3.setFont(new Font("Tahoma", Font.BOLD, 11));
lblNewLabel_3.setBounds(45, 367, 46, 14);
contentPane.add(lblNewLabel_3);

```

```

JButton btnNewButton = new JButton("SUBMIT");
btnNewButton.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseEntered(MouseEvent e) {
        btnNewButton.setBackground(new Color(250,235,46));
    }
    @Override
    public void mouseExited(MouseEvent e) {
        btnNewButton.setBackground(new Color(240,240,240));
    }
});
btnNewButton.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {

```

```

        if(check()==1){

```

```

            try {

```

```

                String query = "insert into CASES (NO,CASE_TYPE,OPEN_DATE,STATUS,DETAILS,WITH) values
                (?, ?, ?, ?, ?, ?)";

```

```

                PreparedStatement pst2 = connection.prepareStatement(query);
                pst2.setString(1, no.getText());
                pst2.setString(2, type.getText());
                pst2.setString(3, date.getText());
                pst2.setString(4, String.valueOf('O'));
                pst2.setString(5, details.getText());
                pst2.setString(6, Inspector.name + " " + Inspector.surname);
                pst2.execute();
                JOptionPane.showMessageDialog(null, "CASE Submitted");
                dispose();
                Inspector temp = new Inspector();
                temp.setVisible(true);
            } catch (SQLException e1) {
                // TODO Auto-generated catch block
                e1.printStackTrace();
                System.exit(1);

```

```

            }

```

```

        else {JOptionPane.showMessageDialog(null, "FILL ALL THE DETAILS");}
    });
    btnNewButton.setBounds(110, 476, 118, 28);
    contentPane.add(btnNewButton);

    JButton btnBack = new JButton("BACK");
    btnBack.addMouseListener(new MouseAdapter() {
        @Override
        public void mouseEntered(MouseEvent e) {
            btnBack.setBackground(new Color(250,235,46));
        }
        @Override
        public void mouseExited(MouseEvent e) {
            btnBack.setBackground(new Color(240,240,240));
        }
    });
    btnBack.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            dispose();
            Inspector temp = new Inspector();
            temp.setVisible(true);
        }
    });
    btnBack.setBounds(753, 0, 89, 23);
    contentPane.add(btnBack);
}
public int check(){

    if( no.getText().isEmpty() || type.getText().isEmpty() || date.getText().isEmpty() || details.getText().isEmpty() )
        return 0;
    return 1;}}

```

Case App:

```

package police;

import java.awt.BorderLayout;
import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JButton;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.sql.Connection;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import javax.swing.JLabel;
import javax.swing.JOptionPane;
import javax.swing.JTextField;

```

```

import javax.swing.JRadioButton;
import javax.swing.ButtonGroup;
import javax.swing.JTable;
import javax.swing.JScrollPane;
import net.proteanit.sql.DbUtils;
import java.awt.Color;
import java.awt.Font;

public class Caseapp extends JFrame {

    private JPanel contentPane;
    private JTextField Casenumber;
    private final ButtonGroup buttonGroup = new ButtonGroup();
    private JButton close;
    private JTable table;
    private JScrollPane scrollPane;
    Connection connection = null;
    private JTextField date;
    private JLabel date1;

    /**
     * Create the frame.
     */
    public Caseapp() {
        setTitle("CASE APPROVAL");
        connection = sqlitedbconnection.dbconnector();
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setBounds(100, 100, 858, 571);
        contentPane = new JPanel();
        contentPane.setBackground(new Color(128, 0, 0));
        contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
        setContentPane(contentPane);
        contentPane.setLayout(null);

        JButton btnBack = new JButton("Back");
        btnBack.addMouseListener(new MouseAdapter() {
            @Override
            public void mouseEntered(MouseEvent e) {
                btnBack.setBackground(new Color(250, 235, 46));
            }
            @Override
            public void mouseExited(MouseEvent e) {
                btnBack.setBackground(new Color(240, 240, 240));
            }
        });
        btnBack.addActionListener(new ActionListener() {
            public void actionPerformed(ActionEvent e) {
                dispose();
                Commisisoner temp = new Commisisoner();
                temp.setVisible(true);
            }
        });
    }
}

```

```

btnBack.setBounds(753, 0, 89, 23);
contentPane.add(btnBack);

JLabel no = new JLabel("Enter Case Number :");
no.setForeground(new Color(255, 255, 255));
no.setBounds(73, 441, 123, 23);
contentPane.add(no);

Casenumber = new JTextField();
Hover.effect(Casenumber);
Casenumber.setBounds(206, 441, 217, 22);
contentPane.add(Casenumber);
Casenumber.setColumns(10);

JButton btnSearch = new JButton("Load All Cases");
btnSearch.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseEntered(MouseEvent e) {
        btnSearch.setBackground(new Color(250,235,46));
    }
    @Override
    public void mouseExited(MouseEvent e) {
        btnSearch.setBackground(new Color(240,240,240));
    }
});
btnSearch.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e){
        try {
            String query = "SELECT * FROM CASES";
            PreparedStatement pst = connection.prepareStatement(query);
            ResultSet rs = pst.executeQuery();
            table.setModel(DbUtils.resultSetToTableModel(rs));

        } catch (Exception e1) {
            e1.printStackTrace();
            System.exit(1);
        }
    }
});
btnSearch.setBounds(331, 58, 141, 23);
contentPane.add(btnSearch);

close = new JButton("Close Case");
close.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseEntered(MouseEvent e) {
        close.setBackground(new Color(250,235,46));
    }
    @Override
    public void mouseExited(MouseEvent e) {
        close.setBackground(new Color(240,240,240));
    }
});

```



```

close.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        if(check()==1){
            try {
                String x = "C";
                String query = "UPDATE CASES set STATUS='"+x+"', CLOSED_DATE='"+date.getText()+"' WHERE
NO='"+Casenumber.getText()+"'";
                PreparedStatement pst = connection.prepareStatement(query);
                pst.execute();
                JOptionPane.showMessageDialog(null, "CASE STATUS UPDATED");

            } catch (Exception e1) {
                e1.printStackTrace();
                System.exit(1);
            }
            else JOptionPane.showMessageDialog(null, "FILL ALL THE DETAILS");
        });
    }

close.setBounds(466, 489, 116, 23);
contentPane.add(close);

scrollPane = new JScrollPane();
scrollPane.setBounds(29, 96, 769, 328);
contentPane.add(scrollPane);

table = new JTable();
table.setFont(new Font("Tahoma", Font.BOLD, 11));
scrollPane.setViewportView(table);

date = new JTextField();
Hover.effect(date);
date.setBounds(206, 490, 217, 20);
contentPane.add(date);
date.setColumns(10);

date1 = new JLabel("Closing Date:");
date1.setForeground(new Color(255, 255, 255));
date1.setBounds(73, 493, 109, 14);
contentPane.add(date1);
}

public int check(){
    if(Casenumber.getText().isEmpty() || date.getText().isEmpty())
        return 0;
    return 1; }
}

Commissioner:
package police;

import java.awt.BorderLayout;
import java.awt.EventQueue;
import java.awt.Image;

```

```

import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import javax.swing.ImageIcon;
import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JMenu;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JMenuBar;
import javax.swing.JMenuItem;
import javax.swing.JLabel;
import java.awt.SystemColor;
import java.awt.Color;
import java.awt.Font;

public class Commisisoner extends JFrame {

    private JPanel contentPane;
    static String name;
    static String surname;

    /**
     * Create the frame.
     */
    public Commisisoner() {
        setTitle("COMMISSONER");

        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setBounds(100, 100, 858, 571);

        contentPane = new JPanel();
        contentPane.setBackground(new Color(128, 0, 0));
        contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
        setContentPane(contentPane);
        contentPane.setLayout(null);

        JMenuBar menuBar = new JMenuBar();
        menuBar.setBackground(new Color(100, 149, 237));
        menuBar.setBounds(0, 0, 69, 21);
        contentPane.add(menuBar);

        JMenu mnSettings = new JMenu("Settings");
        menuBar.add(mnSettings);

        JMenuItem mntmLogout = new JMenuItem("Logout");
        mntmLogout.addActionListener(new ActionListener() {
            public void actionPerformed(ActionEvent e) {
                dispose();
                MAIN temp = new MAIN();
            }
        });
    }
}

```

```

        temp.setVisible(true);
    });
    mnSettings.add(mntmLogout);

    JButton btnNewButton = new JButton("Case Approval");
    Image img1 = new ImageIcon(this.getClass().getResource("/approve.png")).getImage();
    btnNewButton.setIcon(new ImageIcon(img1));
    btnNewButton.addMouseListener(new MouseAdapter() {
        @Override
        public void mouseEntered(MouseEvent e) {
            btnNewButton.setBackground(new Color(250,235,46));
        }
        @Override
        public void mouseExited(MouseEvent e) {
            btnNewButton.setBackground(new Color(240,240,240));
        }
    });
    btnNewButton.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e){
            dispose();
            Caseapp temp =new Caseapp();
            temp.setVisible(true);
        }
    });
    btnNewButton.setBounds(135, 108, 190, 121);
    contentPane.add(btnNewButton);

```

```

    JButton btnNewButton_1 = new JButton("Criminal Search");
    Image img = new ImageIcon(this.getClass().getResource("/search.png")).getImage();
    btnNewButton_1.setIcon(new ImageIcon(img));
    btnNewButton_1.addMouseListener(new MouseAdapter(){
        @Override
        public void mouseEntered(MouseEvent e) {
            btnNewButton_1.setBackground(new Color(250,235,46));
        }
        @Override
        public void mouseExited(MouseEvent e) {
            btnNewButton_1.setBackground(new Color(240,240,240));
        }
    });
    btnNewButton_1.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            dispose();
            CriminalRecords temp = new CriminalRecords();
            temp.setVisible(true);
        }
    });
    btnNewButton_1.setBounds(135, 315, 190, 113);
    contentPane.add(btnNewButton_1);

```

```

    JButton btnNewButton_2 = new JButton("Transfer Officer");
    Image img2 = new ImageIcon(this.getClass().getResource("/transfer.png")).getImage();
    btnNewButton_2.setIcon(new ImageIcon(img2));
    btnNewButton_2.addMouseListener(new MouseAdapter(){

```

```

@Override
public void mouseEntered(MouseEvent e) {
    btnNewButton_2.setBackground(new Color(250,235,46));
}

@Override
public void mouseExited(MouseEvent e) {
    btnNewButton_2.setBackground(new Color(240,240,240));
});

btnNewButton_2.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        dispose();
        Transfer temp = new Transfer();
        temp.setVisible(true);
    });
});

btnNewButton_2.setBounds(521, 108, 190, 121);
contentPane.add(btnNewButton_2);

JButton officer = new JButton("Add Officer");
Image img3 = new ImageIcon(this.getClass().getResource("/officer.png")).getImage();
officer.setIcon(new ImageIcon(img3));
officer.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseEntered(MouseEvent e) {
        officer.setBackground(new Color(250,235,46));
    }
    @Override
    public void mouseExited(MouseEvent e) {
        officer.setBackground(new Color(240,240,240));
    });
});

officer.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        dispose();
        Ofiicertemp = new Ofiicer();
        temp.setVisible(true);
    });
});

officer.setBounds(521, 315, 190, 113);
contentPane.add(officer);

JLabel intro = new JLabel("New label");
intro.setFont(intro.getFont().deriveFont(intro.getFont().getStyle() | Font.BOLD));
intro.setForeground(new Color(255, 255, 255));
intro.setBounds(348, 11, 256, 21);
contentPane.add(intro);

intro.setText("WELCOME" + " " + name + " " + surname);
officer.setFocusable(false);
btnNewButton_1.setFocusable(false);
btnNewButton.setFocusable(false);
btnNewButton_2.setFocusable(false);

```

Criminal:

```
package police;
```

```
import java.awt.BorderLayout;
import java.sql.*;
import javax.swing.*;
import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JTextField;
import java.awt.GridBagLayout;
import java.awt.Color;
import javax.swing.JButton;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.awt.event.FocusAdapter;
import java.awt.event.FocusEvent;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import javax.swing.JLabel;
import javax.swing.JOptionPane;
import javax.swing.JRadioButton;
import javax.swing.ButtonGroup;
import javax.swing.JTextArea;
```

```
public class Criminal extends JFrame {
```

```
    private JPanel contentPane;
    private JTextField name;
    private JTextField surname;
    private final ButtonGroup buttonGroup = new ButtonGroup();
    private JTextField address;
    private JTextField crime;
    private JTextField date;
    JRadioButton male = new JRadioButton("Male");
    JTextArea details = new JTextArea();
    JRadioButton female = new JRadioButton("Female");
    int count;
    Connection connection = null;
    /**
     * Launch the application.
     */
    /**
     * Create the frame.
     */
    public Criminal() {
        connection = sqlitedbconnection.dbconnector();
        setTitle("ADDCRIMINAL");
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE); 45
```

```

setBounds(100, 100, 858, 571);
contentPane = new JPanel();
contentPane.setBackground(new Color(128, 0, 0));
contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
setContentPane(contentPane);
contentPane.setLayout(null);

```

```

JButton Back = new JButton("BACK");
Back.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseEntered(MouseEvent e) {
        Back.setBackground(new Color(250,235,46));
    }
    @Override
    public void mouseExited(MouseEvent e) {
        Back.setBackground(new Color(240,240,240));
    }
});
Back.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        dispose();
        InspectorTemp = new Inspector();
        temp.setVisible(true);
    }
});
Back.setBounds(753, 0, 89, 23);
contentPane.add(Back);

```

```

JLabel lblName = new JLabel("Name :");
lblName.setForeground(new Color(255, 255, 255));
lblName.setBounds(100, 49, 46, 14);
contentPane.add(lblName);

```

```

JLabel variable = new JLabel("Surname :");
variable.setForeground(new Color(255, 255, 255));
variable.setBounds(95, 63, 99, 72);
contentPane.add(variable);

```

```

JLabel lblSex = new JLabel("Sex :");
lblSex.setForeground(new Color(255, 255, 255));
lblSex.setBackground(new Color(255, 255, 255));
lblSex.setBounds(105, 137, 46, 14);
contentPane.add(lblSex);

```

```

JLabel lblCrime = new JLabel("Crime :");
lblCrime.setForeground(new Color(255, 255, 255));
lblCrime.setBounds(100, 260, 46, 14);
contentPane.add(lblCrime);

```

```

JLabel lblData = new JLabel("Date :");
lblData.setForeground(new Color(255, 255, 255));
lblData.setBounds(100, 323, 46, 14);

```

```

contentPane.add(lblData);

JLabel lblDetails = new JLabel("Details :");
lblDetails.setForeground(new Color(255, 255, 255));
lblDetails.setBounds(100, 377, 46, 14);
contentPane.add(lblDetails);

name = new JTextField();
Hover.effect(name);
name.setBounds(159, 45, 206, 24);
contentPane.add(name);
name.setColumns(10);

surname = new JTextField();
Hover.effect(surname);
surname.setBounds(159, 89, 206, 23);
contentPane.add(surname);
surname.setColumns(10);

JLabel lblAddress = new JLabel("Address :");
lblAddress.setForeground(new Color(255, 255, 255));
lblAddress.setBounds(95, 189, 70, 39);
contentPane.add(lblAddress);

buttonGroup.add(male);
male.setBackground(new Color(128, 0, 0));
male.setForeground(new Color(255, 255, 255));
male.setBounds(159, 120, 60, 49);
contentPane.add(male);

buttonGroup.add(female);
female.setBackground(new Color(128, 0, 0));
female.setForeground(new Color(255, 255, 255));
female.setBounds(232, 119, 200, 50);
contentPane.add(female);

address = new JTextField();
Hover.effect(address);
address.setBounds(159, 178, 206, 60);
contentPane.add(address);
address.setColumns(10);

crime = new JTextField();
Hover.effect(crime);
crime.setBounds(159, 249, 206, 37);
contentPane.add(crime);
crime.setColumns(10);

date = new JTextField();
Hover.effect(date);

```

```

date.setBounds(159, 316, 106, 29);
contentPane.add(date);
date.setColumns(10);

```

```

details.addFocusListener(new FocusAdapter() {
    @Override
    public void focusGained(FocusEvent e) {
        details.setBackground(new Color(250,235,46));
    }
    @Override
    public void focusLost(FocusEvent e) {
        details.setBackground(new Color(240,240,240));
    }
});
details.setBounds(156, 372, 305, 72);
contentPane.add(details);

```

```

JButton submit = new JButton("Submit");
submit.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseEntered(MouseEvent e) {
        submit.setBackground(new Color(250,235,46));
    }
    @Override
    public void mouseExited(MouseEvent e) {
        submit.setBackground(new Color(240,240,240));
    }
});
submit.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {

```

```

        if(check()==1){
            count=0;
            try {

```

```

                String query2 = "SELECT * FROM CRIMINAL ";
                PreparedStatement pst = connection.prepareStatement(query2);
                ResultSet rs = pst.executeQuery();
                while(rs.next())count=rs.getInt("NO");
                String query = "insert into CRIMINAL (NO,NAME,SURNAME,SEX,ADDRESS,CRIME,DATE,DETAILS) values
                (?, ?, ?, ?, ?, ?, ?, ?)";

                PreparedStatement pst2 = connection.prepareStatement(query);
                pst2.setString(1, String.valueOf(count+1));
                pst2.setString(2, name.getText());
                pst2.setString(3, surname.getText());
                if(male.isSelected())
                    pst2.setString(4, String.valueOf('M'));
                else pst2.setString(4, String.valueOf('F'));
                pst2.setString(5, address.getText());
                pst2.setString(6, crime.getText());
                pst2.setString(7, date.getText());
                pst2.setString(8, details.getText());

```



```

        pst2.execute();
        JOptionPane.showMessageDialog(null, "CRIMINAL ADDED");
        dispose();
        Inspector temp = new Inspector();
        temp.setVisible(true);
    } catch (SQLException e1) {
        // TODOAuto-generated catch block
        e1.printStackTrace();
        System.exit(1);
    }
    else JOptionPane.showMessageDialog(null, "FILL ALL THE DETAILS");
    });
    submit.setBounds(100, 481, 89, 23);
    contentPane.add(submit);

    JLabel lblDdmmyr = new JLabel("DD/MM/YR");
    lblDdmmyr.setForeground(new Color(255, 255, 255));
    lblDdmmyr.setBounds(275, 323, 75, 14);
    contentPane.add(lblDdmmyr);
}

```

```

public int check(){

```

```

    if(name.getText().isEmpty()|| surname.getText().isEmpty() || (male.isSelected()==false && female.isSelected()==false) ||
    address.getText().isEmpty() || date.getText().isEmpty() || crime.getText().isEmpty() || details.getText().isEmpty() )
        return 0;
    return 1;
}

```

Criminal Records:

```

package police;

```

```

import java.awt.BorderLayout;
import java.sql.*;
import javax.swing.*;
import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JOptionPane;
import javax.swing.JTextField;
import javax.swing.JLabel;
import javax.swing.JButton;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import javax.swing.JTextArea;
import javax.swing.JTable;
import javax.swing.JScrollPane;
import net.proteanit.sql.DbUtils;

```

```

import java.awt.event.KeyAdapter;
import java.awt.event.KeyEvent;
import java.awt.Color;
import java.awt.Font;
import javax.swing.border.MatteBorder;

public class CriminalRecords extends JFrame {

    private JPanel contentPane;
    private JTable table;
    Connection connection = null;
    private JTextField search;

    /**
     * Launch the application.
     */
    /**
     * Create the frame.
     */
    public CriminalRecords() {

        connection = sqlitedbconnection.dbconnector();
        setTitle("CRIMINAL RECORDS");
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setBounds(100, 100, 858, 571);
        contentPane = new JPanel();
        contentPane.setBackground(new Color(128, 0, 0));
        contentPane.setForeground(new Color(128, 0, 0));
        contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
        setContentPane(contentPane);
        contentPane.setLayout(null);

        JButton btnSearch = new JButton("Load All");
        btnSearch.addMouseListener(new MouseAdapter() {
            @Override
            public void mouseEntered(MouseEvent e) {
                btnSearch.setBackground(new Color(250, 235, 46));
            }
            @Override
            public void mouseExited(MouseEvent e) {
                btnSearch.setBackground(new Color(240, 240, 240));
            }
        });
        btnSearch.addActionListener(new ActionListener() {
            public void actionPerformed(ActionEvent e) {
                try {
                    String query = "SELECT * FROM CRIMINAL";
                    PreparedStatement pst = connection.prepareStatement(query);
                    ResultSet rs = pst.executeQuery();
                    table.setModel(DbUtils.resultSetToTableModel(rs));
                }
            }
        });
    }
}

```

```

    } catch (Exception e1) {
        e1.printStackTrace();
        System.exit(1);
    }));
btnSearch.setBounds(366, 47, 89, 23);
contentPane.add(btnSearch);

JButton btnBack = new JButton("Back");
btnBack.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseEntered(MouseEvent e) {
        btnBack.setBackground(new Color(250,235,46));
    }
    @Override
    public void mouseExited(MouseEvent e) {
        btnBack.setBackground(new Color(240,240,240));
    }
});
btnBack.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {

        dispose();
        Commisisoner temp = new Commisisoner();
        temp.setVisible(true);
    }
});
btnBack.setBounds(753, 0, 89, 23);
contentPane.add(btnBack);

JScrollPane scrollPane = new JScrollPane();
scrollPane.setBounds(83, 81, 694, 371);
contentPane.add(scrollPane);

table = new JTable();
table.setFont(new Font("Tahoma", Font.BOLD, 11));
table.setBackground(new Color(255, 255, 255));
table.setForeground(new Color(0, 0, 0));
scrollPane.setViewportView(table);

search = new JTextField();
Hover.effect(search);
search.addKeyListener(new KeyAdapter() {
    @Override
    public void keyReleased(KeyEvent e) {
        try {

            String query = "SELECT * FROM CRIMINAL WHERE NAME=?";
            PreparedStatement pst = connection.prepareStatement(query);
            pst.setString(1, search.getText());
            ResultSet rs = pst.executeQuery();
            table.setModel(DbUtils.resultSetToTableModel(rs));

```

```

        } catch (Exception e1){
            e1.printStackTrace();
        }
    });
    search.setBounds(287, 463, 230, 40);
    contentPane.add(search);
    search.setColumns(10);

    JLabel lblStartTypingName = new JLabel("Type The Name To Search(CAPS)\r\n\r\n");
    lblStartTypingName.setForeground(new Color(255, 255, 255));
    lblStartTypingName.setBounds(75, 469, 202, 29);
    contentPane.add(lblStartTypingName);
}

```

FIR:

```
package police;
```

```

import java.awt.BorderLayout;
import java.awt.Color;
import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JOptionPane;
import javax.swing.JTextField;
import javax.swing.JLabel;
import javax.swing.JRadioButton;
import javax.swing.JRadioButtonMenuItem;
import javax.swing.ButtonGroup;
import javax.swing.JList;
import javax.swing.JButton;
import javax.swing.JMenuBar;
import javax.swing.JTextArea;
import java.sql.*;
import javax.swing.*;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.awt.event.FocusAdapter;
import java.awt.event.FocusEvent;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;

```

```
public class Fir extends JFrame {
```

```

    private JPanel contentpane;
    private JTextField name;
    private JLabel lblSurname;
    private JTextField surname;
    private final ButtonGroup buttonGroup = new ButtonGroup();
    private JRadioButton female;

    JRadioButton male = new JRadioButton("MALE");

```

```

private JLabel ADDRESS;
private JTextField address;
private JLabel lblAge;
private JTextField age;
private JLabel lblYears;
private JLabel lblCrime;
private JTextArea details;
private JTextField crime;
private JTextField date;
int count;

Connection connection = null;

/**
 * Create the frame.
 */
public Fir() {
    connection = sqliteconnection.dbconnector();
    setTitle("FIR");
    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    setBounds(100, 100, 858, 571);
    contentpane = new JPanel();
    contentpane.setBackground(new Color(128, 0, 0));
    contentpane.setForeground(new Color(128, 0, 0));

    contentpane.setBorder(new EmptyBorder(5, 5, 5, 5));
    setContentPane(contentpane);
    contentpane.setLayout(null);

    female = new JRadioButton("FEMALE");
    female.setForeground(new Color(255, 255, 255));
    female.setBackground(new Color(128, 0, 0));
    buttonGroup.add(female);
    female.setBounds(340, 123, 74, 50);
    contentpane.add(female);

    name = new JTextField();
    Hover.effect(name);
    name.setBounds(236, 27, 267, 32);
    contentpane.add(name);
    name.setColumns(10);

    JLabel lblName = new JLabel("NAME : ");
    lblName.setForeground(new Color(255, 255, 255));
    lblName.setBounds(145, 27, 53, 32);
    contentpane.add(lblName);

    lblSurname = new JLabel("SURNAME :");
    lblSurname.setForeground(Color.WHITE);
    lblSurname.setBackground(Color.WHITE);

```

```

lblSurname.setBounds(124, 84, 74, 32);
contentpane.add(lblSurname);

surname = new JTextField();
Hover.effect(surname);
surname.setColumns(10);
surname.setBounds(236, 84, 267, 32);
contentpane.add(surname);

JLabel SEX = new JLabel("SEX :");
SEX.setForeground(Color.WHITE);
SEX.setBounds(152, 141, 46, 14);
contentpane.add(SEX);

buttonGroup.add(male);
male.setBackground(new Color(128, 0, 0));
male.setForeground(new Color(255, 255, 255));
male.setBounds(236, 123, 61, 50);
contentpane.add(male);

ADDRESS = new JLabel("ADDRESS :");

ADDRESS.setForeground(Color.WHITE);
ADDRESS.setBounds(124, 206, 74, 14);
contentpane.add(ADDRESS);

address = new JTextField();
Hover.effect(address);
address.setBounds(236, 200, 267, 50);
contentpane.add(address);
address.setColumns(10);

lblAge = new JLabel("AGE :");
lblAge.setForeground(Color.WHITE);
lblAge.setBounds(145, 285, 46, 14);
contentpane.add(lblAge);

age = new JTextField();
Hover.effect(age);
age.setBounds(236, 281, 61, 23);
contentpane.add(age);
age.setColumns(10);

lblYears = new JLabel("YEARS");
lblYears.setForeground(Color.WHITE);
lblYears.setBounds(314, 285, 46, 14);
contentpane.add(lblYears);

lblCrime = new JLabel("CRIME :");
lblCrime.setForeground(Color.WHITE);

```

```
lblCrime.setBounds(131, 341, 46, 14);
contentpane.add(lblCrime);
```

```
JButton SUBMIT = new JButton("SUBMIT");
SUBMIT.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseEntered(MouseEvent e) {
        SUBMIT.setBackground(new Color(250,235,46));
    }
    @Override
    public void mouseExited(MouseEvent e) {
        SUBMIT.setBackground(new Color(240,240,240));
    }
});
```

```
SUBMIT.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e){
        if(check()==1){
            count=0;
```

```
try {
    String query2 = "SELECT * FROM FIR ";
    PreparedStatement pst = connection.prepareStatement(query2);
    ResultSet rs = pst.executeQuery();
    while(rs.next())count=rs.getInt("NO");;
    String query = "insert into FIR (NO,NAME,SURNAME,SEX,ADDRESS,AGE,CRIME,DETAILS,DATE,BY) values
    (?, ?, ?, ?, ?, ?, ?, ?, ?, ?)";
    PreparedStatement pst2 = connection.prepareStatement(query);
    pst2.setString(1, String.valueOf(count+1));
    pst2.setString(2, name.getText());
    pst2.setString(3, surname.getText());
    if(male.isSelected())
        pst2.setString(4, String.valueOf('M'));
    else pst2.setString(4, String.valueOf('F'));
    pst2.setString(5, address.getText());
    pst2.setString(6, age.getText());
    pst2.setString(7, crime.getText());
    pst2.setString(8, details.getText());
    pst2.setString(9, date.getText());
    pst2.setString(10, Inspector.name+ " "+Inspector.surname);
    pst2.execute();
    JOptionPane.showMessageDialog(null, "FIR Submitted");
    dispose();
    Inspector temp = new Inspector();
    temp.setVisible(true);
} catch (SQLException e1) {
    // TODO Auto-generated catch block
    e1.printStackTrace();
    System.exit(1);
}
} else {JOptionPane.showMessageDialog (n ull, "FILL THE DETAILS " );}});
```

```

SUBMIT.setBounds(88, 486, 89, 23);
contentpane.add(SUBMIT);

JButton BACK = new JButton("BACK");
BACK.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseEntered(MouseEvent e) {
        BACK.setBackground(new Color(250,235,46));
    }
    @Override
    public void mouseExited(MouseEvent e) {
        BACK.setBackground(new Color(240,240,240));
    }
});
BACK.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        dispose();
        Inspector temp = new Inspector();
        temp.setVisible(true);
    }
});
BACK.setBounds(753, 0, 89, 23);
contentpane.add(BACK);

JLabel lblDetails = new JLabel("Details :");
lblDetails.setForeground(Color.WHITE);
lblDetails.setBounds(131, 403, 46, 14);
contentpane.add(lblDetails);

details = new JTextArea();
details.setLineWrap(true);
details.setBounds(238, 398, 441, 81);
contentpane.add(details);

crime = new JTextField();
Hover.effect(crime);
crime.setBounds(236, 329, 267, 39);
contentpane.add(crime);
crime.setColumns(10);

JLabel lblDateDdmmYr = new JLabel("DATE: DD/MM/YR");
lblDateDdmmYr.setForeground(Color.WHITE);
lblDateDdmmYr.setBounds(456, 285, 140, 14);
contentpane.add(lblDateDdmmYr);

date = new JTextField();
Hover.effect(date);
date.setBounds(558, 282, 121, 20);
contentpane.add(date);
date.setColumns(10);
details.addFocusListener(new FocusAdapter() {
    @Override

```



```

    public void focusGained(FocusEvent e) {
        details.setBackground(new Color(250,235,46));
    }
    @Override
    public void focusLost(FocusEvent e) {
        details.setBackground(new Color(240,240,240));
    });}

    public int check(){

        if( name.getText().isEmpty() || surname.getText().isEmpty() || (male.isSelected()==false &&female.isSelected()==false) ||
        address.getText().isEmpty() || age.getText().isEmpty() || date.getText().isEmpty() || crime.getText().isEmpty() ||
        details.getText().isEmpty() )
            return 0;
        return 1;
    }
}

```

Hover:

```

package police;

import java.awt.Color;
import java.awt.event.FocusAdapter;
import java.awt.event.FocusEvent;
import javax.swing.JTextField;

public class Hover {

    static void effect (JTextField x){
        x.addFocusListener(new FocusAdapter() {
            @Override
            public void focusGained(FocusEvent e) {
                x.setBackground(new Color(250,235,46));
            }
            @Override
            public void focusLost(FocusEvent e) {
                x.setBackground(new Color(240,240,240));
            });}
    }
}

```

Inspector:

```

package police;

import java.awt.BorderLayout;
import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JButton;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import javax.swing.JScrollBar;
import java.awt.FlowLayout;
import javax.swing.ImageIcon;

```

```

import javax.swing.JList;
import javax.swing.BoxLayout;
import javax.swing.JMenuBar;
import javax.swing.JMenu;
import javax.swing.JMenuItem;
import javax.swing.JOptionPane;
import javax.swing.JSeparator;
import java.awt.Color;
import java.awt.GridLayout;
import java.awt.GridBagLayout;
import java.awt.CardLayout;
import java.awt.Image;
import javax.swing.JLabel;
import javax.swing.UIManager;
import java.awt.Font;
import java.awt.SystemColor;
import java.awt.event.MouseMotionAdapter;
import java.awt.event.MouseEvent;
import java.awt.event.MouseAdapter;

```

```

public class Inspector extends JFrame {

```

```

    private JPanel contentPane;

```

```

    static String name = null ;
    static String surname = null;
    /**
     * Create the frame.
     */

```

```

    public Inspector() {
        setForeground(new Color(128, 0, 0));
        setTitle("INSPECTOR");
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setBounds(100, 100, 858, 571);
        contentPane = new JPanel();
        contentPane.setForeground(new Color(128, 0, 0));
        contentPane.setBackground(new Color(128, 0, 0));
        contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
        setContentPane(contentPane);
        contentPane.setLayout(null);

```

```

        JButton Leave = new JButton("REQUEST LEAVE\r\n");
        Leave.addMouseListener(new MouseAdapter() {
            @Override
            public void mouseEntered(MouseEvent e) {
                Leave.setBackground(new Color(250, 235, 46));
            }
            @Override
            public void mouseExited(MouseEvent e) {

```

```

        Leave.setBackground(new Color(240,240,240));
    });
    Image img3 = new ImageIcon (this.getClass().getResource("/leave.png")).getImage();
    Leave.setIcon(new ImageIcon(img3));
    Leave.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            JOptionPane.showMessageDialog(null, "LEAVE LETTER HAS BEEN SENT TO COMMISSIONER");
        }
    });
    Leave.setBounds(527, 108, 190, 121);
    contentPane.add(Leave);

    JButton Criminal = new JButton("ADD CRIMINAL");
    Image img1 = new ImageIcon (this.getClass().getResource("/criminal.png")).getImage();
    Criminal.setIcon(new ImageIcon(img1));
    Criminal.addMouseListener(new MouseAdapter() {
        @Override
        public void mouseEntered(MouseEvent e) {
            Criminal.setBackground(new Color(250,235,46));
        }
        @Override
        public void mouseExited(MouseEvent e) {
            Criminal.setBackground(new Color(240,240,240));
        }
    });
    Criminal.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e){
            dispose();
            Criminal temp = new Criminal();
            temp.setVisible(true);
        }
    });
    Criminal.setBounds(135, 332, 190, 121);
    contentPane.add(Criminal);

    JButton addcase = new JButton("ADD CASE");
    Image img2 = new ImageIcon (this.getClass().getResource("/case.png")).getImage();
    addcase.setIcon(new ImageIcon(img2));
    addcase.addMouseListener(new MouseAdapter() {
        @Override
        public void mouseEntered(MouseEvent e) {
            addcase.setBackground(new Color(250,235,46));
        }
        @Override
        public void mouseExited(MouseEvent e) {
            addcase.setBackground(new Color(240,240,240));
        }
    });
    addcase.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            dispose();
            Addcase temp = new Addcase();
            temp.setVisible(true);
        }
    });

```

```

addcase.setBounds(527, 332, 190, 121);
contentPane.add(addcase);

JMenuBar menuBar = new JMenuBar();
menuBar.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseEntered(MouseEvent e) {
        menuBar.setBackground(new Color(250, 235, 46));
    }
    @Override
    public void mouseExited(MouseEvent e) {
        menuBar.setBackground(new Color(240, 240, 240));
    }
});
menuBar.setBounds(0, 0, 63, 23);

menuBar.setBackground(new Color(240, 240, 240));
contentPane.add(menuBar);

JMenu mnSettings = new JMenu("Settings");
menuBar.add(mnSettings);

JMenuItem mntmLogout = new JMenuItem("Logout");
mntmLogout.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        dispose();
        MAINtemp = new MAIN();
        temp.setVisible(true);
    }
});
mnSettings.add(mntmLogout);

JLabel intro_name = new JLabel("dwadaw");
intro_name.setForeground(new Color(255, 255, 255));
intro_name.setFont(intro_name.getFont().deriveFont(intro_name.getFont().getStyle() | Font.BOLD));
intro_name.setText("WELCOME" + " " + name + " " + surname + "!!");
intro_name.setBounds(309, 11, 262, 23);
contentPane.add(intro_name);

JButton Fir = new JButton("ADD FIR");
Fir.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseEntered(MouseEvent e) {
        Fir.setBackground(new Color(250, 235, 46));
    }
    @Override
    public void mouseExited(MouseEvent e) {
        Fir.setBackground(new Color(240, 240, 240));
    }
});
Fir.setFocusable(false);
addcase.setFocusable(false);
Criminal.setFocusable(false);

```

```
Leave.setFocusable(false);
```

```
Image img = new ImageIcon (this.getClass().getResource("/fir3.png")).getImage();
Fir.setIcon(newImageIcon(img));
Fir.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        dispose();
        Fir temp = newFir();
        temp.setVisible(true);
    }
});
Fir.setBounds(135, 108, 190, 121);
contentPane.add(Fir);
}}
```

Main:

```
package police;
```

```
import java.applet.Applet;
import java.awt.BorderLayout;
import java.awt.Color;
import java.awt.EventQueue;
import java.awt.Graphics;
import java.awt.Image;
import javax.print.DocFlavor.URL;
import javax.swing.ImageIcon;
import javax.swing.JFrame;
import javax.swing.JOptionPane;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JButton;
import javax.swing.JTextField;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.sql.*;
import javax.swing.JLabel;
import javax.swing.JPasswordField;
import java.awt.Font;
```

```
public class MAIN extends JFrame {
```

```
    private JPanel contentPane;
    private JTextField UID;
    private JPasswordField PWD;
```

```
/**
```

```
 * Launch the application.
```

```
*/
```

```
public static void main(String[] args){
```

```

EventQueue.invokeLater(new Runnable() {
    public void run() {
        try {
            MAIN frame = new MAIN();
            frame.setVisible(true);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
});
Connection connection = null;

/**
 * Create the frame.
 */
public MAIN() {

    connection = sqliteconnection.dbconnector();
    setTitle("HOME PAGE");
    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    setBounds(100, 100, 858, 571);
    contentPane = new JPanel();
    contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
    contentPane.setBackground(new Color(128, 0, 0));
    setContentPane(contentPane);
    contentPane.setLayout(null);

    UID = new JTextField();
    UID.setBounds(579, 65, 109, 23);
    contentPane.add(UID);
    UID.setColumns(10);

    JLabel lblUserId = new JLabel("USER ID :");
    lblUserId.setFont(lblUserId.getFont().deriveFont(lblUserId.getFont().getStyle() | Font.BOLD));
    lblUserId.setForeground(Color.WHITE);
    lblUserId.setBounds(480, 67, 70, 19);
    contentPane.add(lblUserId);

    JLabel lblPwd = new JLabel("PASSWORD :");
    lblPwd.setFont(lblPwd.getFont().deriveFont(lblPwd.getFont().getStyle() | Font.BOLD));
    lblPwd.setForeground(Color.WHITE);
    lblPwd.setBounds(480, 112, 89, 19);
    contentPane.add(lblPwd);

    JButton btnSignIn = new JButton("SIGN IN");
    btnSignIn.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            PreparedStatement pst=null;

            try{
                String query ="SELECT * FROM OFFICERS where username=? and password=?";
                String rank=null;

```

```

pst = connection.prepareStatement(query);
pst.setString(1, UID.getText());
pst.setString(2, PWD.getText());
ResultSet rs = pst.executeQuery();
int count = 0;
while(rs.next()){
    count++;
    rank = rs.getString("RANK");
    if(rank.equals("INSPECTOR")){
        Inspector.name = rs.getString("NAME");
        Inspector.surname =rs.getString("SURNAME");
    }

    else {
        Commisisoner.name = rs.getString("NAME");
        Commisisoner.surname = rs.getString("SURNAME");
    }
}
if(count==1){
    if(rank.equals("INSPECTOR")){
        dispose();
        Inspector ins_obj = new Inspector();
        ins_obj.setVisible(true);
    }
    else if(rank.equals("COMMISSIONER")){
        dispose();
        Commisisoner temp = new Commisisoner();
        temp.setVisible(true);
    }
}
else JOptionPane.showMessageDialog(null, "user name and password not correct");
rs.close();
pst.close();

}catch(Exception e1){
    JOptionPane.showMessageDialog(null, e1);
    System.exit(1);
}}});
btnSignIn.setBounds(579, 172, 89, 23);
contentPane.add(btnSignIn);

PWD = new JPasswordField();
PWD.setBounds(579, 111, 109, 19);
contentPane.add(PWD);

JLabel justice_img = new JLabel("");
justice_img.setBounds(35, 28, 377, 422);
contentPane.add(justice_img);
Image img = new ImageIcon(this.getClass().getResource("/india justice(main page).jpe")).getImage();
justice_img.setIcon(new ImageIcon(img));
getContentPane().add(justice_img);
}

```

Officer:

```
package police;
```

```
import java.awt.BorderLayout;
import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JOptionPane;
import javax.swing.JTextField;
import javax.swing.JButton;
import javax.swing.JLabel;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.sql.Connection;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import javax.swing.JPasswordField;
import java.awt.Color;
import java.awt.Font;
```

```
public class Ofiicerextends JFrame {
```

```
    private JPanel contentPane;
    private JTextField name;
    private JTextField surname;
    private JTextField username;
    private JTextField rank;
    private JTextField date;
    private JButton submit;
    int count;
    Connection connection = null;
    private JPasswordField password;
```

```
/**
```

```
 * Create the frame.
```

```
*/
```

```
public Ofiicer() {
    setBackground(new Color(0, 0, 0));
    JLabel name1 = new JLabel("NAME :");
    name1.setFont(new Font("Tahoma", Font.BOLD, 11));
    name1.setBackground(new Color(255, 255, 255));
    name1.setForeground(new Color(255, 255, 255));
    connection = sqlitedbconnection.dbconnector();
    setTitle("Add Ofiicer");
    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
```



```

setBounds(100, 100, 858, 571);
contentPane = new JPanel();
contentPane.setBackground(new Color(128, 0, 0));
contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
setContentPane(contentPane);
contentPane.setLayout(null);

name = new JTextField();
name.setBounds(321, 78, 185, 28);
contentPane.add(name);
name.setColumns(10);
Hover.effect(name);

JButton btnNewButton = new JButton("BACK");
btnNewButton.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseEntered(MouseEvent e) {
        btnNewButton.setBackground(new Color(250, 235, 46));
    }
    @Override
    public void mouseExited(MouseEvent e) {
        btnNewButton.setBackground(new Color(240, 240, 240));
    }
});
btnNewButton.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        dispose();
        Commissoner temp = new Commissoner();
        temp.setVisible(true);
    }
});
btnNewButton.setBounds(747, 0, 95, 28);
contentPane.add(btnNewButton);

surname = new JTextField();
Hover.effect(surname);
surname.setBounds(321, 131, 185, 28);
contentPane.add(surname);
surname.setColumns(10);

username = new JTextField();
Hover.effect(username);
username.setBounds(321, 184, 185, 28);
contentPane.add(username);
username.setColumns(10);

rank = new JTextField();
Hover.effect(rank);
rank.setBounds(321, 309, 185, 28);
contentPane.add(rank);
rank.setColumns(10);

```

```

date = new JTextField();
Hover.effect(date);
date.setBounds(321, 370, 185, 28);
contentPane.add(date);
date.setColumns(10);

submit = new JButton("SUBMIT");
submit.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseEntered(MouseEvent e) {
        submit.setBackground(new Color(250,235,46));
    }
    @Override
    public void mouseExited(MouseEvent e) {
        submit.setBackground(new Color(240,240,240));
    }
});
submit.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        if(check()==1){
            count=0;

            try {
                String query2 = "SELECT * FROM OFFICERS ";
                PreparedStatement pst = connection.prepareStatement(query2);
                ResultSet rs = pst.executeQuery();
                while(rs.next()){count= rs.getInt("ID");}
                String query = "insert into OFFICERS (ID,NAME,SURNAME,USERNAME,PASSWORD,RANK,DATE) values
(?,?,?,?,?,?,?)";
                PreparedStatement pst2 = connection.prepareStatement(query);
                pst2.setString(1, String.valueOf(count+1));
                pst2.setString(2, name.getText());
                pst2.setString(3, surname.getText());
                pst2.setString(4, username.getText());
                pst2.setString(5, password.getText());
                pst2.setString(6, rank.getText());
                pst2.setString(7, date.getText());
                pst2.execute();
                JOptionPane.showMessageDialog(null, "OFFICER ADDED");
                dispose();
                Commissionertemp = new Commissioner();
                temp.setVisible(true);
            } catch (SQLException e1) {
                // TODO Auto-generated catch block
                e1.printStackTrace();
                System.exit(1);
            }
        }
        else {JOptionPane.showMessageDialog(null, "FILL ALL THE DETAILS");}
    }
});
submit.setBounds(156, 463, 113, 36);
contentPane.add(submit);

```

```
name1.setBounds(250, 85, 61, 14);
contentPane.add(name1);
```

```
JLabel surname2 = new JLabel("SURNAME :");
surname2.setFont(new Font("Tahoma", Font.BOLD, 11));
surname2.setForeground(new Color(255, 255, 255));
surname2.setBounds(231, 138, 61, 14);
contentPane.add(surname2);
```

```
JLabel username1 = new JLabel("USERNAME :");
username1.setForeground(new Color(255, 255, 255));
username1.setFont(username1.getFont().deriveFont(username1.getFont().getStyle() | Font.BOLD));
username1.setBounds(229, 188, 82, 21);
contentPane.add(username1);
```

```
JLabel password1 = new JLabel("PASSWORD :");
password1.setFont(new Font("Tahoma", Font.BOLD, 11));
password1.setForeground(new Color(255, 255, 255));
password1.setBounds(224, 243, 103, 14);
contentPane.add(password1);
```

```
JLabel rank1 = new JLabel("RANK :");
rank1.setFont(new Font("Tahoma", Font.BOLD, 11));
rank1.setForeground(new Color(255, 255, 255));
rank1.setBounds(250, 316, 46, 14);
contentPane.add(rank1);
```

```
JLabel date1 = new JLabel("DATE of JOINING :");
date1.setFont(new Font("Tahoma", Font.BOLD, 11));
date1.setForeground(new Color(255, 255, 255));
date1.setBounds(197, 374, 130, 21);
contentPane.add(date1);
```

```
JLabel lblDdmmYr = new JLabel("DD/MM/YR");
lblDdmmYr.setFont(new Font("Tahoma", Font.BOLD, 11));
lblDdmmYr.setForeground(new Color(255, 255, 255));
lblDdmmYr.setBounds(556, 377, 76, 14);
contentPane.add(lblDdmmYr);
```

```
JLabel lblInspectorcommissoner = new JLabel("INSPECTOR/COMMISSONER");
lblInspectorcommissoner.setForeground(new Color(255, 255, 255));
lblInspectorcommissoner.setFont(new Font("Tahoma", Font.BOLD, 11));
lblInspectorcommissoner.setBounds(556, 316, 171, 14);
contentPane.add(lblInspectorcommissoner);
```

```
password = new JPasswordField();
Hover.effect(password);
password.setBounds(321, 235, 185, 31);
contentPane.add(password); }
```

```
public int check(){
```

```

        if(name.getText().isEmpty()|| surname.getText().isEmpty() || username.getText().isEmpty()|| password.getText().isEmpty()||
rank.getText().isEmpty() || date.getText().isEmpty() )
            return 0;
        return 1;
    }
}

```

SQLite Connection:

```

package police;

import java.sql.*;
import javax.swing.*;
public class sqliteconnection {

    Connection conn = null;
    public static Connection dbconnector(){
        try{
            Class.forName("org.sqlite.JDBC");
            Connection conn = DriverManager.getConnection("jdbc:sqlite:test.sqlite");

            return conn;
        }catch(Exception e){
            JOptionPane.showMessageDialog(null, e);
            System.exit(0);
            return null;
        }
    }
}

```

Transfer:

```

package police;

import java.awt.BorderLayout;
import java.awt.EventQueue;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.sql.Connection;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JOptionPane;
import javax.swing.JPanel;
import javax.swing.JTextField;
import javax.swing.border.EmptyBorder;
import javax.swing.JTextArea;
import javax.swing.JTable;
import javax.swing.JScrollPane;
import net.proteanit.sql.DbUtils;
import java.awt.Color;
import java.awt.Font;

```

```

public class Transfer extends JFrame {

    private JPanel contentPane;
    private JTextField id;
    private JTable table;
    private JTextField place;

    Connection connection = null;

    /**
     * Create the frame.
     */
    public Transfer() {
        connection = sqliteconnection.dbconnector();
        setTitle("TRANSFER");
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setBounds(100, 100, 858, 571);
        contentPane = new JPanel();
        contentPane.setBackground(new Color(128, 0, 0));
        contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
        setContentPane(contentPane);
        contentPane.setLayout(null);

        JLabel lblEnterName = new JLabel("Enter ID Of Officer To Transfer");
        lblEnterName.setForeground(new Color(255, 255, 255));
        lblEnterName.setBounds(170, 439, 171, 17);
        contentPane.add(lblEnterName);

        JButton btnSearch = new JButton("Transfer");
        btnSearch.addMouseListener(new MouseAdapter() {
            @Override
            public void mouseEntered(MouseEvent e) {
                btnSearch.setBackground(new Color(250, 235, 46));
            }
            @Override
            public void mouseExited(MouseEvent e) {
                btnSearch.setBackground(new Color(240, 240, 240));
            }
        });
        btnSearch.addActionListener(new ActionListener() {
            public void actionPerformed(ActionEvent e) {
                if(id.getText().isEmpty() || place.getText().isEmpty())
                    JOptionPane.showMessageDialog(null, "FILL ALL DETAILS");
                else{
                    try {
                        String query = "DELETE FROM OFFICERS WHERE ID='"+id.getText()+"' ";
                        PreparedStatement pst = connection.prepareStatement(query);
                        pst.execute();
                        JOptionPane.showMessageDialog(null, "TRANSFER LETTER WILL BE SENT");
                    } catch (Exception e1){

```

```

        e1.printStackTrace();
        System.exit(1);
    }));
btnSearch.setBounds(541, 472, 89, 23);
contentPane.add(btnSearch);

JButton btnBack = new JButton("Back");
btnBack.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseEntered(MouseEvent e) {
        btnBack.setBackground(new Color(250,235,46));
    }
    @Override
    public void mouseExited(MouseEvent e) {
        btnBack.setBackground(new Color(240,240,240));
    }
});
btnBack.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {

        dispose();
        Commisisonertemp = new Commisisoner();
        temp.setVisible(true);
    }
});
btnBack.setBounds(753, 0, 89, 23);
contentPane.add(btnBack);

id = new JTextField();
Hover.effect(id);
id.setBounds(351, 433, 147, 29);
contentPane.add(id);
id.setColumns(10);

JScrollPane scrollPane = new JScrollPane();
scrollPane.setBounds(71, 67, 714, 352);
contentPane.add(scrollPane);

table = new JTable();
table.setFont(new Font("Tahoma", Font.BOLD, 11));
scrollPane.setViewportView(table);

JButton btnNewButton = new JButton("Load All Officers");
btnNewButton.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseEntered(MouseEvent e) {
        btnNewButton.setBackground(new Color(250,235,46));
    }
    @Override
    public void mouseExited(MouseEvent e) {
        btnNewButton.setBackground(new Color(240,240,240));
    }
});
btnNewButton.addActionListener(new ActionListener() {

```

```

public void actionPerformed(ActionEvent e) {
    try {
        String query = "SELECT ID,NAME,SURNAME,RANK,DATE FROM OFFICERS";
        PreparedStatement pst = connection.prepareStatement(query);
        ResultSet rs = pst.executeQuery();
        while(rs.next()){
            if(rs.getString("RANK").equals("COMMISSONER"));
            else
                table.setModel(DbUtils.resultSetToTableModel(rs));
        } catch (Exception e1){
            e1.printStackTrace();
            System.exit(1);
        }
    });
    btnNewButton.setBounds(327, 30, 171, 23);
    contentPane.add(btnNewButton);

    place = new JTextField();
    Hover.effect(place);
    place.setBounds(349, 469, 149, 29);
    contentPane.add(place);
    place.setColumns(10);

    JLabel lblEnterPlace = new JLabel("Enter Place ");
    lblEnterPlace.setForeground(new Color(255, 255, 255));
    lblEnterPlace.setBounds(170, 475, 74, 17);
    contentPane.add(lblEnterPlace);
}

```

# CERTIFICATION



## CERTIFICATE OF COMPLETION

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