

ADVANCED PROGRAMMING

PROJECT -REPORT

**PROJECT TITLE – POLICE STATION MANAGEMENT
SYSTEM**

GROUP NO. – 20

GROUP MEMBERS

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Method Description

Person Class

- **int enterInPersonTable()**
To store details of person in person table and will return the allotted personID.
- **Person getPersonDetails(int personID)**
To get details of person having given personID.
- **boolean checkDuplicates(String aadharCardNumber)**
To check if person with given aadharCardNumber exists or not in person table.
- **int getPersonIDthroughAadhar(String aadhar)**
To get the personID of person having given aadhar card number.
- **void updateRecord(int id, String name, String contact, String aadharCardNumber)**
To update details of person in person table having given id.
- **void markAsSuspect(int crimeID, int personID)**
To store given personID as suspect of particular crime in Suspects table.
- **void markAsWitness(int crimeID, int personID)**
To store given personID as witness of particular crime in witness table.
- **void markAsVictim(int crimeID, int personID)**
To store given personID as victim of particular crime in victims table.
- **ResultSet getSuspects(int crimeID)**
To get all suspects of particular crime having given crimeID.
- **ResultSet getWitness(int crimeID)**
To get all witnesses of particular crime having given crimeID.
- **ResultSet getVictims(int crimeID)**
To get all victims of particular crime having given crimeID.
- **int getCriminalRecord(String aadhar)**
To get crimeID of the criminal having given aadhar number
- **boolean checkCriminalRecord(String aadhar)**
To check if person having given aadhar number is criminal or not.
- **int enterInPrisonerRecord(int personID,int crimeID)**
To store pesonID and crimeID of crime in PrisonerRecord table.
- **int checkPrisonerRecord(String aadhar)**
To get crimeID of the prisoner having given aadhar number.
- **int enterInCriminalRecord(int personID,int crimeID)**
To store pesonID and crimeID of crime in CriminalRecord table.

Complaint Class

- **boolean checkAuthenticity(int complaintID, int password)**
To check the login credentials of complaint.
- **void changeCaseStatus(int complaintID,String Status)**
To change the status of case to Closed/Active and if Closed is chosen it will also update the cases Involved of police officer involved.
- **int updateInComplaintTable()**
To store the details in complaint table in database will return it complaintID allotted by SQL Server(complaintID is set to auto-updated).
- **ResultSet getAllotedComplaint(int policeID)**
To get all the cases allotted to police having given policeID.
- **ResultSet getAndAllotComplaint()**
To get all the cases which is not allotted to police.
- **String getComplaintStatus(int complaintID)**
To get the Status of complaint having given complaintID.
- **int getComplainantID(int complaintID)**
To get the complainantID of complaint having given complaintID.
- **int getCrimeID(int complaintID)**
To get CrimeID of the complaint having given complaintID.
- **void assignPolice(int complaintID,int policeID)**
To allot police having given policeID to complaint having given complaintID.

Police Class

- **void entryInPoliceTable()**
To update details of police in Police Table of PoliceStation Database.
- **int getFreePoliceID()**
To get the PoliceID of police involved in least number of cases.
- **int getID()**
To get the PoliceID of just updated record in Police Table.
- **ResultSet searchByCity(String checkcity)**
To get details of all police in given city.
- **ResultSet searchByName(String checkname)**
To get details of all police having given Name.
- **Police searchByID(int id)**

To get details of police having given policeID.

- **boolean checkLogin(int id, String pass)**
To check Login Credentials of Police .
- **void updateRecord(int id, String name, String city, String residence, String contact, int casesInvolved)**
To update the details of police in police table having given policeID.
- **void deleteRecord(int id)**
To delete record of police having given policeID from police table.

CreateTable Class

- **String USER = "";**
To store the username of mysql of program user device.
- **String PASS = "";**
To store the password of mysql of program user device.
- **void createAllTables()**
To create database and tables if not already created , it will check first that if database exists already if not then create them.

Crime Class

- **int updateCrimeTable()**
To store details of crime in crime table.
- **Crime getCrimeDetails(int crimeID)**
To get details of crime from crime table having given crimeID.
- **void updateDetailsOfCrimeTable(int crimeID,String desc,String loc,String extra)**
To update details of crime from crime table having given crimeID will also update the details of crime-specific tables.
- **void deleteCrime(int crimeID)**
To delete the Crime details from crime table ,crime-specific table, victims, witness, suspects having given crimeID .

Next 4 classes have is – a relationship with crime class (For less complexity we are using only one extra crime specific details can be easily increased)

Kidnap Class

- **void updateInKidnapTable()**
To store kidnap – specific details in kidnap table.
- **String getKidnapDetails(int crimeID)**
To get kidnap – specific details from kidnap table having given crimeID.

RoadAccident Class

- **void updateInRoadAccidentTable()**
To store RoadAccident – specific details in RoadAccident table.
- **String getRoadAccidentDetails(int crimeID)**
To get RoadAccident– specific details from RoadAccident table having given crimeID.

Murder Class

- **void updateInMurderTable()**
To store Murder – specific details in Murder table.
- **String getMurderDetails(int crimeID)**
To get Murder – specific details from Murder table having given crimeID.

Robbery Class

- **void updateInOtherCrimeTable()**
To store Robbery – specific details in Robbery table.
- **String getRobberyDetails(int crimeID)**
To get Robbery – specific details from Robbery table having given crimeID.

Relationship diagram (next page)

Relationship Diagram

Complaint

Complaint ID(P.K)	Police ID	Crime ID	Person ID	Status	Password
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Crime

Crime ID (P.K)	Crime Name	Description	Location
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Kidnap

Crime ID	Car Number
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Murder

Crime ID	Weapon
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Road Accident

Crime ID	Car Number
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Robbery

Crime ID	Things Stolen
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Person

Person ID	Name	Contact	Aadhar
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Suspects

Person ID	Crime ID
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Witness

Person ID	Crime ID
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Victims

Person ID	Crime ID
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Prisoner Record

Person ID	Prisoner ID (P.K)	Crime ID
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Criminal Record

Person ID	Criminal ID(P.K)	Crime ID
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Police

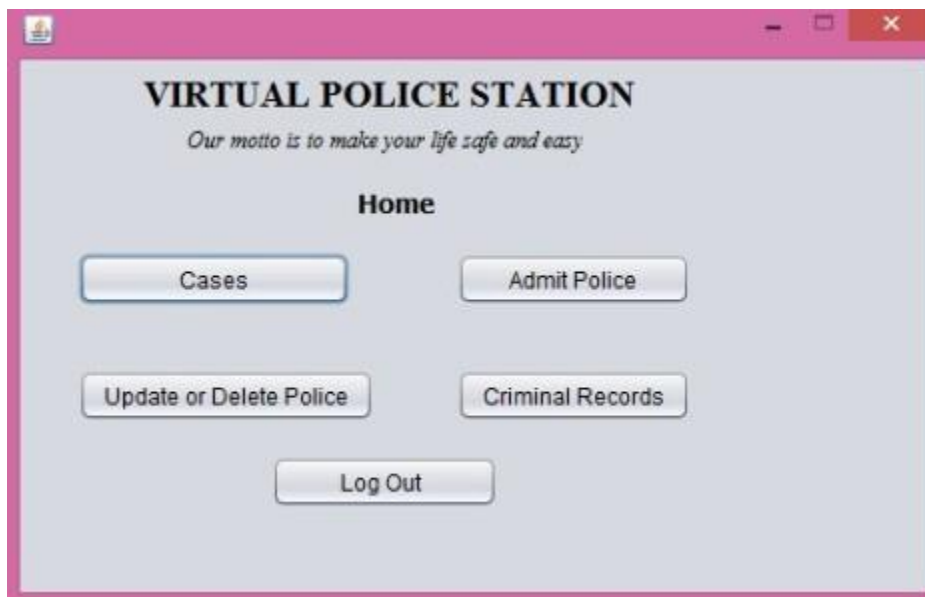
Police ID(P.K)	Name	Contact	Residence	Cases Involved	City	Password
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Project-Execution Samples(Screenshot)

Main Page



Admin login page



Admin Sign up

The screenshot shows the 'Admin Sign Up' form in the 'VIRTUAL POLICE STATION' application. The form has fields for 'Admin ID' (containing '12454') and 'Password' (containing '*****'). Below these fields are 'Sign In' and 'Go Back' buttons. An error message box is overlaid on the right, stating 'Login info is incorrect' with an 'OK' button.

VIRTUAL POLICE STATION
Our motto is to make your life safe and easy

Admin Sign Up

Admin ID: 12454

Password: *****

Sign In

Go Back

Message

Login info is incorrect

OK

Assign Officers to case

The screenshot shows the 'Cases' section of the 'VIRTUAL POLICE STATION' application. It features a table with four columns: 'Complaint ID', 'Type', 'Location', and 'Assigned Officer...'. The table contains three rows of data. Below the table are three buttons: 'Get Info', 'Update', and 'Go Back'.

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Cases

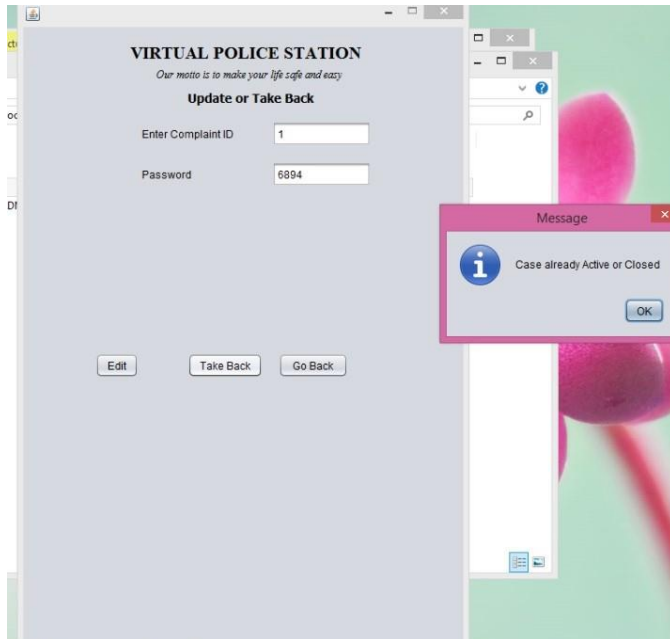
Complaint ID	Type	Location	Assigned Officer...
5	RoadAccident	jnmfds	1
6	RoadAccident	4123	0
8	Murder	Raja Park	0

Get Info

Update

Go Back

Cannot take back complaint(as complaint as already active or closed if not then it will be taken back)



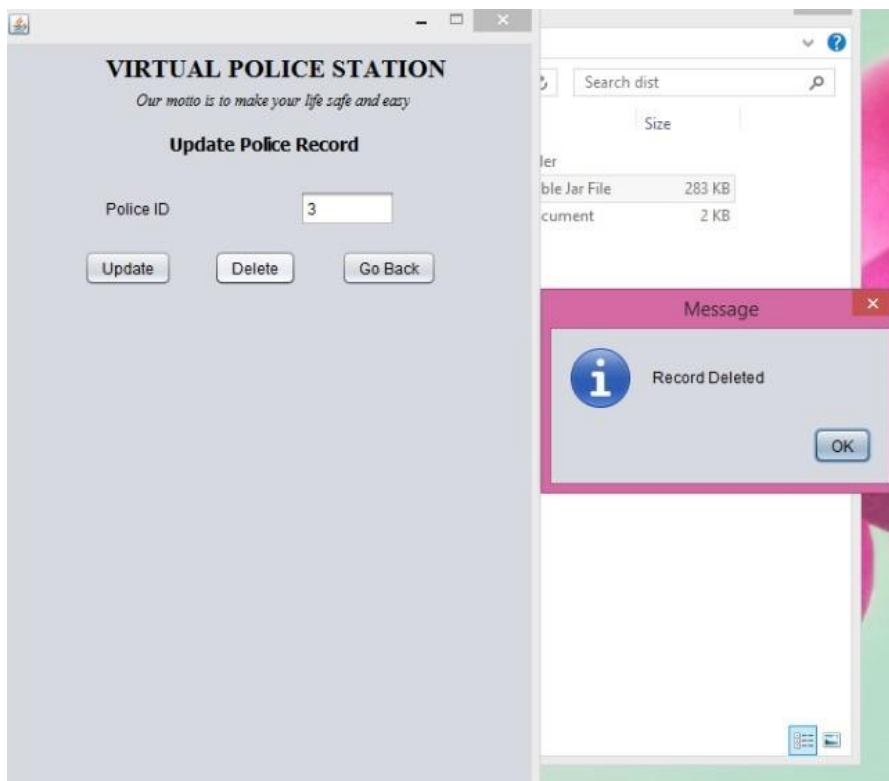
Check Complaint Status



Criminal Records Page



Delete Police Record



Edit Complaint

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Update or Take Back

Enter Complaint ID:

Password:

Witness Details:

Name:

Contact:

Aadhar No.:

Victim Details:

Victim Name:

Victim Contact:

Crime Details:

Crime:

Location:

Weapon:

Other Details

Message

i Your complaint is updated.

Enter Criminal Details

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Enter into Criminal Records

Aadhar Card Number:

Complaint ID:

☒ Mark as Prisoner

Message

i Criminal entered

Enter witness and Suspects

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Enter Witness & Suspects

Witness Details: (Enter in same sequence with next record in next line)

Name	Contact	Aadhar No.
Raj	9219977334	52671287

Suspect Details: (Enter in same sequence with next record in next line)

Name	Contact	Aadhar No.

☒ Mark as Active ☐ Mark as closed

Get information about police by name

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Get Information about your police

☐ By City Name ☒ By Officer Name

Enter Here

Police ID	Name	Contact Number	City
1	Avi	78347231	Meerut

Information about police

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Get Information about your police

☒ By City Name ☐ By Officer Name

Enter Here

Police ID	Name	Contact Number	City
1	Avi	78347231	Meerut
3	Avinav	78322	Meerut

Information of police when record is not inserted

VIRTUAL POLICE STATION
Our motto is to make your life safe and easy


Get Information about your police

☐ By City Name ☒ By Officer Name

Enter Here

Police ID	Name	Contact Number	City
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Message

 No record found

New Police Registration



The screenshot shows a web application window titled "VIRTUAL POLICE STATION" with the motto "Our motto is to make your life safe and easy". The main heading is "New Police registration". The form contains the following fields:

- Name:
- City:
- Contact:
- Password:
- Address:

At the bottom of the form are two buttons: "Enter" and "Go Back". To the right of the form, a "Message" dialog box is open, displaying an information icon and the text "Police ID is 4", with an "OK" button.

Officer sign-in

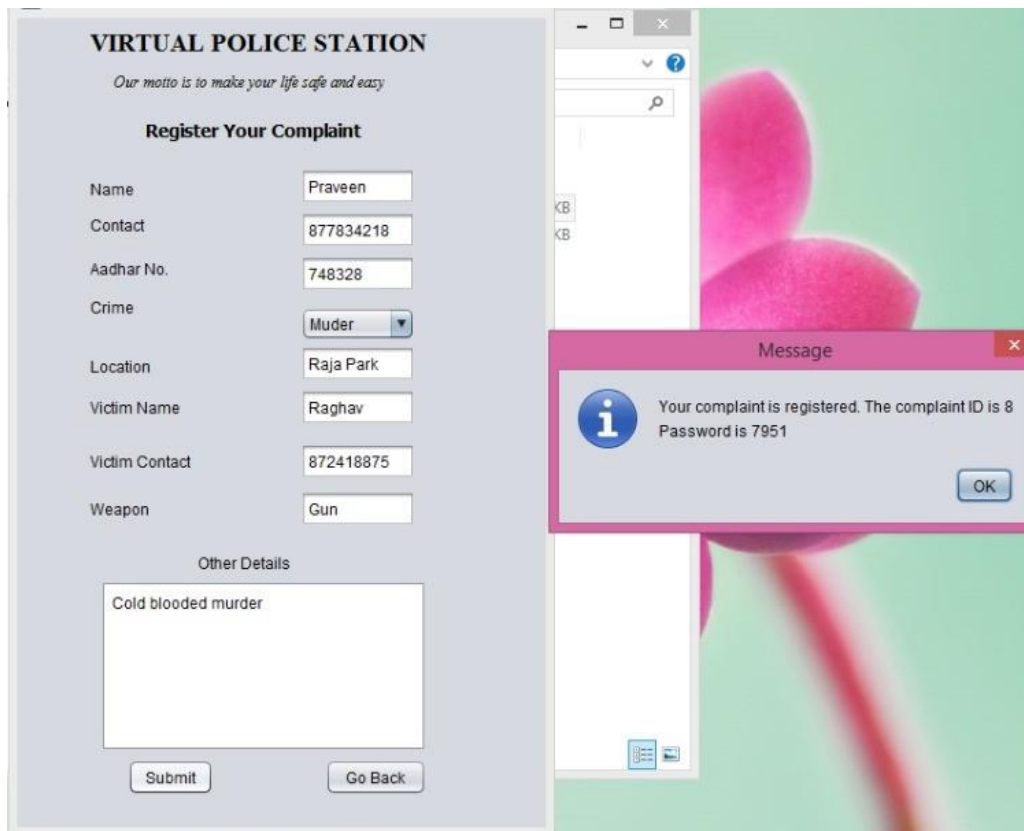


The screenshot shows a web application window titled "VIRTUAL POLICE STATION" with the motto "Our motto is to make your life safe and easy". The main heading is "Officer Sign Up". The form contains the following fields:

- Police ID:
- Password:

At the bottom of the form are two buttons: "Sign In" and "Go Back".

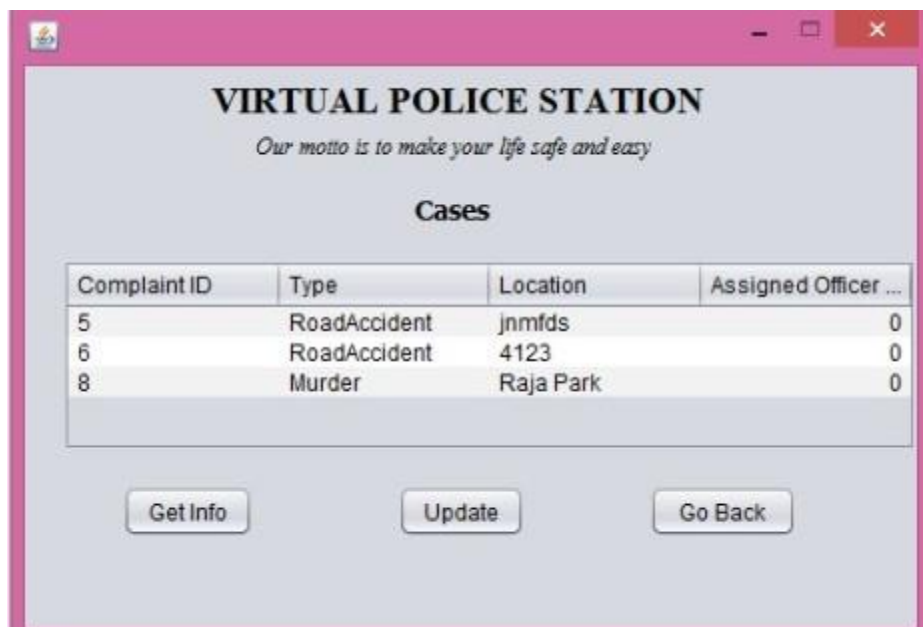
Register Complaint



Search Criminal Records



View Cases



Update case when wrong credentials given



Enter Witness and Suspects

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Our motto is to make your life safe and easy

Enter Witness & Suspects

Witness Details: (Enter in same sequence with next record in next line)

Name	Contact	Aadhar No.
Raj	9219977334	52671287

Suspect Details: (Enter in same sequence with next record in next line)

Name	Contact	Aadhar No.

☒ Mark as Active ☐ Mark as closed

Message

Case Updated

Update cases

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Cases

Complaint ID	Type	Location	Assigned Officer ...
5	RoadAccident	jnmids	1
6	RoadAccident	4123	0
8	Murder	Raja Park	0

Message

Update Successful

Update criminal as a prisoner

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Enter into Criminal Records

Aadhar Card Number

Complaint ID

☒ Mark as Prisoner



Update information

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Information

Witness Details:

Name

Contact

Aadhar No.

Victim Details:

Victim Name

Victim Contact

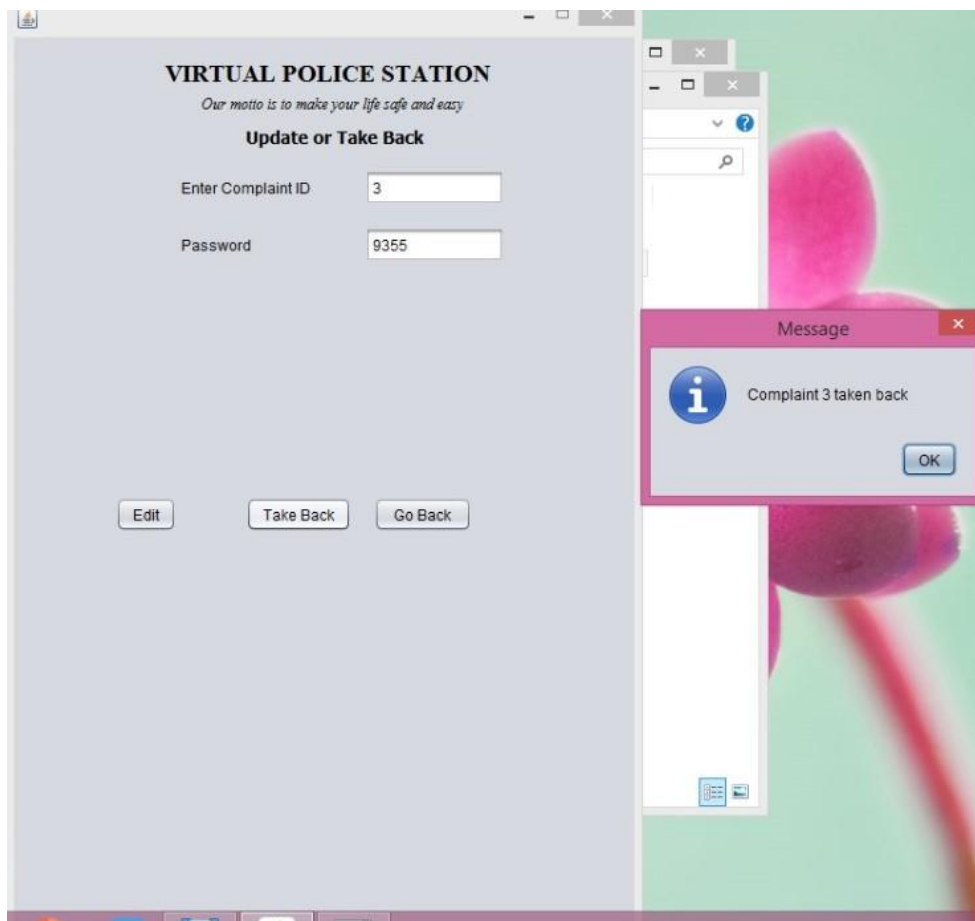
Crime Details:

Crime

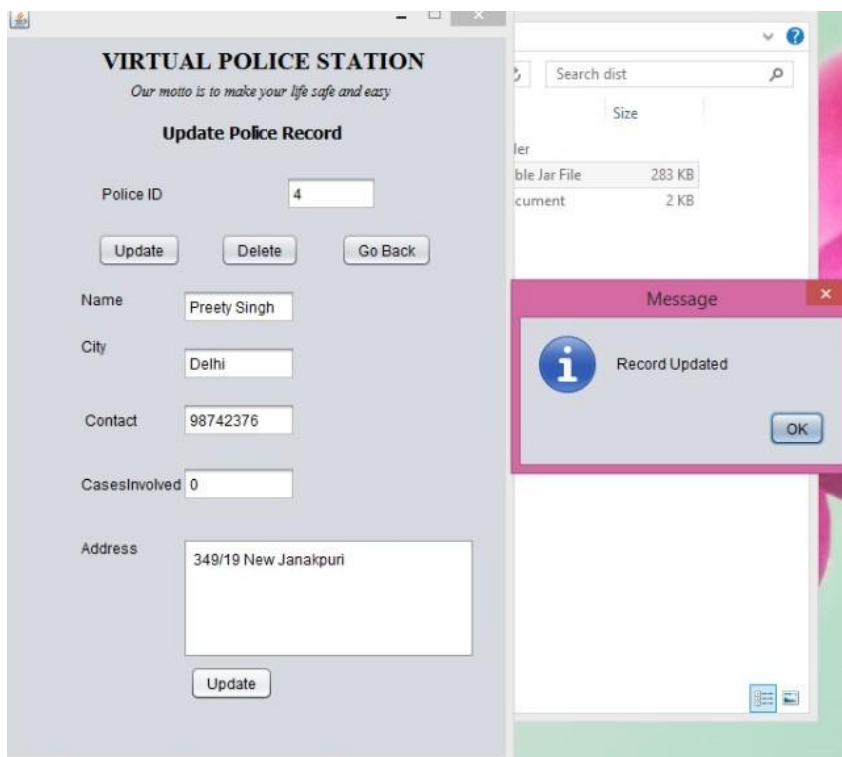
Location

Other Details


Take back complaint



Update Police Records



View Cases



VIRTUAL POLICE STATION

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Cases

Complaint ID	Type	Location	Assigned Officer ...
5	RoadAccident	jnmfds	0
6	RoadAccident	4123	0
8	Murder	Raja Park	0

Get Info

Update

Go Back

