

University Institute of Engineering
and Technology
CSJM University
Kanpur

DBMS Project Report

Project Title:- Crime Record Management

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INDEX:

Title-----	Page
1. Declaration by the student-----	
2. Abstract-----	
3. Introduction-----	
4. Description about schema-----	
5. About relation of schema-----	
6. Functionality provided by application-----	
7. Description of tools used-----	
8. References-----	

Declaration

This is to Declare that this project has been solely developed by me. No part of this project has been plagiarized from the internet or other sources. Any information included from Books/Sites has been duly acknowledged.

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Abstract—

The proposed system applies to all Police stations across the country and specifically looks into the subject of Crime Records Management. 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 depend on what quality of information it can derive from its existing records and how fast it can have access to it. 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. The project has been planned to be having the view of distributed architecture, with centralized storage of the database. The application for the storage of the data has been planned. Using the constructs of SQL server and all the user interfaces have been designed using Python3 modules such as 'tkinter' and connection between the user interface and database is done by the Python module 'pymysql'.

-----:INTRODUCTION :-----

The Crime Records Management System applies to working record of Police Stations all across the country and specifically looks into the subject crime prevention, working information (efficiency) of officer and also the efficiency of the Police Department depending on a highly responsive backbone of Information Management. The efficiency of Police department is determined by the ratio of solved cases and pending cases. The efficiency of any officer is also determined by the percentage of cases solved by that officer. This project will help to collect the information about the most unsafe place and help people to be attentive while they are visiting those areas leading to the minimization of crime.

Modules:

1:- Officer Module:- The officer has to select the option 'login as officer' and have to enter the authorized id and password. Once the prospective station registers with the software they can avail the existing records.

2:- Citizen Module:- The citizen has to select the option 'login as citizen' and he did not required any authentication. The can just go to the informative application pops next to it.

System Analysis:-

System Analysis works with users to identify goals and build systems to achieve them. System analysis is an important phase of any system development process. The system is studied to the minutest details and analyzed. The system analyst plays the role of an interrogator and dwells deep in to the working of the present system. In analysis, a detailed study of these operations performed by a system and their relationships within and outside of the system is done. A key question considered here is, “what must be done to solve the problem?” One aspect of analysis is defining the boundaries of the system and determining whether or not the candidate system should be considered. The system is viewed as a whole and the inputs to the system are identified. The outputs from the system are traced through the various processing that the input phases through in the organization. During analysis, data are collected on available files, decision points, and transaction handled by present system. Once analysis is completed the analyst has a firm understanding of what is to be done.

Existing System:-

In the existing crime management system, most of the operations are done manually like send complaints, taking actions against crimes, view status

etc. So with the existing system if anybody wants to complaint against crimes he must do it through the police. If we are doing the system manually, so many minor errors will occur. Error detection in the previous entries made and data cross verification is another important function. These are done manually, and it would take time. The data extraction is quiet difficult and doing it manually is very tough task. The information of the work progress of any department or any officer is quiet difficult to get as the data is very bulky.

1) Drawbacks of the existing system can be concluded as follows:

- * The existing system is time consuming and not very user friendly.
- * The existing system is not efficient to have the informative outputs about crime and officers.
- * The existing system is not able to provide the working of it's department.
- * As per our jurisdiction, "Let thousand criminals escape not a single innocent be punished ". As a result of this and other factors that influence investigation, such as bribery, the innocent becomes accused in several situations in the eyes of Justice.
- * The existing system could provide only investigation and there is no Advocating, Counseling facilities and

transparency of the working of the system etc. hence no contact or control or co-ordination on these cell.

IV. PROPOSED SYSTEM:-

Our mission statement directs us to promote the public interest while balancing the Law. Obviously we'll not rush to judgment, but will look at the facts and render a thoughtful decision based on these facts. Organization is an independent statutory body which was created to maintain an effective and efficient police service for the public. Its primary task includes securing continuous needs of the public in an efficient manner. As part of the responsibility, 'our committee' is responsible for performance monitoring (performance planning and review formerly professional standards and performance monitoring) decided to look at the contribution and effectiveness of the organization within the public. We need the whole hearted support of each and every individual member of the site and cooperation of the users. Given their key role in these partnerships, we felt that an overview of strength and Weakness of the organization is needed. The aim of the project is to reduce the crime rate .

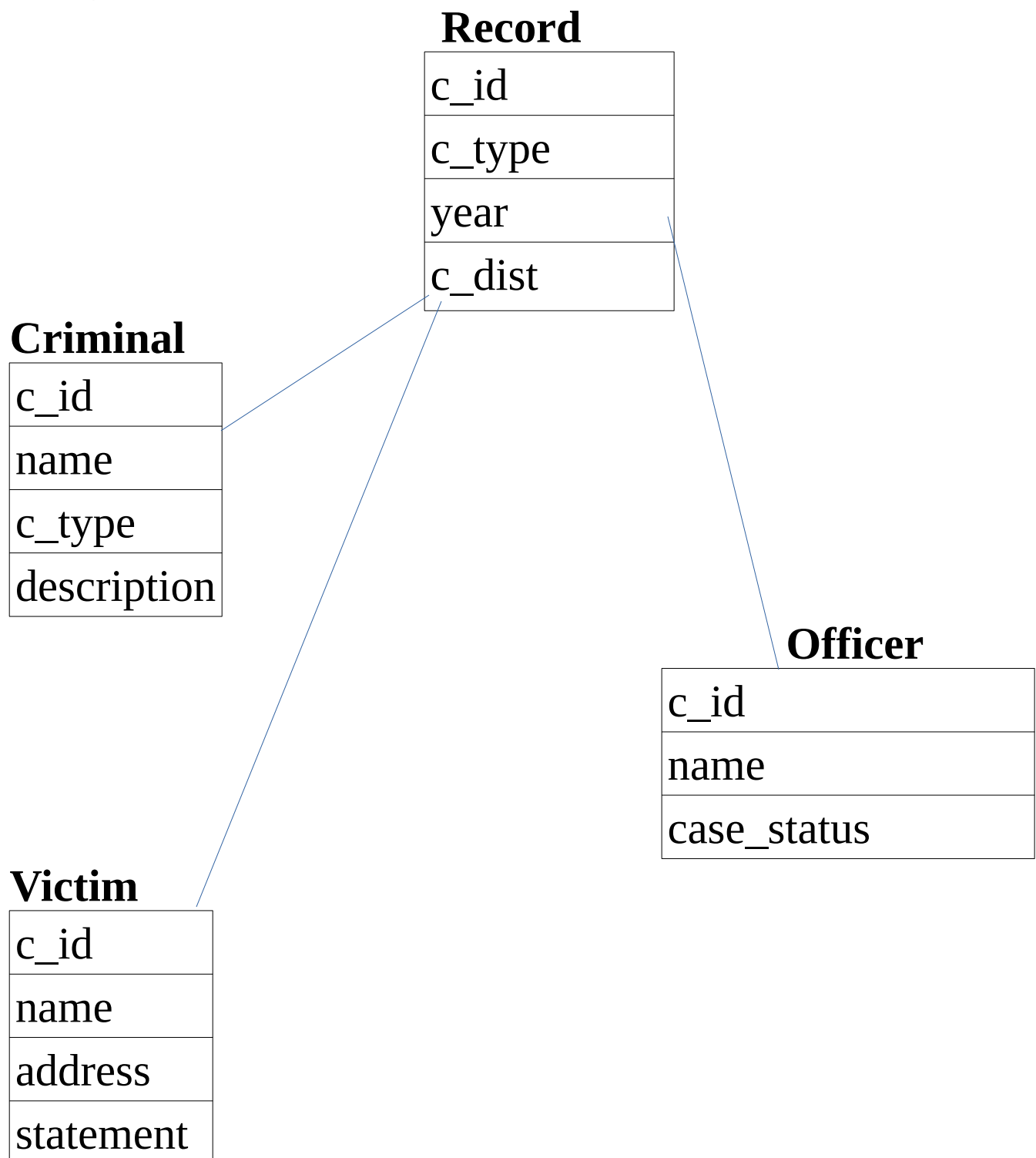
Description about the schema :-

There are five tables into the database.

The description of each table is as follows:

- **Record:-** It consists of case id, case type, place of crime, year of crime as attributes and case id as primary key.
- **Criminal:-** It consists of case id ,criminal name and description about the case as attributes and case id as primary key.
- **Officer:-** It consists of case id ,officer name and status of case as attributes and case id as primary key.
- **Victim :-**It consists of case id, victim name, victim address, victim statement and date as attributes and case id as primary key.
- **Login:-** It consists of all the id and passwords of the officers .

Description about the relationship and ER diagram:-

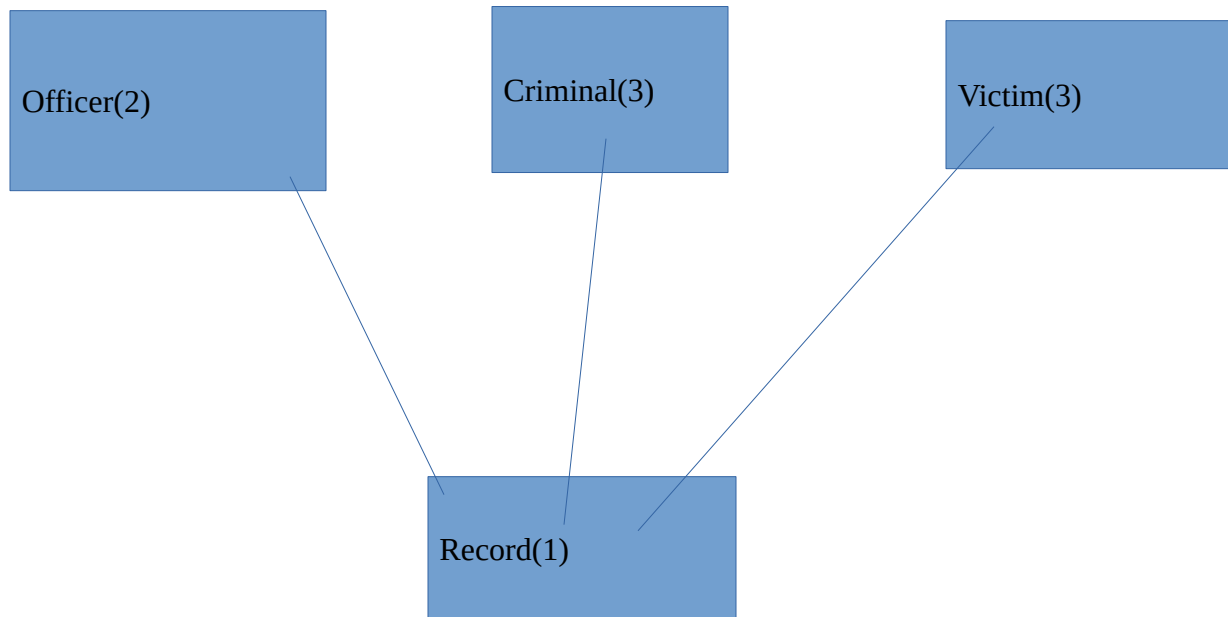


Description about relationship :-

In this the record table is related to criminal table by the relation “criminal of” .

The record table is related to officer table by the relation of “officer of ”.

The record table is related to officer table by the relation of “victim of ”.



Snapshot of tables(Description)

Activities Terminal Fri Nov 16, 2:01 AM

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Database changed

```
mysql> desc Record;
```

Field	Type	Null	Key	Default	Extra
c_id	varchar(20)	NO	PRI	NULL	
year	varchar(5)	YES		NULL	
c_type	varchar(20)	YES		NULL	
c_dist	varchar(20)	YES		NULL	
description	varchar(50)	NO		NULL	

5 rows in set (0.00 sec)

```
mysql> desc Officer;
```

Field	Type	Null	Key	Default	Extra
c_id	varchar(20)	NO	PRI	NULL	
name	varchar(25)	YES		NULL	
status	varchar(20)	YES		NULL	

3 rows in set (0.01 sec)

```
mysql>
```

Page 12 of 20 | 1,424 words, 9,019 characters | Default Style | English (USA) | 100%

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```
mysql> desc Criminal;
```

Field	Type	Null	Key	Default	Extra
c_id	varchar(20)	NO	PRI	NULL	
name	varchar(25)	YES		NULL	
c_type	varchar(20)	YES		NULL	

3 rows in set (0.00 sec)

```
mysql> desc Victim;
```

Field	Type	Null	Key	Default	Extra
c_id	varchar(20)	NO	PRI	NULL	
name	varchar(25)	YES		NULL	
address	varchar(50)	YES		NULL	
statement	varchar(50)	YES		NULL	
date	varchar(15)	NO		NULL	

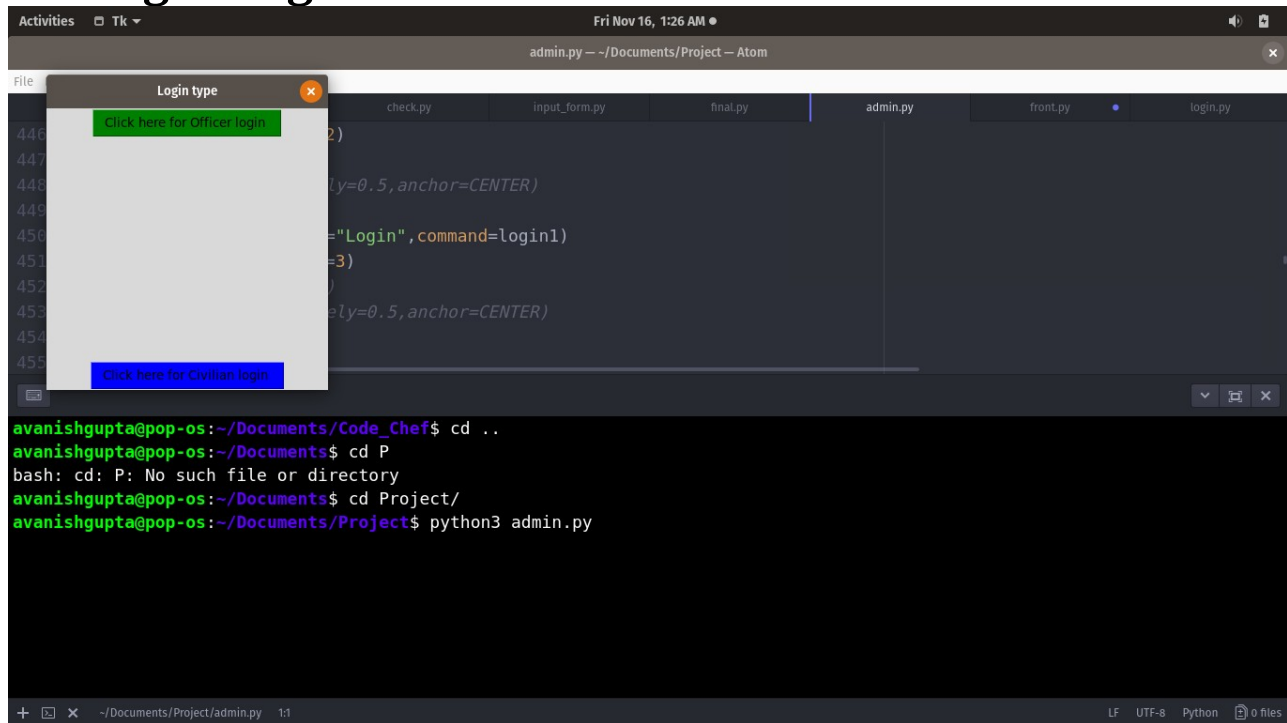
5 rows in set (0.00 sec)

```
mysql>
```

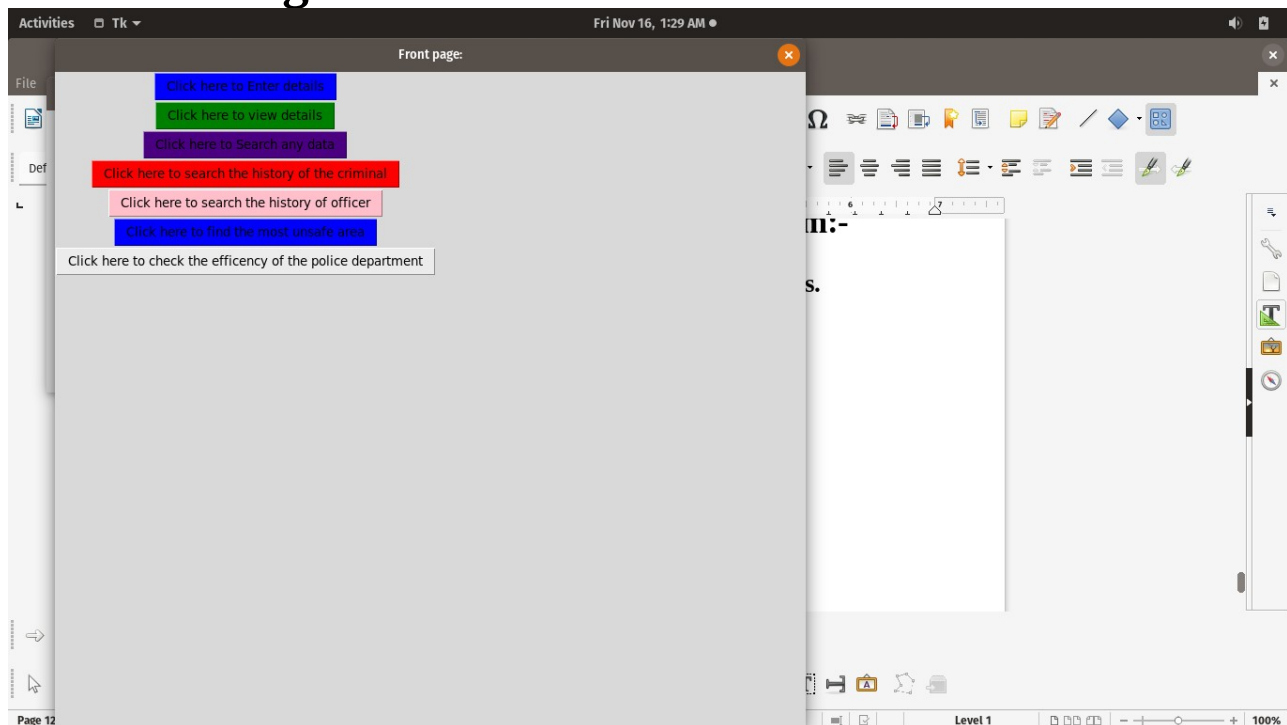
Page 12 of 20 | 1,424 words, 9,019 characters | Default Style | English (USA) | 100%

Functionality Provided by the system:-

- Login Page



- Front Page



• Input Page

Input page:

Enter the case id:

Enter the crime type:

Enter the name of criminal:

Enter the name of investigating officer:

Enter the place(District) of crime:

Enter the year of crime:

Enter the case status:

Enter victim name:

Enter address of victim:

Enter date(DD/MM/YYYY):

Enter victim's statement:

Enter the description about case:

[Click here to enter the details](#)

Click

• View Page

Display the total

The data is here

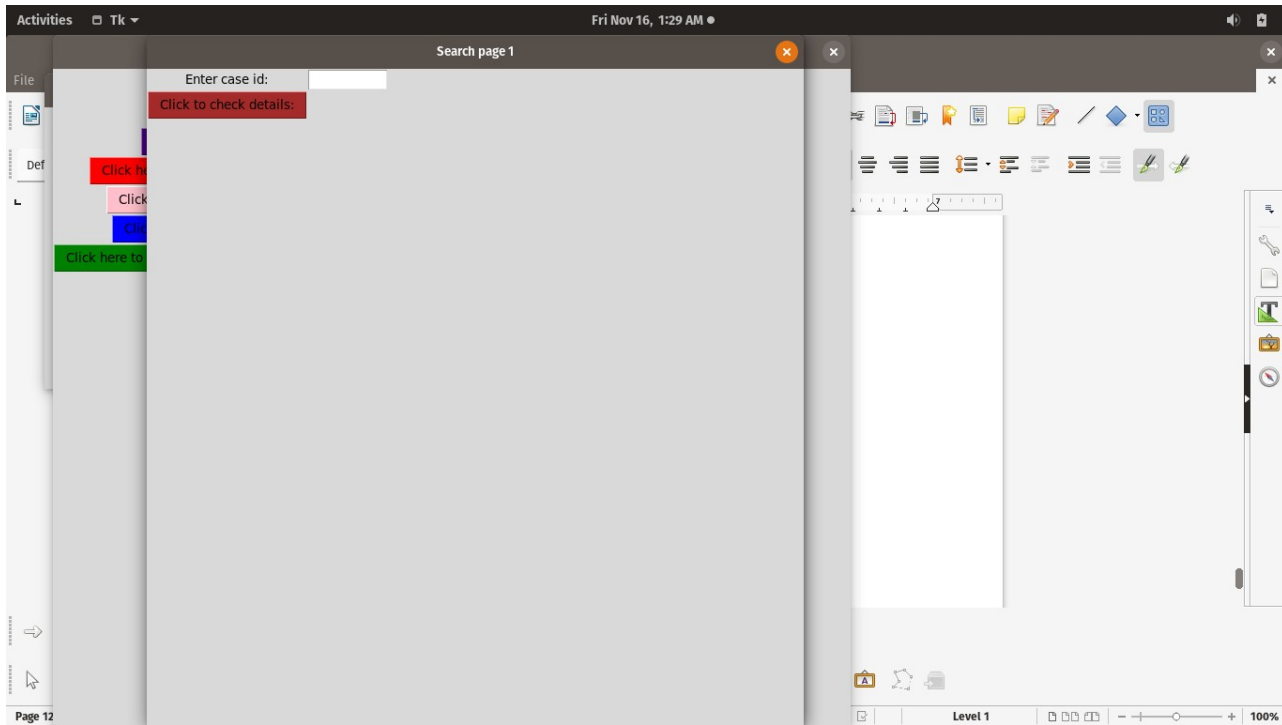
Case Details:

Case id--'a'	Criminal Name--'JAGGA'	Case Type--'ROBBERY'
Year--'2018'	Place of Crime--'DELHI'	Case status--'SOLVED'
Victim Name--'PK ARORA'	Victim Address--'VASANT VIHAR, DELHI'	Case Officer--'PS MISHRA'
Statement of the victim--'ABOUT ONE LAKH WAS LOOTED'		
Description --'ABOUT 1 LAKHS CASH AND JEWELLARY WAS LOOTED'		

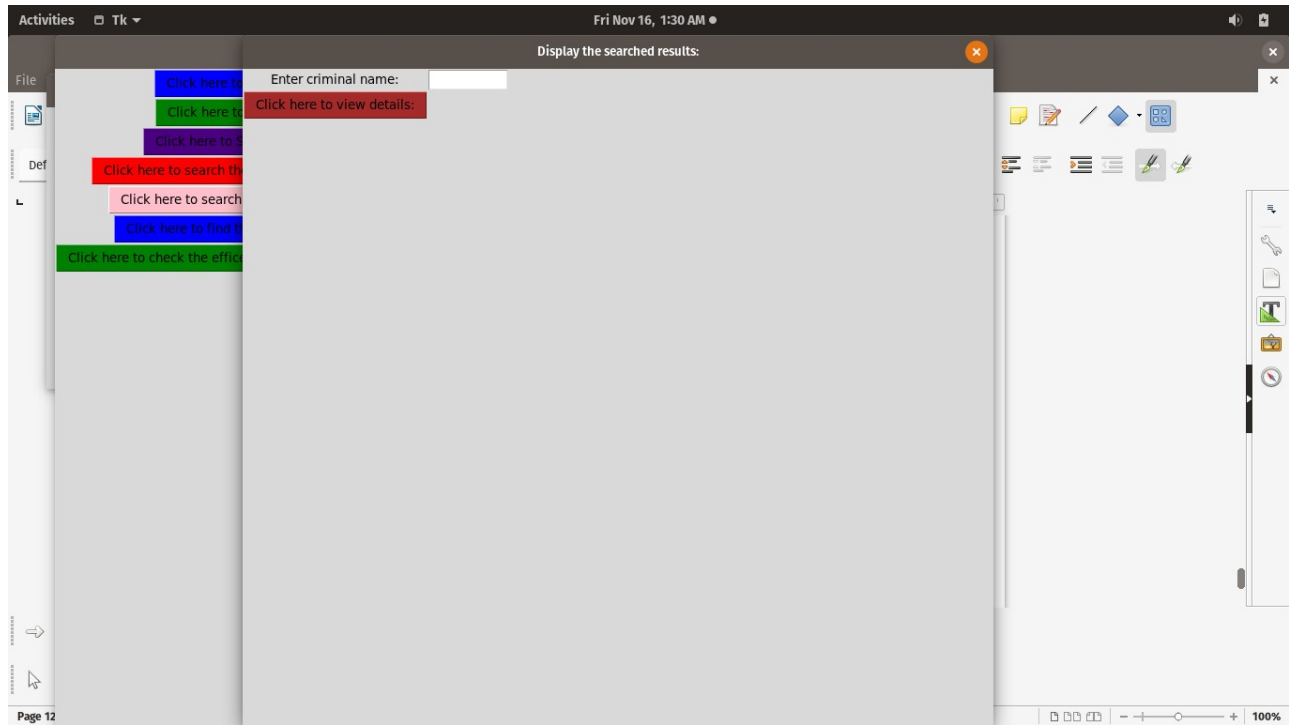
Case Details:

Case id--'b'	Criminal Name--'ASHA RAM'	Case Type--'RAPE'
Year--'2017'	Place of Crime--'PAPANIPAT'	Case status--'SOLVED'
Victim Name--'HONEYPREET'	Victim Address--'JALANDHAR PUNJAB'	Case Officer--'PS MISHRA'
Statement of the victim--'I WAS HARRESHED SEXUALLY'		
Description --'CRIMINAL WAS FOUND GUILTY'		

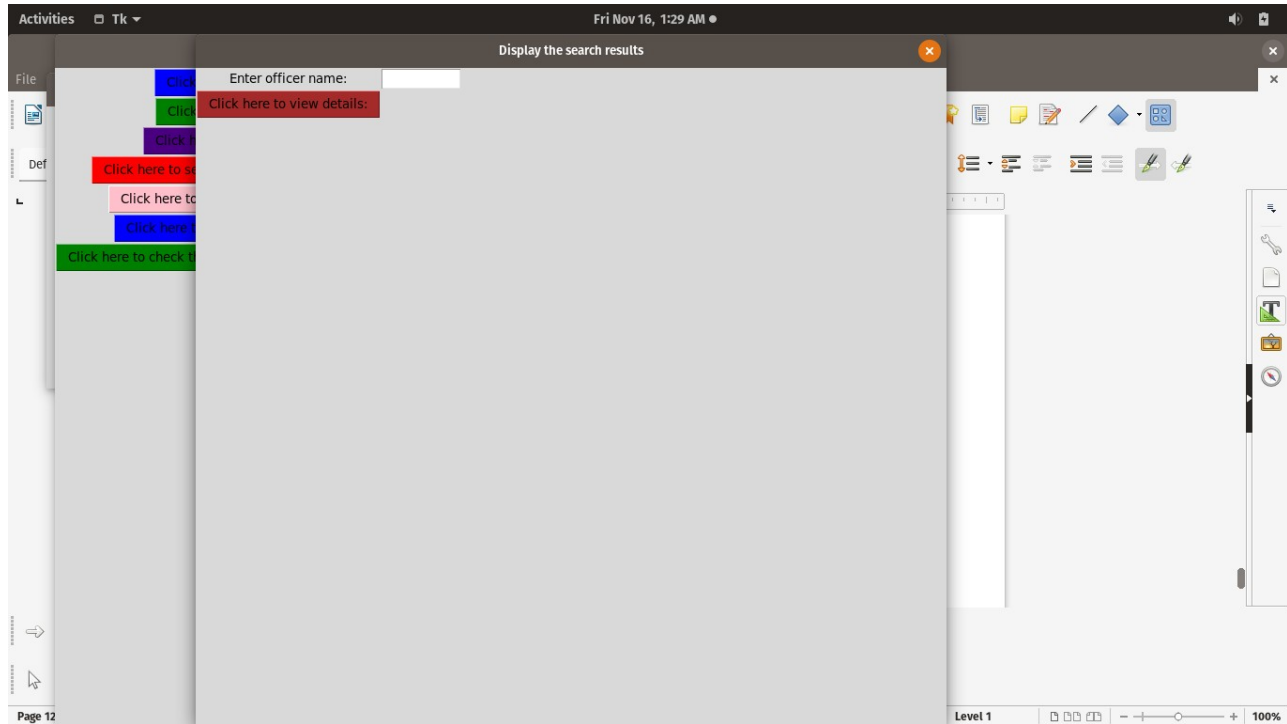
- **Search for case id:**



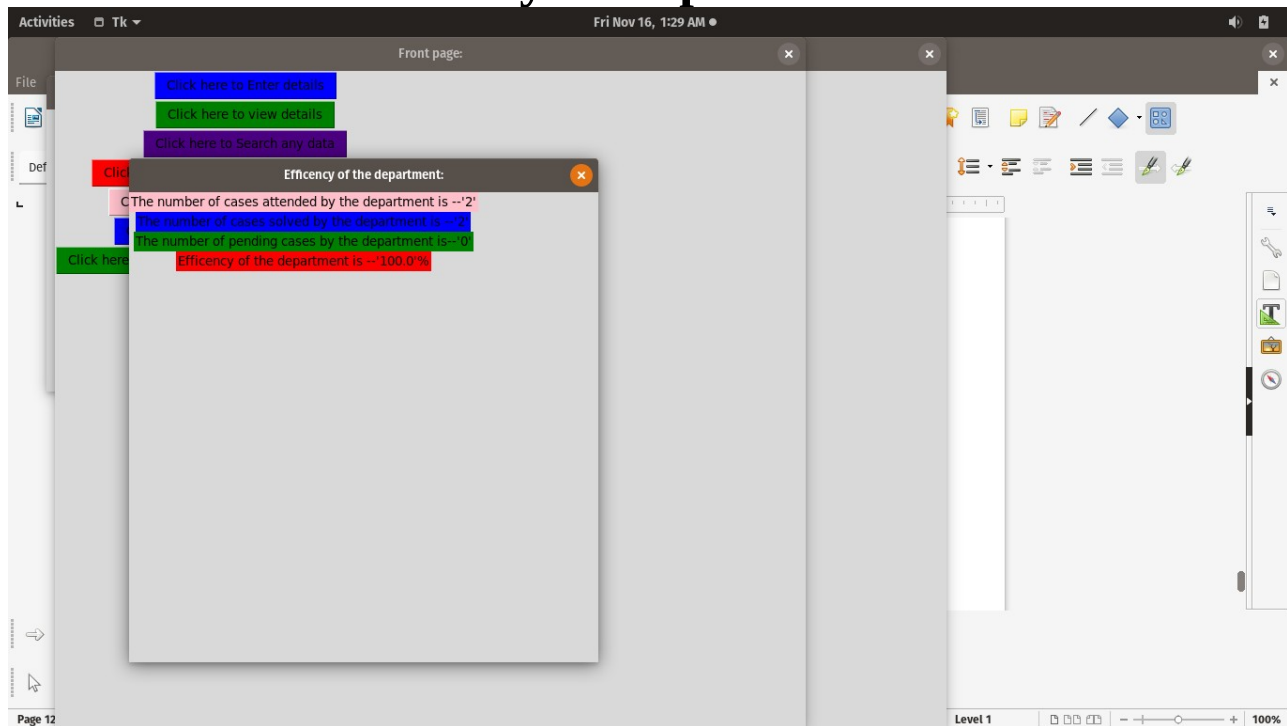
- **Search for criminal name**



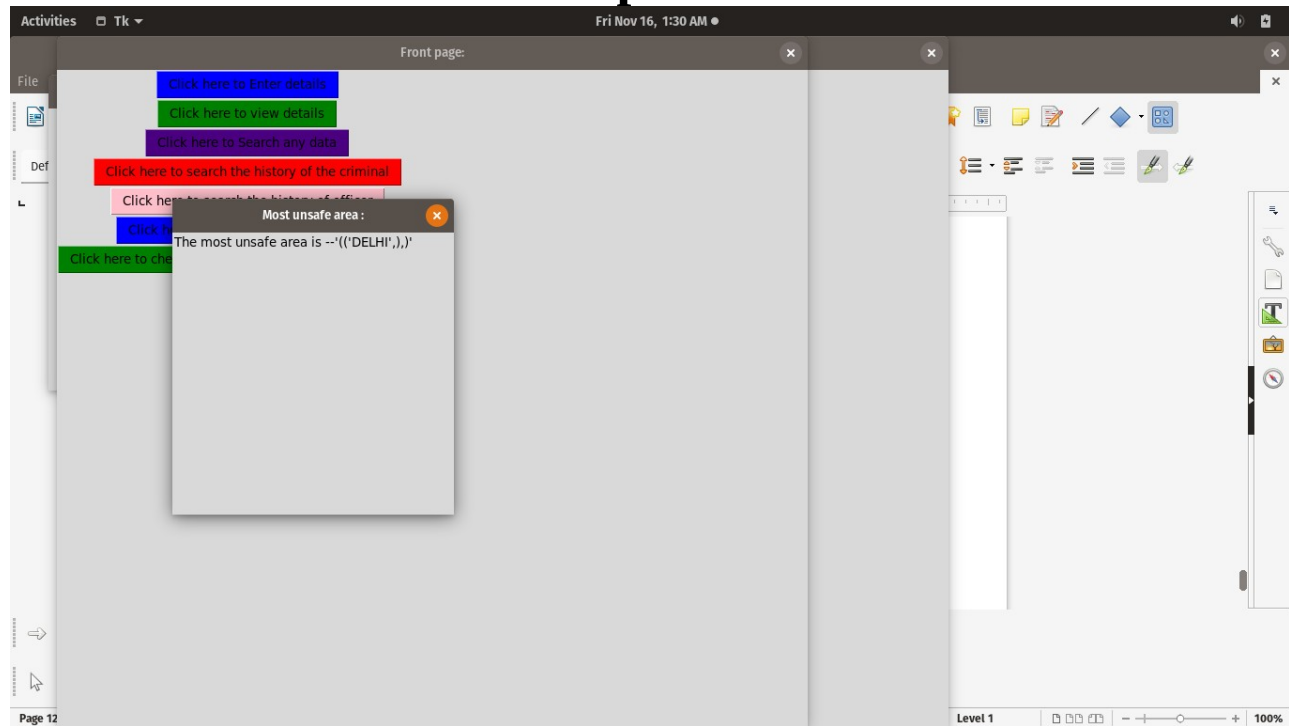
- Search for officer name



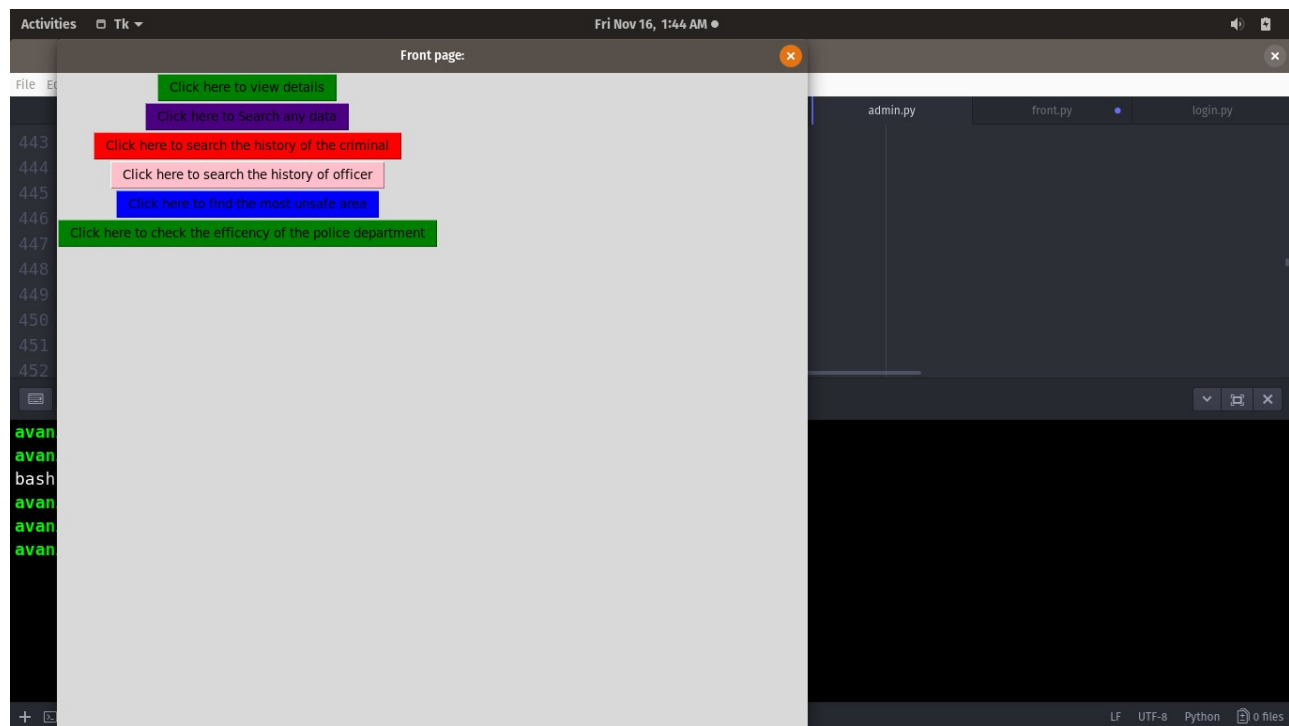
- Search for efficiency of Department



- Search for most unsafe place



- Front for citizen view



Description of tool used:

- **For GUI:-** For GUI I have used language python3 and the module name is “tkinter”.This help me to add windows , buttons ,Entry boxes and labels on the windows.
- **For Database:-** For database storage I have used sql-server as database manager. This helped me in storing and retrieving back data in very efficient way.
- **For Database Connection:-** For database connection I have used language python3 and the module name is “pymysql”.This helped me in making connection with the windows to the database and in insertion and retrieval of data.

References:

- Database System Concepts by Siberschartz Korth Sudarshan.
- W3Schools website(www.w3schools.com)
- Internet