

**American International University-Bangladesh (AIUB)**

**Department of Computer Science**

**Faculty of Science & Technology (FST)**

**Urban Areas Crime Detection and Public Safety System**

A Software Engineering Project Submitted  
By

Semester: Summer_21_22		Section:	Group Number:	
SN	Student Name	Student ID	Contribution (CO1+CO2)	Individual Marks
	Rasel Mahmud	20-43867-2		
	Md Aminul Islam	20-43854-2		
	Md Nafiul Islam Nayeem	20-43678-2		
	Sadman Sonid Tanim	20-43866-2		
	Md Atikur Rahman	19-41532-3		

**Course Teacher: Farzana Benete Alam**

## **LAB TASK 1**

### **1. PROJECT PROPOSAL**

#### **1.1 Background to the Problem**

As Bangladesh is developed rapidly over this century the Crimes in Urban areas are also increased. Year by Year the Crime rate is increasing rapidly if we look at the report published by [macrotrends.net](https://www.macrotrends.net) we will see the crime rates is increasing from the past years. In 2018 the murder rate of Bangladesh is 2.37% per 100k people which was 2.22% per 100k people in 2017. Drug Addictions among the young Generation. Snatching is also a major social crime and we can see the Alarming rise in Snatching in Urban Areas. In our Society we can see that the Young Generation suffered in frustration for some reasons, and they involved in social crimes. Many citizens in our generation doesn't feel safety when they go outside. But there is no such system that helps our citizens for their safe lifestyle. To Solve those problems we developed an artificial intelligence-based mobile application. This application will helps our citizens when they see any crime in their surrounding, when they feel unsafe, when they see anything unethical.

The root of this problem is Unemployment, drug addiction, frustration, family issues, bad politics. Crime prevention can reduce not only the economic and social costs of crime, but also the long-term costs associated with the criminal justice system, increasing investment in the form of savings in justice, welfare, and social protection.

#### **1.2 Solution to the Problem**

Our project is about to develop an artificial intelligence-based mobile application where citizens can notify about the crimes to the near police station, local NGO, local govt organizations and public safety organization, And the system can also find about the types of crime using Artificial Intelligence. From Our Mobile Application, A citizen can also know the crime areas nearest him which will be helpful for his pre-awareness. Our first key feature is, When A citizen see any crimes near him or face any criminal activity he can notify the nearest police station by sending text messages, sending captured pictures or video clips, sending the voice clips, pressing the button in the application. Then the Police station will take the further steps. Our application can also detect the types of crime using the knowledge of his perception sent by the citizen and scanning it. A person can also send message for help to his nearest one, apply for security while travelling from one place to another.

This problem is a real-life problem and one of the obstacles of our development. If we can give the safety to our citizens it will be a great beneficial for our society as well as our country. These

projects will significantly help the foreign tourists and our citizens in several ways as we mentioned. It includes crime suppressions, ensuring the safety, prevent young generation from crime and more. It will improve the safety system. Overall, this project will help our citizens in their daily lifestyles and it can solve the social crime problems. Also, it will help the students and the young generations refrain from various types of crimes and drug addiction, which will establish them to be a good and sincere person in the society.

## **LAB TASK 2**

### **The Chosen Process Model Extreme Programming(XP) Process Model:**

We are using SCRUM Process Model which is a Agile Method. We are using this method because when we start to develop our system, we will gather the requirements from the users and we will regularly update the backlog list and we can also priorities the requirements. These stories can provide us the environment related to crime and the crimes they faced, or our citizens faces regularly. And based on the user stories and we prioritise the requirement and work on them. In Scrum programming we can also have the option of working in sprint and in every sprint we works on some requirements and fulfil them. And user's new requirement can also come in the future for the betterment, and which will help us to provide a excellent project. In XP our requirements are regularly updates which is also a good sign to create a good crime detecting application. Customer or User acceptance test is also play a good role in our project. Developers can also get a friendly environment to create this project.

### **Why Other Process Model are not good for our project:**

We don't choose the Waterfall model as for implementing the waterfall model we have to know all requirements and then start our working. But for our project determining or identify all the requirements are not possible. The types of Crime can change and the requirements are also updates. So Waterfall is unsuitable for our project.

Feedback plays a important role in our project But scrum can't provide us the option of feedback. Without feedback we can not improve many things in our project.

The Only Problem with the DSDM process model is we have to release the final product but in our project if we release only the final product then it will not be so effective and we won't able to identify many lacking's of our project.

FDD is very costly as well as we can not have pair programming here in this process model rather there is a high reliance on one person in this process model. On person have to play multiple role

### **Roles and responsibility for Our Project:**

#### **1. Customer/User:**

Customer/User writes the stories or requirements which we need to implement in our project. They also decide which requirements are fulfilled. From them we can also know the priorities requirements which needs to implement first

## **2. Programmer:**

They Write the code to implement the requirements in our project.

## **3. Tester:**

They will help the customer write functional tests, also run functional tests regularly, broadcast test results and maintain testing tools.

## **4. Tracker:**

They track the progress of our project. They also traces the progress of each iteration and evaluates whether the goal is reachable within the given resource and time constraints or if any changes are needed in the process. He gives the feedback in Extreme.

## **5.Coach:**

Coach is the responsible for the whole project. He guides the project members.

## **6. Consultant:**

If any technical needed to the developer team, he will guide them.

## **7. Manager (Big Boss):**

In our project Manager makes all the decisions

## LAB TASK 3

# System Features

## 1. System Login

### Functional Requirements

1. The system will allow all existing users to login into their account with email/mobile number and password.
2. To complete the step user have to verify 'his/her self is accessing as human, not a script or bot'.
3. If the username or password is incorrect then the system will show an error message "Invalid username or password" and ask to insert those again.
4. If the user forgets his/her account password, then he can request to reset his/her account password through email /phone number (used to create an account). And a temporary password will be sent to that email/ phone number for accessing/ resetting the password.
5. For 3 times the wrong login attempts the user account will be blocked for 15 minutes.
6. If the user's credential is correct then the user will be redirected to his/her account dashboard.

**Priority Level:** High

**Precondition:** User have to be a valid user, the username and password should be correct.

## 2.Register

### Functional Requirements

1. The software will allow every new user to create an account with his/her email/phone number, username, password, and NID.
2. The username will contain only letters and numbers. And password would be more than 6 characters long that contain capital and small letters, numbers, and special symbols
3. Users have to select the account type. If he wants to answer the questions then the user will select Admin type otherwise Farmers type.

**Priority Level:** High

**Precondition:** User have to have a valid email / phone number , full-fill the username and password constringe, and account type.

### **3.Local Area Information**

**Functional requirement:** Database

User : All types of Citizens

1. A user can get basic information about the area he/she stays.
2. Our users can know about crime rates and red zones surrounding him.
3. User can consult to the local police station.

### **4.Internal City Different crystal crime Zones Information**

**Functional Requirements**

User: All types of Citizens

1. A user can know the vulnerable zones in the city where crime rate is high.
2. User can also know the low crime zones.
3. The user can see the top crime rate, its reason and the solution to get help from the authorized people mostly.

**Priority Level:** High

**Precondition:** user must input the valid city

### **5.Drugs Information Alert**

**Functional Requirements**

User: All types of Citizens

1. A user can inform to the police station when he/she will see any student or person is taking drug.

2. User can also inform about the drug suppliers.
3. The user will see a option to inform about the drugs then he will see there three suboptions-1.Student  
2.General People  
3.Street Children  
if he/she choose the Student or the Street Children then the information will go to the local drug cure center.  
if he/she choose the General People then the information will go to the local police and rehabilitation center.  
**Priority Level:** High  
**Precondition:** User valid information

## 6.Capture Crime

**Functional Requirements :** Device camera, Database.

**User:** All types of Citizens

1. A user Capture the Scene of the crime and he/she can send it to the police station.
2. This captured crime scene will help the police to identify the criminals.
3. The user will see a option capture if he/she choose option then his camera will open and he can capture the crime.
4. Sometime this feature can also identify the weapon used in the crime by the help of scanning the image.
5. When the crime scene will go the police station the local police force can immediately come to the crime spot.

**Priority Level:** High

**Precondition:** User valid information

## 7.Children Safety

**Functional Requirements**

**User:** All types of Citizens and specially Parents

1. Parents can link their children any digital device to the system which will help to track their children.
2. Any user can notify when he will see any children is involved any crime.



3. A user can also notify to the police station and children safety organization when he will see any Trafficking of children.
4. There is a Option for Children safety in Our system when the user will enter to this option he can inform to the local government children safety organization also the non government children safety organization if he/she sees the children is involved in crime.
5. But if the User inform about the children trafficking then the information will go to the nearest local police unit of the place.

**Priority Level:** High

**Precondition:** User valid information

## 8. Women Safety

### Functional Requirements

**User:** Women

1. There is Women safety Option in our system when a women enter the Option she can ask for help as an emergency.
2. Inside the Women safety Option there are some sub options

**Safety & emergency -> Emergency SOS.**

**Call emergency services**

**Record emergency video**

This sub options will help her in any condition.

3. After choosing the option this app will automatically keep track the women and her locations every two minutes to the nearest police station and local councilor office.

**Priority Level:** High

## 9.Snatching Alert

### Functional Requirements

**User:** All types of Citizens

1. When the User enter any very high snatching area this app will make the user phone vibrate which will help the user to be safe from the snatching problem.
2. Any user can notify and ask for help to the local police station about the using our system.
3. To inform about the snatching the user will see a option of inform the snatching here he will see the details of the nearest police station and their number he can send them message or he can call them.

Priority Level: High

Precondition: User valid information

## 10.Location Sharing

**Functional Requirements** :Turn on Location option

**User:** All types of Citizens

1. A user can share his location to his friends, parents, local police station or councilor office in case of feeling unsafe or for the safety.
2. There is a Share Location Option in our system which will enable the user to share his current location.
3. When he will turn on this option his every movement is tracked if the system tracked any unusal movement then there is emergency meease will sent to his friends, parents, local police station or councilor office. It depends on his current location and how far are they.
4. But if the Phone battery is low and the Phone Shut down then the last location untill the Phone is on will be shared automatically.

Priority Level: High

## 11.Help Alert

**Functional Requirements**

**User:** All types of Citizens

1. When the User felt unsafe in any place he can choose the Help Alert System from our System.
2. Any user from anywhere can communicate for the help with the police.
3. There is a option of Help in our system whenever he enter the option and press the urgent help button then the local public safety unit will try to communicate with him or they will try to track his/her location.

4. After tracking the user location the public safety unit or the police unit will help him to reach his destination safely.

## **12. Find Family and Friends**

### **Functional Requirements**

**User:** All types of Citizens

1. There is a Option of Find family and friends when a user lost his way or visit any unknown place he/she can enter to the Option and find his friends or family member near his location.
2. There are two Option inside the Find family and friends
  - i. I lost my way: which will help him to find his nearest friends or relatives.
  - ii. Track my friends and Family: This option will help if any friend or family member is in danger or sick it will 1<sup>st</sup> ask name of the friend or family member and a message is sent to that person. If the user don't received any reply with in the 10 minutes then the user can ask for the help in the nearest help center of that person.

## **13. Medical Helpline**

### **Functional Requirements**

**User:** All types of Citizens

1. A user can ask for the help using Medical Help Option.
2. When he enter into the option he can ask for medical treatment if he/she get injured.
3. A user can also ask for medical help when he/she see any emergency medical needed his surroundings.
4. After giving the Proper information the medical team will reach to the given location where medical treatment is needed.

## **14. Settings**

### **Functional Requirements**

**Functional requirement:** Digital Device, Phone Number

**User:** All types of Citizens

1. A user can hide his identity after entering the setting option.
2. A user can also change his/password or change his location.
3. Setting option also helps the user to change his/her general information.

## **15. Previous Crime Experience**

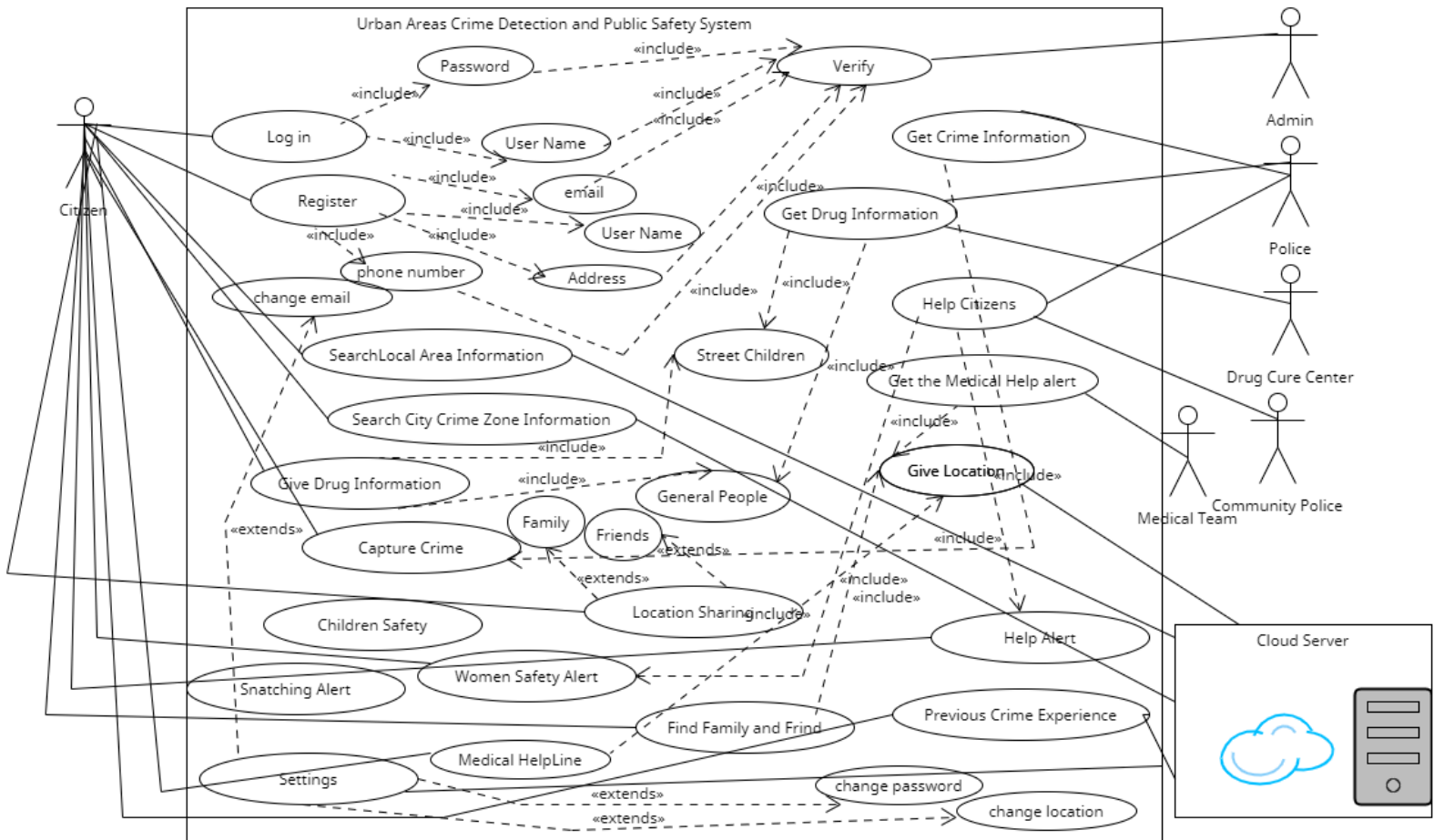
**Non Functional Requirements**

**User:** All types of Citizens

1. A user can describe his previous crime experience which he had been faced.
2. A user can also describe how helpful our system was while he need helps.

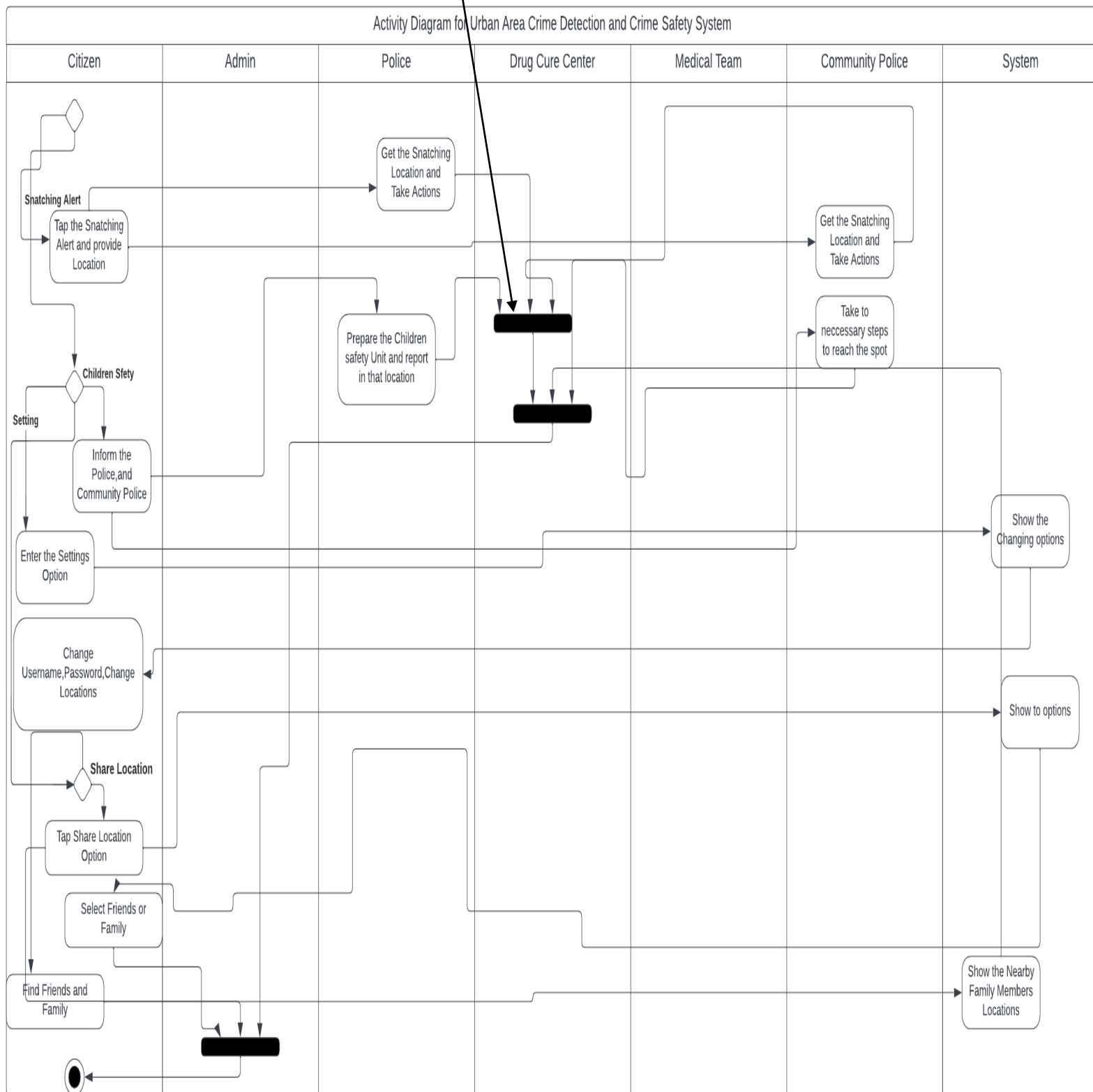
## LAB TASK 4

### Use Case Diagram:

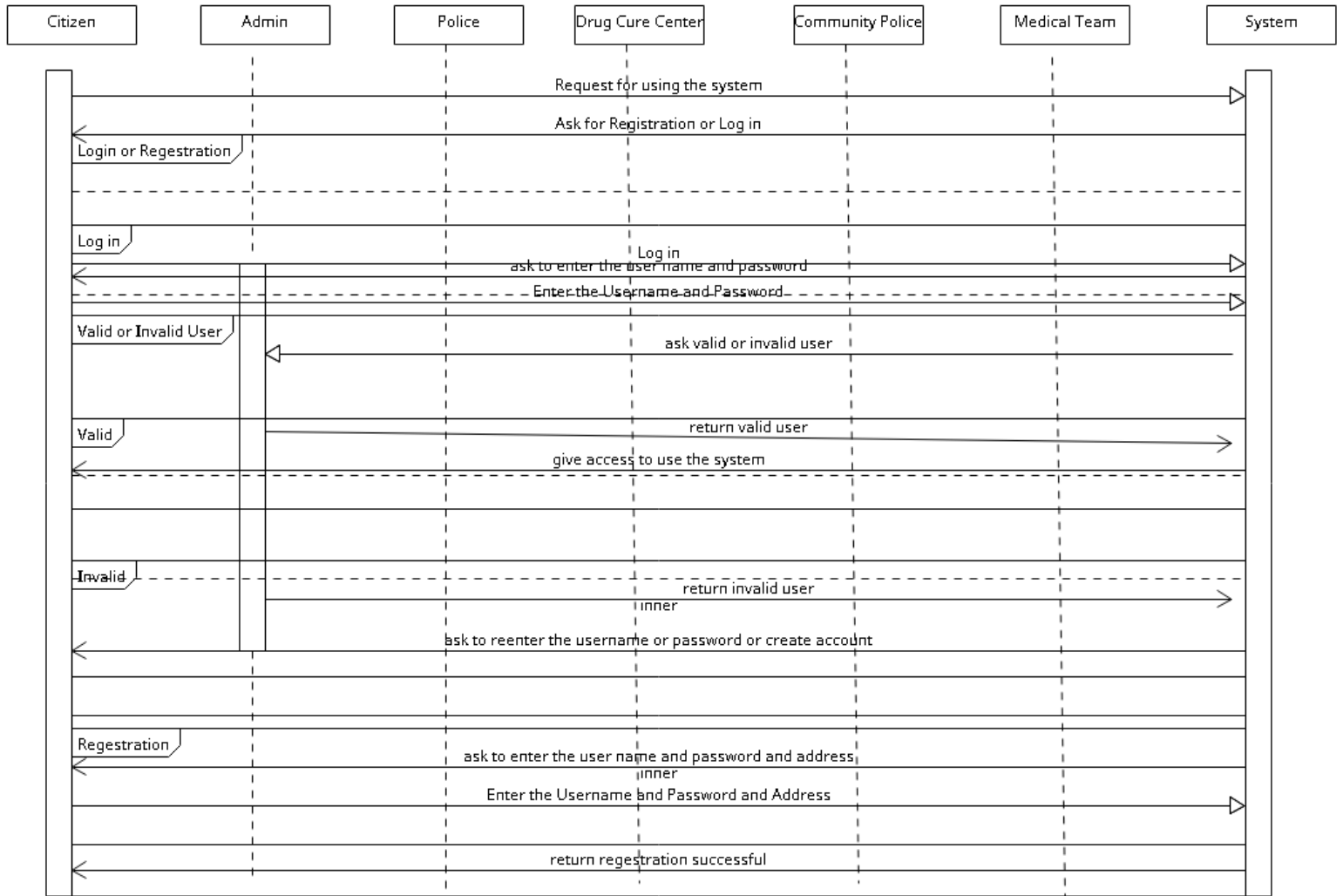


Activity Diagram for Urban Area Crime Detection and Crime Safety System

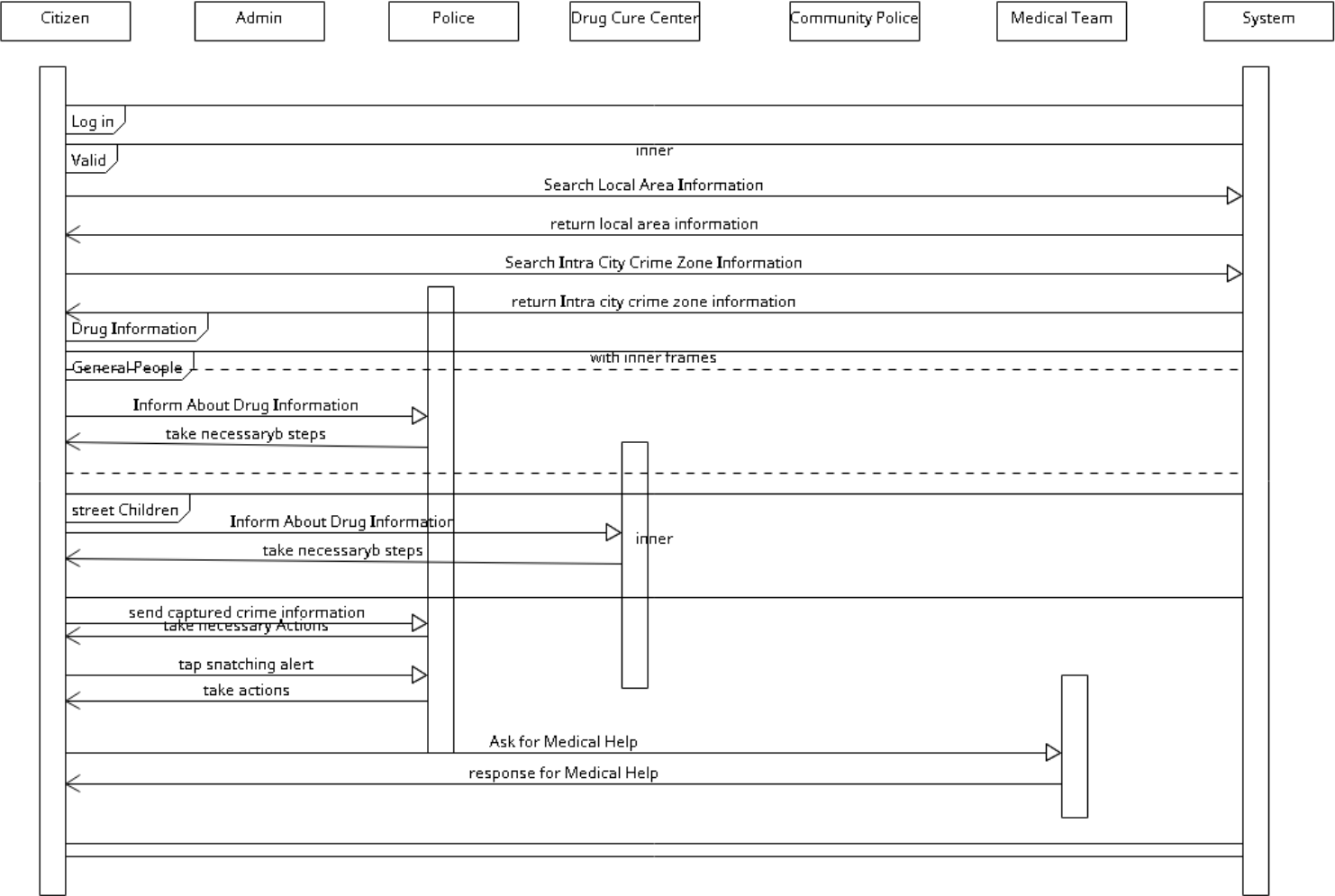
The diagram is a swimlane activity diagram with seven lanes: Citizen, Admin, Police, Drug Cure Center, Medical Team, Community Police, and System. It details the workflow for crime detection and safety. Key activities include: Citizen (log in, Register, Show Service List, Search Local Area Information, Search Intra city crime Area Information, Send Crime Footage, Drug Information, Send Drug Information, Street Children, General People, Safety Alert, Enable Women Safety Alert, Medical Help, Enable Medical HelpLine, Snatching Alert, Tap the Snatching Alert and provide Location); Admin (Validate Information); Police (Get the Crime footage, Detect the Location and take Action, Get the drug information, Take Necessary Action, Get the Women Safety Alert, Extract the Location and take Action); Drug Cure Center (Get the drug information, Take Necessary Action); Medical Team (Find the Location and send the Medical team to the Location); Community Police (Get the Women Safety Alert, Extract the Location and take Action); System (Fill up log in form, Fill up registration form, Show Local Area Information, Show intra city red crime zone information). The flow starts with Citizen login/register, moves to Admin validation, then to Police for crime/drug detection and action. It branches to Medical Team for location finding and to Community Police for women safety alerts. The System lane handles form filling and information display. Multiple synchronization bars (thick black lines) are used to merge and split flows between lanes.

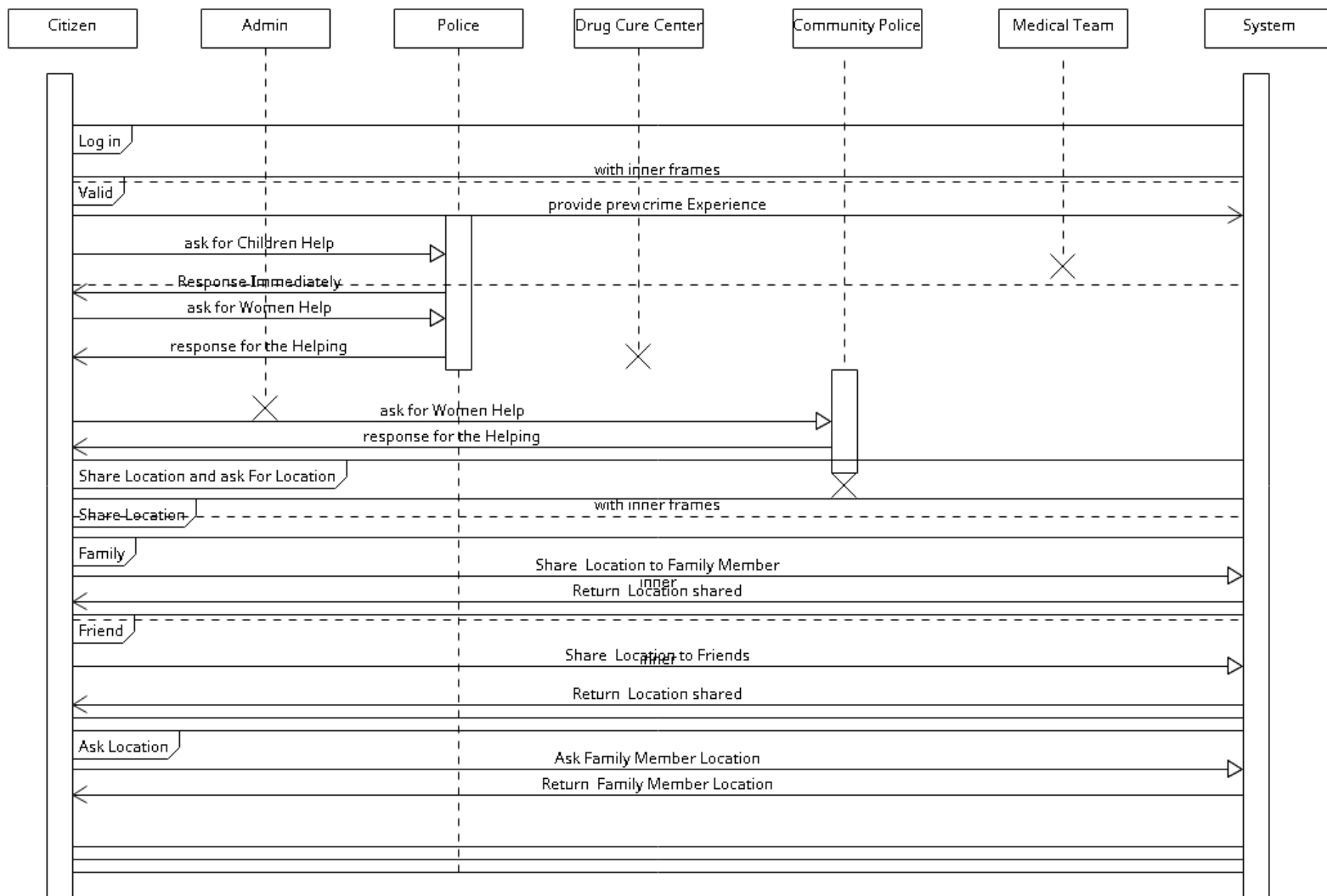


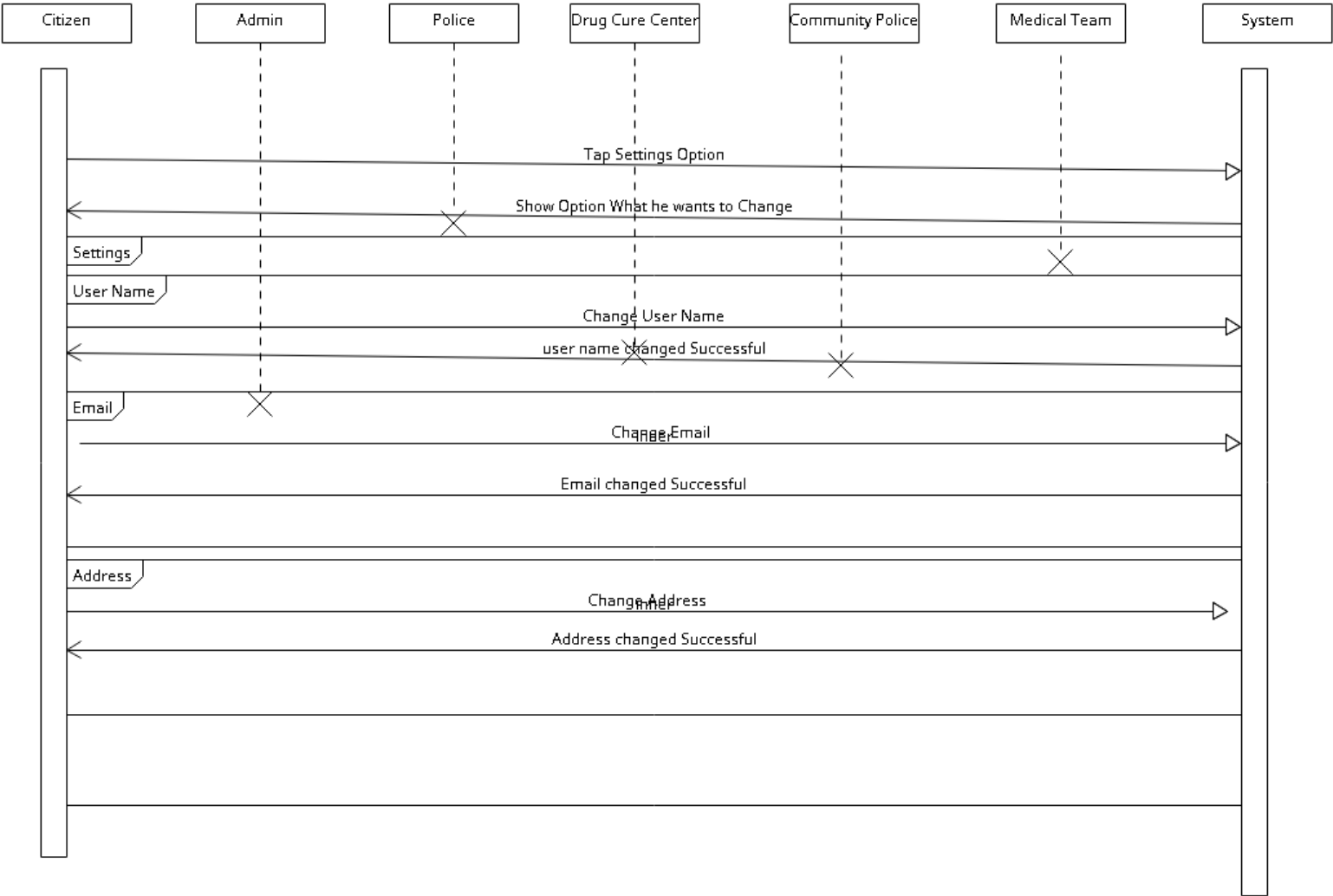
## Sequence Diagram



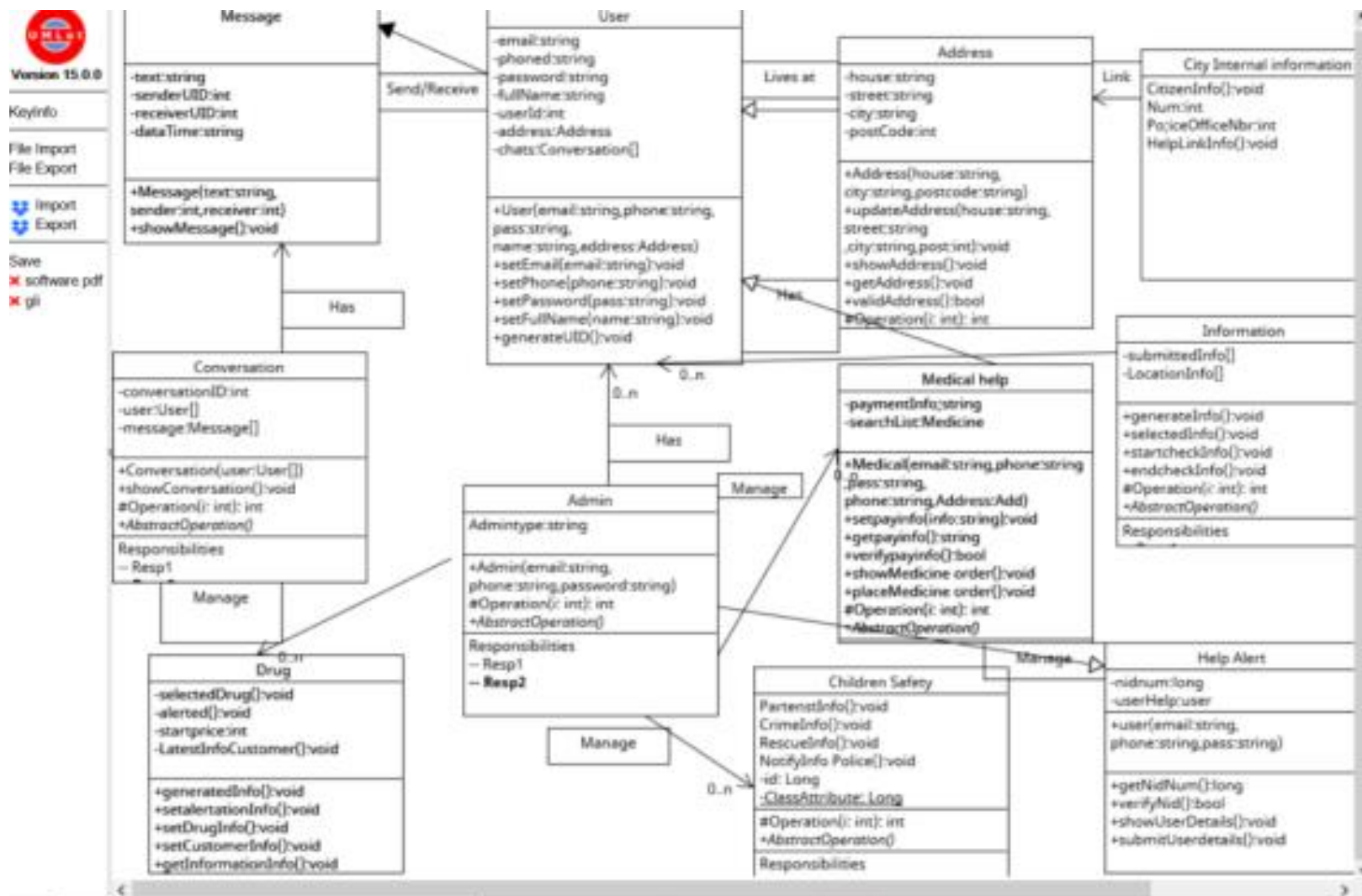




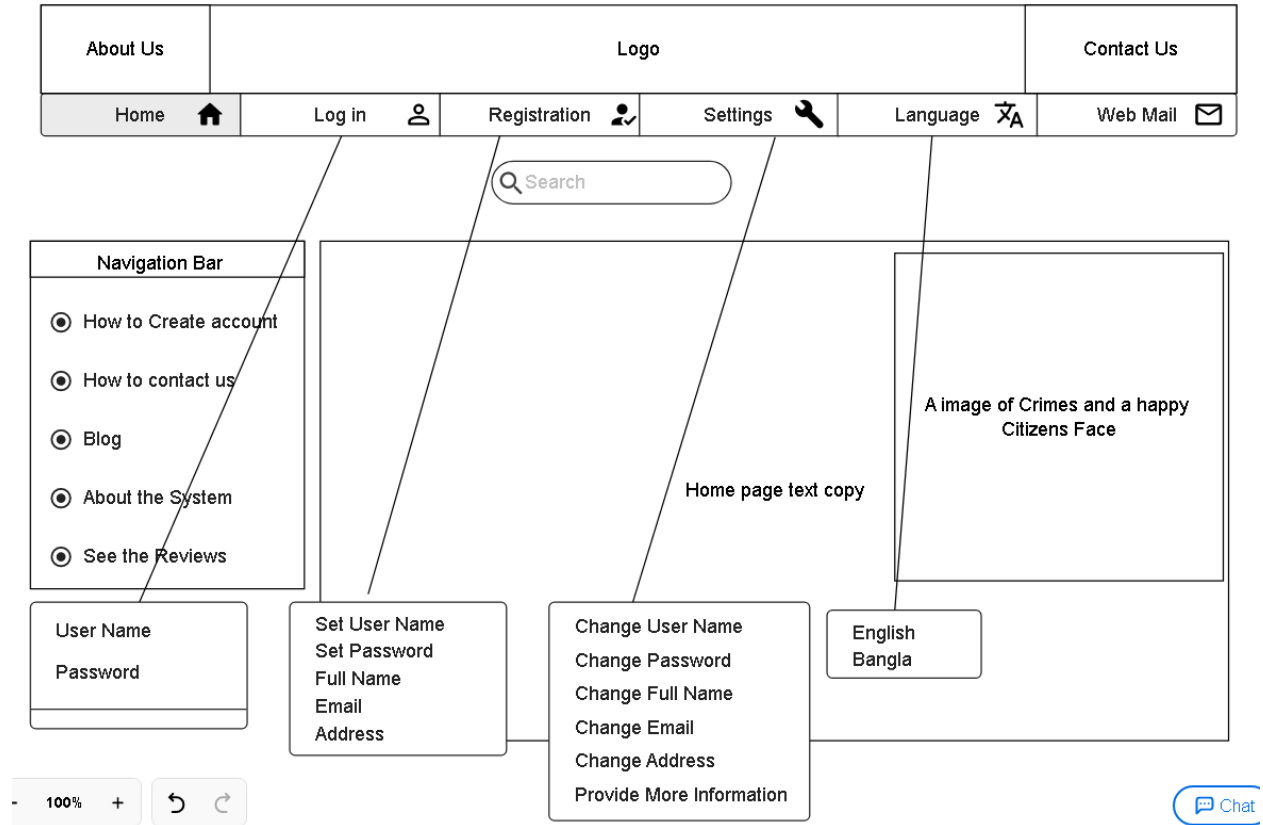


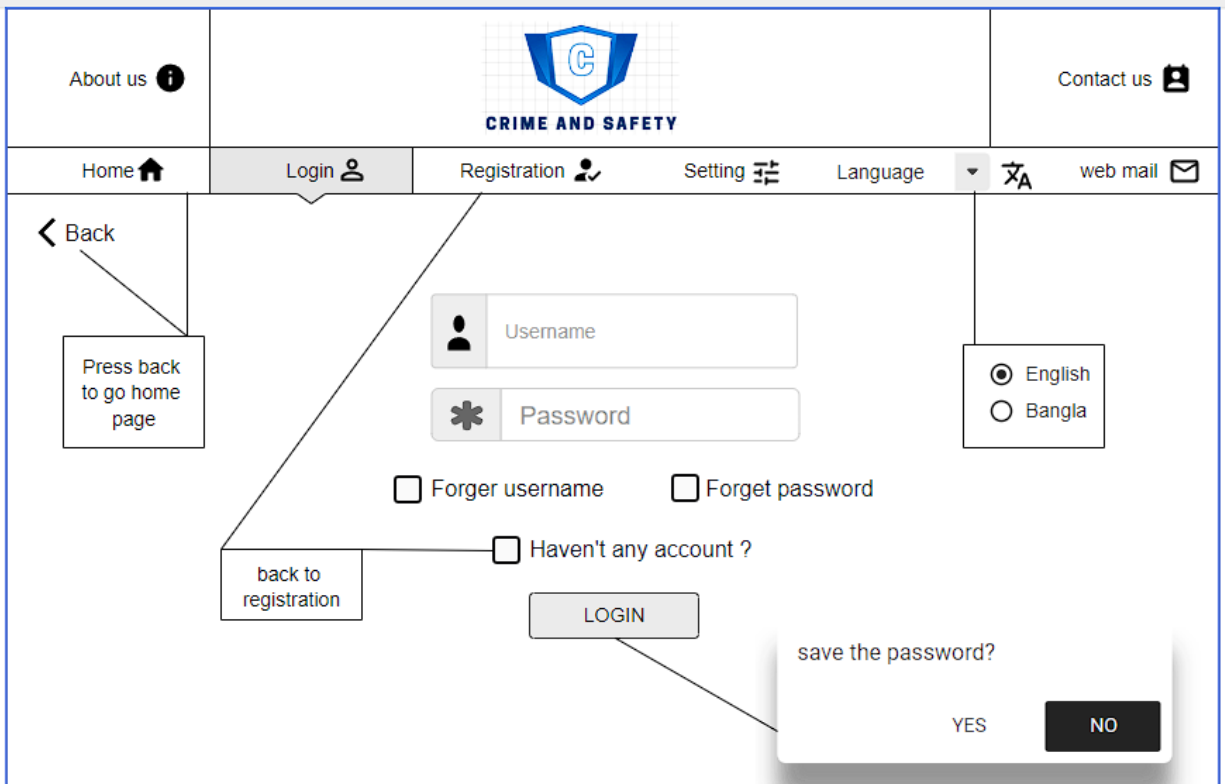
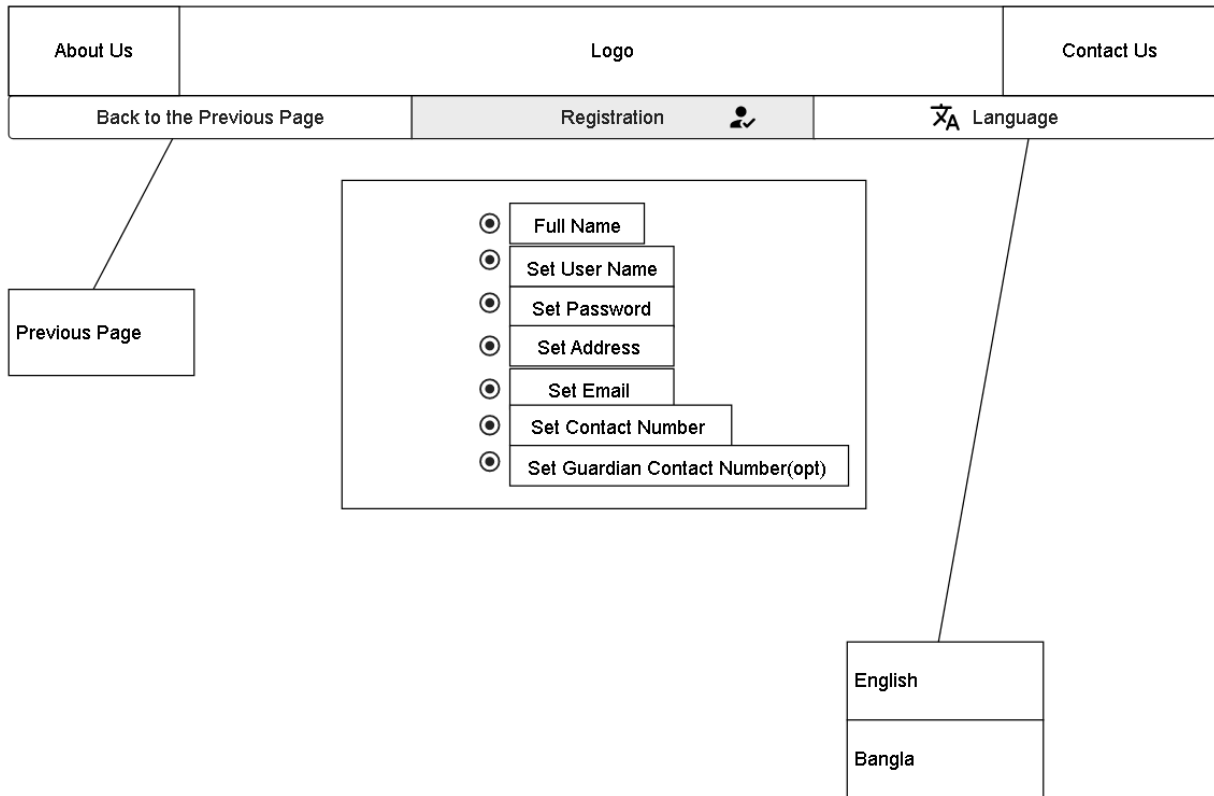


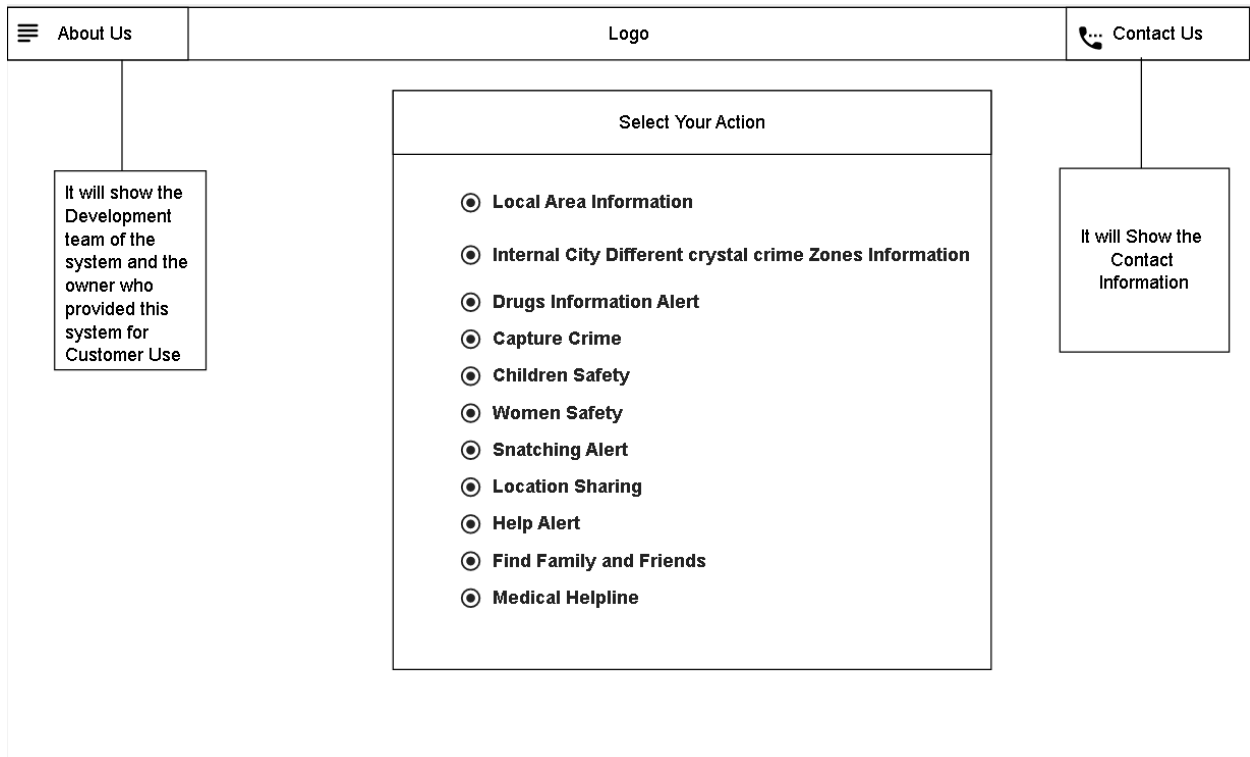
# Class Diagram

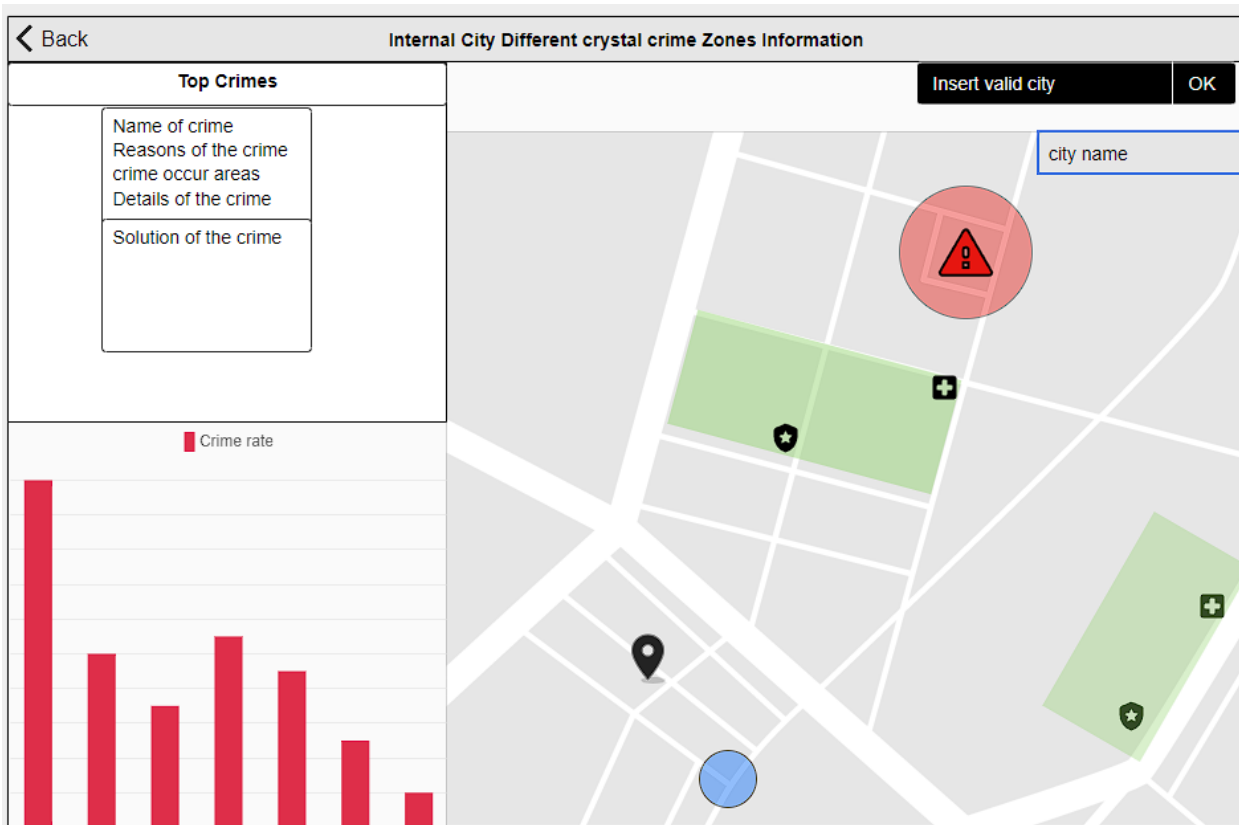
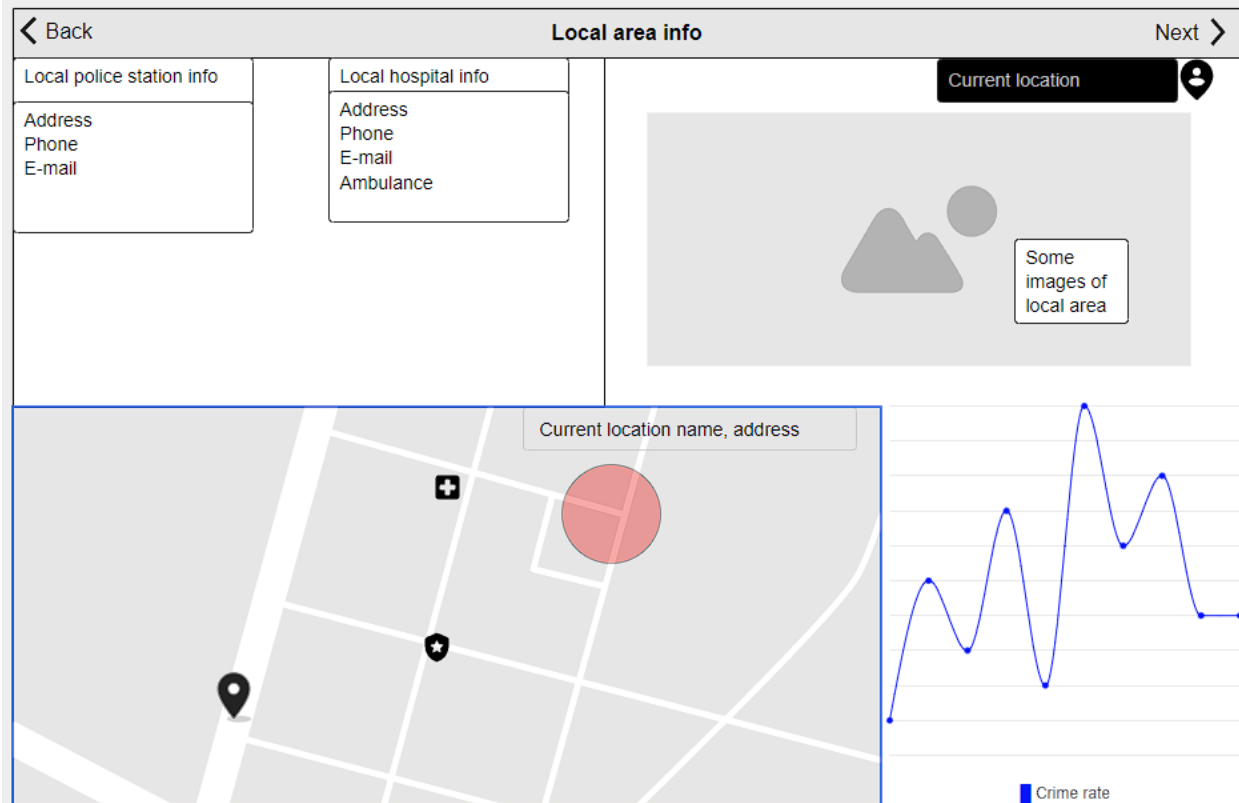


## Final Lab Task 1











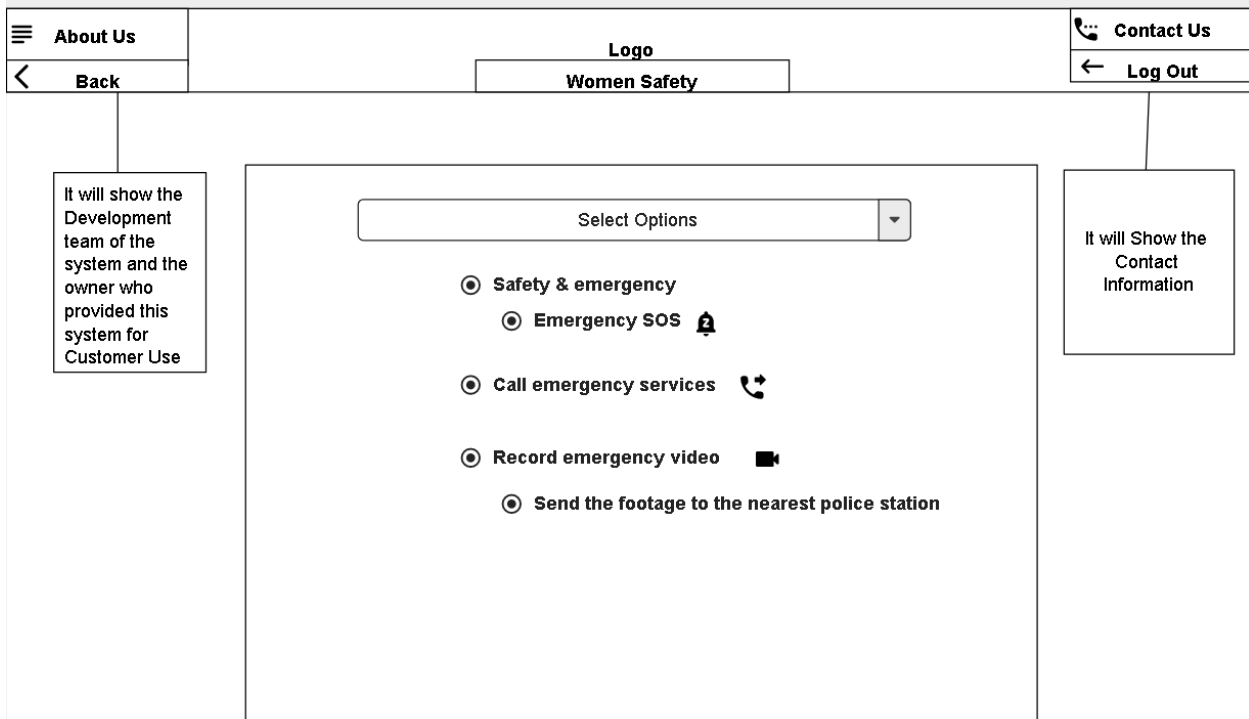
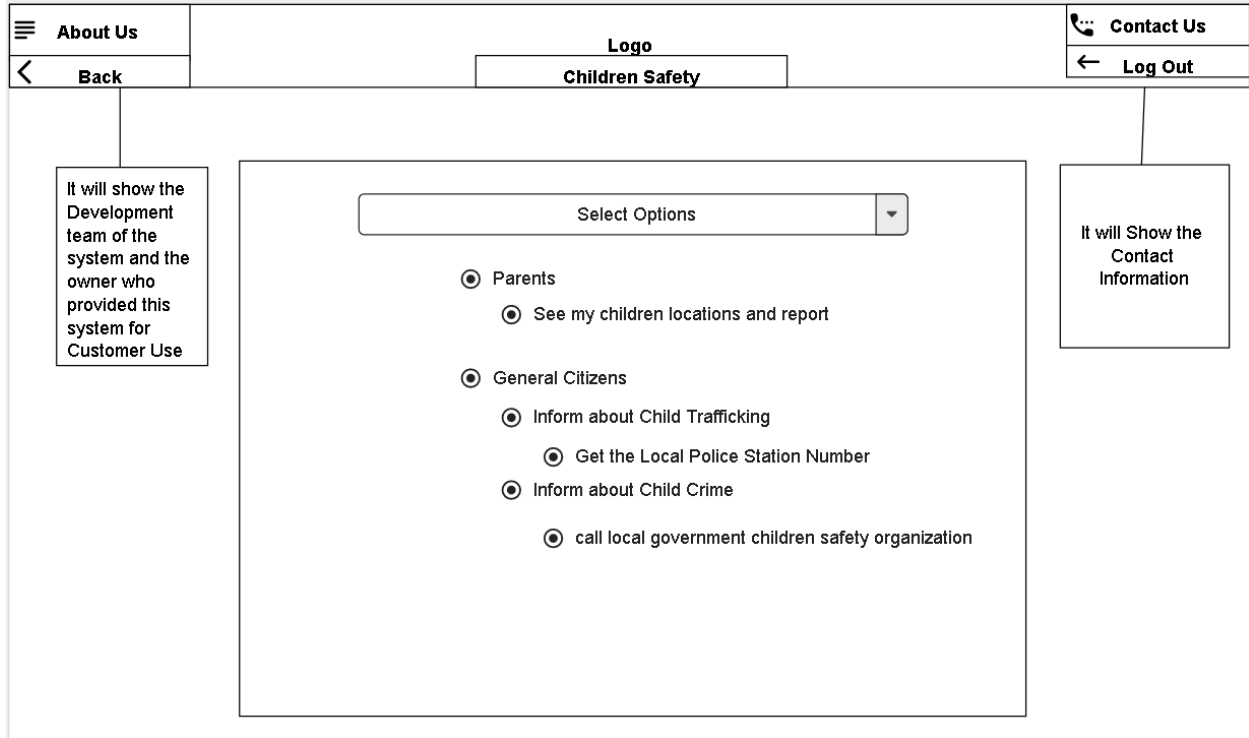






 About Us	Logo <b>Drugs Information Alert</b>	 Contact Us
It will show the Development team of the system and the owner who provided this system for Customer Use	<div><div>Drug trafficking</div><div><input checked="" type="radio"/> Call the Police and Share the Location  </div><div>Inform about Drug users</div><div><input checked="" type="radio"/> Street Children <input checked="" type="radio"/> inform the local drug cure center <input checked="" type="radio"/> General Public <input checked="" type="radio"/> inofrm local police and rehabilitation center.  </div></div>	It will Show the Contact Information

 About Us	Logo <b>Capture Crime</b>	 Contact Us
 Back		 Log Out
It will show the Development team of the system and the owner who provided this system for Customer Use	<div><div>Select Options</div><div><input checked="" type="radio"/> Capture the Crime and Send it to the Police Stations </div></div>	It will Show the Contact Information



<div>☰ About Us</div> <div>&lt; Back</div>	<div>Logo</div> <div>Snatching Alert</div>	<div>☎ Contact Us</div> <div>&lt; Log Out</div>
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It will show the Development team of the system and the owner who provided this system for Customer Use

Select Options

● Is This Location a High Snatching Area

● Turn on Location

● Take Help from Police

● Call the nearest police

It will Show the Contact Information

<div>☰ About Us</div> <div>&lt; Back</div>	<div>Logo</div> <div>Location Sharing</div>	<div>☎ Contact Us</div> <div>&lt; Log Out</div>
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It will show the Development team of the system and the owner who provided this system for Customer Use

Select Options

● Share Location

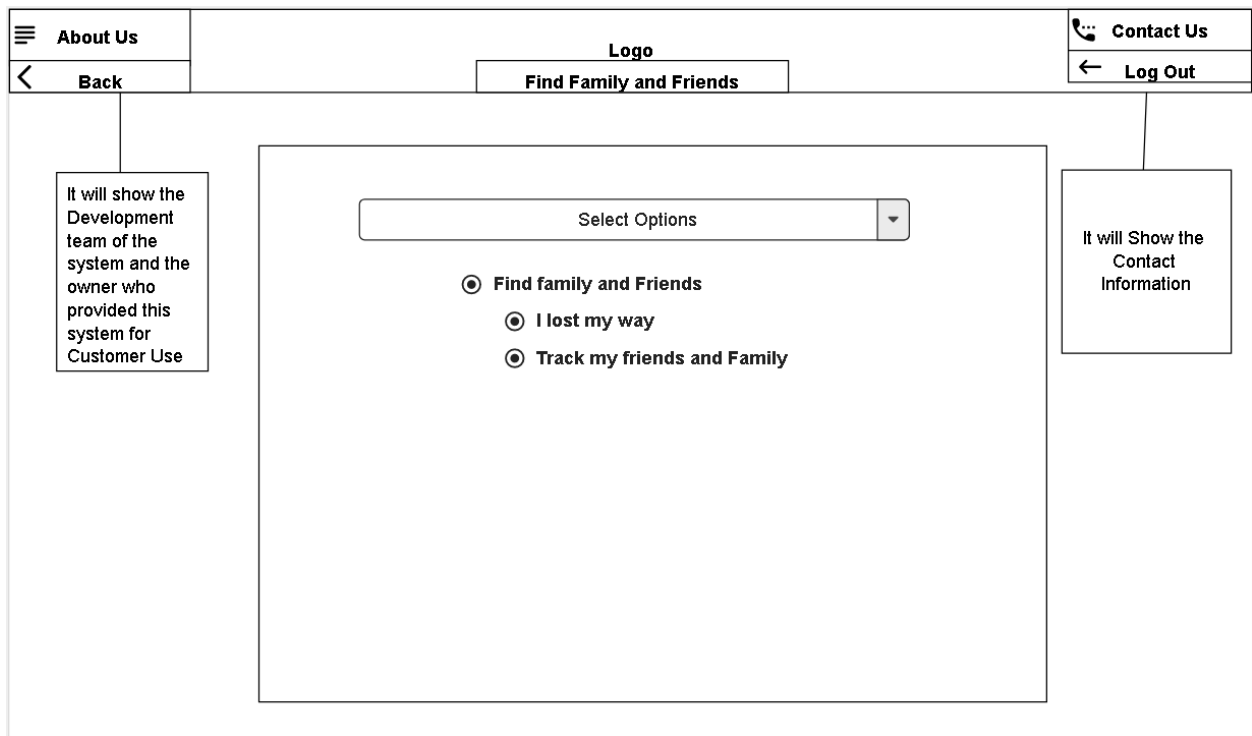
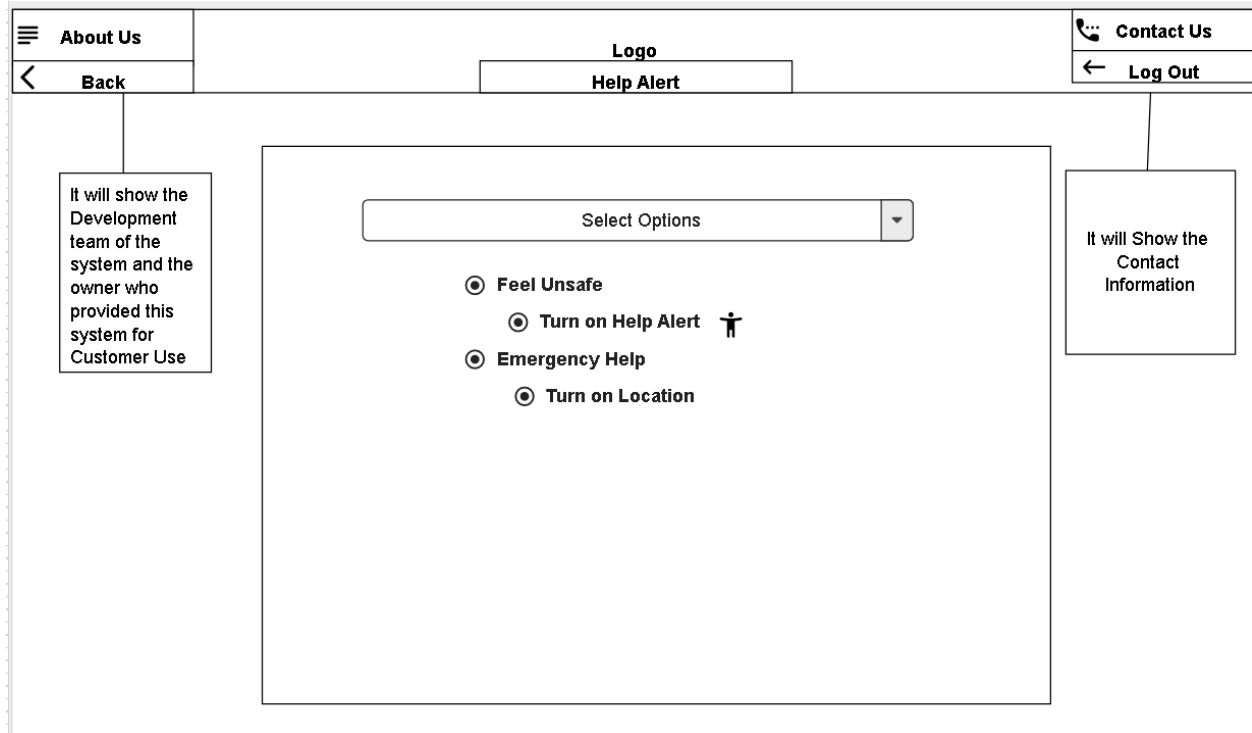
● Friends



● Family

● Local Councillor Office


● Local Police Station


It will Show the Contact Information



 <b>About Us</b>	<b>Logo</b>	 <b>Contact Us</b>
 <b>Back</b>	<b>Medical Helpline</b>	 <b>Log Out</b>

It will show the Development team of the system and the owner who provided this system for Customer Use

Select Options 

☒ I am Injured 

☒ Turn on Location 

It will Show the Contact Information

## Final Lab Task 2

### 1. System Login

Project Name: Urban Areas Crime Detection and Public Safety System			Test Designed by: Rasel Mahmud	
Test Case ID: FR_1_1			Test Designed date:11/16/22	
Test Priority (Low, Medium, High): Medium			Test Executed by: Rasel Mahmud	
Module Name: Login Session			Test Execution date:	
Test Title: verify login with valid username and password				
Description: Test website login page				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Enter username  3. Enter password  4. Click submit	Username: Rasel123@  Password: 0r7wf5	User should login into the application		
Post Condition:				

<b>Project Name: Urban Areas Crime Detection and Public Safety System</b>	<b>Test Designed by: Rasel Mahmud</b>
<b>Test Case ID: FR_1_2</b>	<b>Test Designed date:11/16/22</b>
<b>Test Priority (Low, Medium, High): Medium</b>	<b>Test Executed by: Rasel Mahmud</b>
<b>Module Name: Login Session</b>	<b>Test Execution date:</b>
<b>Test Title: verify login with valid username and password</b>	
<b>Description: Test website login page</b>	
<b>Precondition (If any): User must enter the invalid username and password</b>	

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
<b>1. Go to the website</b>  <b>2. Enter username</b>  <b>3. Enter password</b>  <b>4. Click submit</b>	<b>Username:</b> <b>99999999999</b>  <b>Password: 321</b>	<b>User shouldn't login into the application</b>		
<b>Post Condition:</b>				

Project Name: Urban Areas Crime Detection and Public Safety System			Test Designed by: Rasel Mahmud	
Test Case ID: FR_1_3			Test Designed date:11/16/22	
Test Priority (Low, Medium, High): Medium			Test Executed by: Rasel Mahmud	
Module Name: Login Session			Test Execution date:	
Test Title: verify login with valid username and password				
Description: Test website login page				
Precondition (If any): User must enter the forget password option				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Enter Forget Password  3. Enter email/phone number	Enter email: <a href="mailto:rasel@gmail.com">rasel@gmail.com</a>  Or  Phone: 01*****	User should  Get the link to reset his password and username		
Post Condition:				

## 2. Register

Project Name: Urban Areas Crime Detection and Public Safety System			Test Designed by: Rasel Mahmud	
Test Case ID: FR_2_1			Test Designed date:11/16/22	
Test Priority (Low, Medium, High): High			Test Executed by: Rasel Mahmud	
Module Name: Registration Session			Test Execution date:	
Test Title: verify registration with valid name ,valid , address , Email ,username and password				
Description: Test website registration page				
Precondition (If any): User must have valid username, name, unique email, address, Phone and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Enter name  3. Enter username  4. Enter address  5. Enter password  6. Enter phone  7.Enter Email  8. Click submit	Name: Rasel  Username: raselpinon  Address: aziz stress,house name**,flat number**,4207  password :127ofsw  phone:01*****  Email:ras**@gmail.com	User should register into the application		
Post Condition:				



Project Name: Urban Areas Crime Detection and Public Safety System			Test Designed by: Rasel Mahmud	
Test Case ID: FR_2_2			Test Designed date:11/16/22	
Test Priority (Low, Medium, High): High			Test Executed by: Rasel Mahmud	
Module Name: Registration Session			Test Execution date:	
Test Title: verify registration with valid name ,valid , address , Email ,username and password				
Description: Test website registration page				
Precondition (If any): User must enter invalid username/ invalid name/duplicate email/invalid address/invalid Phone and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Enter name  3. Enter username  4. Enter address  5. Enter password  6. Enter phone  7.Enter Email  8. Click submit	Name: Rasel456  Username: 01527  Address: aziz stress,house name**,flat number**,4207  password :127ofsw  phone:01***odd*****  Email:ras**@gmail.com	User shouldn't register into the application		
Post Condition:				

### 3. Local Area Information

Project Name: Urban Areas Crime Detection and Public Safety System			Test Designed by: Rasel Mahmud	
Test Case ID: FR_3_1			Test Designed date:11/16/22	
Test Priority (Low, Medium, High): High			Test Executed by: Rasel Mahmud	
Module Name: local area information feature Session			Test Execution date:	
Test Title: get the local area information around the user from the system				
Description: Test systems Local Area Information Feature				
Precondition (If any): Have a valid Account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Login into the System  3.Turn on Location  4. Click the get Local area Information  5. Click show  6.Back To the Previous Page	Location: Turn on  Enter the area name:(optional)	User should get all the crime spot around the local area		
Post Condition:				

Project Name: Urban Areas Crime Detection and Public Safety System			Test Designed by: Rasel Mahmud	
Test Case ID: FR_3_2			Test Designed date:11/16/22	
Test Priority (Low, Medium, High): High			Test Executed by: Rasel Mahmud	
Module Name: local area information feature Session			Test Execution date:	

<b>Test Title: get the local area information around the user from the system</b>  <b>Description: Test systems Local Area Information Feature</b>  <b>Precondition (If any): Have a valid Account</b>				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Login into the System  3. Turn on Location  4. Click the get Local area Information  5. Click show  6. Back To the Previous Page	Location: Turn off  Enter the invalid area name: XXX	User shouldn't get all the crime spot around the local area and show invalid command		
<b>Post Condition:</b>				

Project Name: Urban Areas Crime Detection and Public Safety System			Test Designed by: Rasel Mahmud	
Test Case ID: FR_3_3			Test Designed date:11/16/22	
Test Priority (Low, Medium, High): High			Test Executed by: Rasel Mahmud	
Module Name: local area information feature Session			Test Execution date:	
Test Title: Back to the home page of the system from the Local Area Information Feature				
Description: Test systems Local Area Information Feature				
Precondition (If any): Have a valid Account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Login into the System  3.Turn on Location	Click: Back to the Previous Page	The system should take the user to the home page from the Local		

4.Click Back To the Previous Page		Area Information page		
Post Condition:				

4. Internal City Different crystal crime Zones Information

Project Name: Urban Areas Crime Detection and Public Safety System			Test Designed by: Rasel Mahmud	
Test Case ID: FR_4_1			Test Designed date:11/16/22	
Test Priority (Low, Medium, High): High			Test Executed by: Rasel Mahmud	
Module Name: Internal City Different crystal crime Zones Information feature Session			Test Execution date:	
Test Title: get the Internal City Different crystal crime Zones Information from the system				
Description: Test systems Internal City Different crystal crime Zones Information Feature				
Precondition (If any): Have a valid Account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Login into the System 3.Turn on Location 4. Click the get Internal City Different crystal crime Zones Information 5. Click show	Enter the City Name: Dhaka	User should get all the crystal crime Zones information in the City		

6.Back To the Previous Page				
Post Condition:				

Project Name: Urban Areas Crime Detection and Public Safety System			Test Designed by: Rasel Mahmud	
Test Case ID: FR_4_2			Test Designed date:11/16/22	
Test Priority (Low, Medium, High): High			Test Executed by: Rasel Mahmud	
Module Name: Internal City Different crystal crime Zones Information feature Session			Test Execution date:	
Test Title: get the Internal City Different crystal crime Zones Information from the system				
Description: Test systems Internal City Different crystal crime Zones Information Feature				
Precondition (If any): Have a valid Account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Login into the System  3.Turn on Location  4. Click the get Internal City Different crystal crime Zones Information  5. Click show  6.Back To the Previous Page	Enter the City Name: Dhaka	User shouldn't get all crystal crime Zones information in the City and show invalid command		
Post Condition:				

Project Name: Urban Areas Crime Detection and Public Safety System			Test Designed by: Rasel Mahmud	
Test Case ID: FR_4_3			Test Designed date:11/16/22	
Test Priority (Low, Medium, High): High			Test Executed by: Rasel Mahmud	
Module Name: Internal City Different crystal crime Zones Information feature Session			Test Execution date:	
Test Title: get the Internal City Different crystal crime Zones Information from the system				
Description: Test systems Internal City Different crystal crime Zones Information Feature				
Precondition (If any): Have a valid Account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Login into the System  3.Turn on Location  4. Click the get Internal City Different crystal crime Zones Information  5. Click show  6.Back To the Previous Page	Click: Back to the Previous Page	The system should take the user to the home page from Internal City Different crystal crime Zones Information page		
Post Condition:				

## 5. Drugs Information Alert

Project Name: Urban Areas Crime Detection and Public Safety System		Test Designed by: Sanid		
Test Case ID: FR_5_1		Test Designed date:11/16/2022		
Test Priority (Low, Medium, High): Medium		Test Executed by: Sanid		
Module Name: Information of Drug		Test Execution date:11/16/2022		
Test Title: verify the information of drug sent by the user				
Description: Testing the information of drug from the website.				
Precondition (If any): Have a valid Account.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Login into the System  3. Click the get Drug Information Alert  4. Click Open Camera or  Click I want to write the Information in text.  5.Back To the Previous Page	Select the Drug User Type: Children/Adult/None  If None then Write What Information I want to Provide: Drug Dealer/Supplier  Enter the Drug Type: Tablet/Liquid/Others  Enter the Location:****	The Information will go the Local Drug Cure Center if There is Valid User Type and match with the drug type.  The Information will go to the Police Station if user select Drug Dealer/Supplier		
Post Condition:				

Project Name: Urban Areas Crime Detection and Public Safety System		Test Designed by: Rasel		
Test Case ID: FR_5_2		Test Designed date:11/16/2022		
Test Priority (Low, Medium, High): Medium		Test Executed by: Rasel		
Module Name: Information of Drug		Test Execution date:11/16/2022		
Test Title: verify the information of drug sent by the user				
Description: Testing the information of drug from the website.				
Precondition (If any): Have a valid Account.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Login into the System  3. Click the get Drug Information Alert  4. Click Open Camera or  Click I want to write the  Information in text.  5.Back To the Previous Page	Select the Drug User Type: Children/Adult/None       Capture/Video(Opt):Picture or video       Select None then Write What Information I want to Provide: Drug Dealer/Supplier       Enter the Drug Type: Tablet/Liquid/Others       Enter the Location: Invalid Location	If the User provide a invalid Location or if the user send a picture/video not related to drug then show please provide us valid Information		
Post Condition:				



Project Name: Urban Areas Crime Detection and Public Safety System		Test Designed by: Rasel		
Test Case ID: FR_5_3		Test Designed date:11/16/2022		
Test Priority (Low, Medium, High): Medium		Test Executed by: Rasel		
Module Name: Information of Drug		Test Execution date:11/16/2022		
Test Title: verify the information of drug sent by the user				
Description: Testing the information of drug from the website.				
Precondition (If any): Have a valid Account.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Login into the System  3. Click the get Drug Information Alert  4. Click Open Camera or  Click I want to write the  Information in text.  5.Back To the Previous Page	Select: Back to the previous page	The system should take the user to the home page from Drug Information page		
Post Condition:				

## 6.Capture Crime

Project Name: Urban Areas Crime Detection and Public Safety System		Test Designed by: Sanid		
Test Case ID: FR_6_1		Test Designed date:11/16/2022		
Test Priority (Low, Medium, High): High		Test Executed by: Sanid		
Module Name: Capture the crime.		Test Execution date:11/16/2022		
Test Title: Verify the Scenario of Crime from the Captured Picture.				
Description: Capture the crime Testing result is worked successfully.				
Precondition (If any): Have a valid Account working camera on the device.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Login into the System  3. Click Capture Crime Option  4. Turn on Location/ Send Location  5. Click on Open Camera  6.Send Pictures  7.Back To the Previous Page	Open Camera: Click Open Camera  Click: Enter Click  Send: Send the Pictures  Location: I have Already Turned on/ Type the Location	The Pictures first verified by the help of AI then Sent to the Nearby police station depending on the Location		
Post Condition:				

Project Name: Urban Areas Crime Detection and Public Safety System	Test Designed by: Rasel
Test Case ID: FR_6_2	Test Designed date:11/16/2022

Test Priority (Low, Medium, High): High			Test Executed by: Rasel	
Module Name: Capture the crime.			Test Execution date:11/16/2022	
Test Title: Verify the Scenario of Crime from the Captured Picture.				
Description: Capture the crime Testing result is worked successfully.				
Precondition (If any): Have a valid Account and working camera on the device.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Login into the System 3. Click Capture Crime Option 4. Turn on Location/ Send Location 5. Click on Open Camera 6.Send Pictures 7.Back To the Previous Page	Open Camera: Click Open Camera  Click: Enter Click  Send: Send the Pictures  Location: I have Already Turned on/ Type the Location	The Pictures first verified by the help of AI and it seems not related to crime/ the location is not appropriate then show Please Provide Correct Information		
Post Condition:				

<b>Project Name: Urban Areas Crime Detection and Public Safety System</b>	<b>Test Designed by: Rasel</b>
<b>Test Case ID: FR_6_3</b>	<b>Test Designed date:11/16/2022</b>
<b>Test Priority (Low, Medium, High): High</b>	<b>Test Executed by: Rasel</b>
<b>Module Name: Capture the crime.</b>	<b>Test Execution date:11/16/2022</b>
<b>Test Title: Verify the Scenario of Crime from the Captured Picture.</b>	
<b>Description: Capture the crime Testing result is worked successfully.</b>	

<b>Precondition (If any):</b> Have a valid Account and working camera on the device.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
<b>1. Go to the website</b> <b>2. Login into the System</b> <b>3.Click Back To the Previous Page</b>	<b>Back to the Previous Page: Enter</b>	<b>The system should take the user to the home page from Capture the crime page</b>		
<b>Post Condition:</b>				

## 7.Children Safety

Project Name: Urban Areas Crime Detection and Public Safety System		Test Designed by: Sanid		
Test Case ID: FR_7_1		Test Designed date:11/16/2022		
Test Priority (Low, Medium, High): High		Test Executed by: Sanid		
Module Name: Children Safety		Test Execution date:11/16/2022		
Test Title: verify the children safety feature in the system.				
Description: children safety feature is working correctly.				
Precondition (If any): Have a valid Account.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)

<b>1. Go to the website</b> <b>2. Login into the System</b> <b>3. Click Children Option</b> <b>4.Back to the Previous Page</b>	<b>Select User: Parent/ General People</b>  <b>Children involved in Crime: Yes/No</b>  <b>Report About Child Trafficking: Yes/No</b>  <b>If Yes: Call Police</b>  <b>Child Safety Emergency: Call Now</b>	<b>If the user call the police it should work correctly</b>  <b>And if the user call for emergency child safety then the call should be work perfectly</b>  <b>If option choose their children trackers should work perfectly</b>		
<b>Post Condition: None</b>				

<b>Project Name: Urban Areas Crime Detection and Public Safety System</b>			<b>Test Designed by: Rasel</b>	
<b>Test Case ID: FR_7_2</b>			<b>Test Designed date:11/16/2022</b>	
<b>Test Priority (Low, Medium, High): High</b>			<b>Test Executed by: Rasel</b>	
<b>Module Name: Children Safety</b>			<b>Test Execution date:11/16/2022</b>	
<b>Test Title: verify the children safety feature in the system.</b>				
<b>Description: children safety feature is working correctly.</b>				
<b>Precondition (If any): Have a valid Account.</b>				
<b>Test Steps</b>	<b>Test Data</b>	<b>Expected Results</b>	<b>Actual Results</b>	<b>Status (Pass/Fail)</b>

<b>1. Go to the website</b> <b>2. Login into the System</b> <b>3. Click Children Option</b> <b>4.Back to the Previous Page</b>	<b>Select User: Parent/ General People</b>  <b>Children involved in Crime: Yes/No</b>  <b>Report About Child Trafficking: Yes/No</b>  <b>If Yes: Call Police</b>  <b>Child Safety Emergency: Call Now</b>	<b>If the user call the police and Emergency unit for child safety without any reason then a warning should be sent to the user from the system</b>		
<b>Post Condition: None</b>				

Project Name: Urban Areas Crime Detection and Public Safety System			Test Designed by: Rasel	
Test Case ID: FR_7_2			Test Designed date:11/16/2022	
Test Priority (Low, Medium, High): High			Test Executed by: Rasel	
Module Name: Children Safety			Test Execution date:11/16/2022	
Test Title: verify the children safety feature in the system.				
Description: children safety feature is working correctly.				
Precondition (If any): Have a valid Account.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)

1. Go to the website 2. Login into the System 3. Click Children Option 4. Back to the Previous Page	Back to the Previous Page: Click	The system should take the user to the home page from children safety feature page		
Post Condition: None				

## 8. Women Safety

Project Name: Urban area and social crime detection		Test Designed by: Md.Nafiul Islam Nayeem		
Test Case ID: FR_8_1		Test Designed date: 16.11.2022		
Test Priority (Low, Medium, High): High		Test Executed by: Md.Nafiul Islam Nayeem		
Module Name: Women Safety		Test Execution date:		
Test Title: Help For Women Safety.				
Description: Test Women Safety in website feature page				
Precondition (If any): User must have a valid account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Log in successfully  3. Click on women safety  4. Choose option  5. Click Submit  6. Back	Location: Turn on  Valid location: Road-A/12  Send Emergency notification: Police/local councilor office.	The notification from the user should sent nearest police station or councilor office by emergency call or video record or message signal.		

	<p><b>Call emergency: 999</b></p> <p><b>Record emergency video for prove: Turn on camera</b></p>			
<b>Post Condition:</b>				

<b>Project Name: Urban area and social crime detection</b>			<b>Test Designed by: Md.Nafiul Islam Nayeem</b>	
<b>Test Case ID: FR_8_2</b>			<b>Test Designed date: 16.11.2022</b>	
<b>Test Priority (Low, Medium, High): High</b>			<b>Test Executed by: Md.Nafiul Islam Nayeem</b>	
<b>Module Name: Women Safety</b>			<b>Test Execution date:</b>	
<b>Test Title: Help For Women Safety.</b>				
<b>Description: Test Women Safety in website feature page</b>				
<b>Precondition (If any): User must have a valid account</b>				
<b>Test Steps</b>	<b>Test Data</b>	<b>Expected Results</b>	<b>Actual Results</b>	<b>Status (Pass/Fail)</b>



<p>1. Go to the website</p> <p>2. Log in successfully</p> <p>3. Click on women safety</p> <p>4. Choose option</p> <p>5. Click Submit</p> <p>6. Back</p>	<p>Location: Turn on</p> <p>Valid location: Road-A/12</p> <p>Send Emergency notification: Police/local councilor office.</p> <p>Call emergency: 999</p> <p>Record emergency video for prove: Turn on camera</p>	<p>If the location is turn off then</p> <p>The user should not go further.</p> <p>If the video is irrelevant then the system will show your information are irrelevant for this feature</p> <p>If the user call in the emergency unit without any reason she should get a warning message</p>		
Post Condition:				

Project Name: Urban area and social crime detection		Test Designed by: Rasel		
Test Case ID: FR_8_3		Test Designed date: 16.11.2022		
Test Priority (Low, Medium, High): High		Test Executed by: Rasel		
Module Name: Women Safety		Test Execution date:		
Test Title: Help For Women Safety.				
Description: Test Women Safety in website feature page				
Precondition (If any): User must have a valid account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Log in successfully  3. Click on women safety  4. Choose option  5. Click Submit  6. Back	Go to the previous page: Click	The system should take the user to the home page from Women Safety page		
Post Condition:				

## 9.Snatching Alert

Project Name: Urban area and social crime detection		Test Designed by: Md.Nafiul Islam Nayeem		
Test Case ID: FR_9_1		Test Designed date: 16.11.2022		
Test Priority (Low, Medium, High): High		Test Executed by: Md.Nafiul Islam Nayeem		
Module Name: Snatching Alert		Test Execution date:		
Test Title: By snatching alert to help user.				
Description: Test Snatching alert in website feature page				
Precondition (If any): User must have a valid account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Log in successfully 3. Click on snatching alert 4. Choose option 5. Click Submit 6. Back	Location Turn on  Valid Location: GP road A/222  User notify local police station.  User Phone vibration will help from snatching  Auto call : 999	User could notify local police and get help from 999.		
Post Condition:				

Project Name: Urban area and social crime detection		Test Designed by: Md.Nafiul Islam Nayeem		
Test Case ID: FR_9_2		Test Designed date: 16.11.2022		
Test Priority (Low, Medium, High): High		Test Executed by: Md.Nafiul Islam Nayeem		
Module Name: Snatching Alert		Test Execution date:		
Test Title: By snatching alert to help user.				
Description: Test Snatching alert in website feature page				
Precondition (If any): User must have a valid account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Log in successfully  3. Click on snatching alert  4. Choose option  5. Click Submit  6. Back	Location Turn off    Invalid area: GP Road A/222    User failed to notify local police station.    System failed to vibrate and can not get any safety alert    No Auto call From : 999	User could not notify local police station and will not any get help police station.		
Post Condition: User is validated with database and successfully login to account. The account session details are logged in the database.				

Project Name: Urban area and social crime detection		Test Designed by: Rasel		
Test Case ID: FR_9_3		Test Designed date: 16.11.2022		
Test Priority (Low, Medium, High): High		Test Executed by: Rasel		
Module Name: Snatching Alert		Test Execution date:		
Test Title: By snatching alert to help user.				
Description: Test Snatching alert in website feature page				
Precondition (If any): User must have a valid account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Log in successfully  3. Click on snatching alert  4. Choose option  5. Click Submit  6. Back	Back to the Previous Page: Click	The system should take the user to the home page from snatching alert page		
Post Condition:				

## 10.Location Sharing

Project Name: Urban area and social crime detection		Test Designed by: Md.Nafiul Islam Nayeem		
Test Case ID: FR_10_1		Test Designed date: 16.11.2022		
Test Priority (Low, Medium, High): High		Test Executed by: Md.Nafiul Islam Nayeem		
Module Name: Location Sharing		Test Execution date:		
Test Title: User share location for feeling unsafe				
Description: Test sharing in website feature page				
Precondition (If any): User must have a valid account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Log in successfully  3. Click on sharing location  4. Choose option  5. Click Submit  6. Back	Location turn on   			

Project Name: Urban area and social crime detection	Test Designed by: Md.Nafiul Islam Nayeem
Test Case ID: FR_10_2	Test Designed date: 16.11.2022
Test Priority (Low, Medium, High): High	Test Executed by: Md.Nafiul Islam Nayeem
Module Name: Location Sharing	Test Execution date:

<b>Test Title: User share location for feeling unsafe</b>  <b>Description: Test sharing in website feature page</b>  <b>Precondition (If any): User must have a valid account</b>				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Log in successfully 3. Click on sharing location 4. Choose option 5. Click Sumit 6. Back	Location Turn off  Invalid Location:  pp Road/232	System should fail to share the user last location.		
<b>Post Condition:</b>				

Project Name: Urban area and social crime detection			Test Designed by: Rasel	
Test Case ID: FR_10_3			Test Designed date: 16.11.2022	
Test Priority (Low, Medium, High): High			Test Executed by: Rasel	
Module Name: Location Sharing			Test Execution date:	
Test Title: User share location for feeling unsafe				
Description: Test sharing in website feature page				
Precondition (If any): User must have a valid account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)

1. Go to the website 2. Log in successfully 3. Click on sharing location 4. Choose option 5. Click Submit 6. Back	Back to the Previous Page: Click	The system should take the user to the home page from Location Sharing page		
Post Condition:				

## 11.Help Alert

Project Name: Urban area and social crime detection		Test Designed by: Md. Atikur Rahman		
Test Case ID: FR_11_1		Test Designed date: 11/16/2022		
Test Priority (Low, Medium, High): High		Test Executed by: Md. Atikur Rahman		
Module Name: Help Alert		Test Execution date:		
Test Title: send help alert when feel unsafe and emergency				
Description: Test help alert in website feature page				
Precondition (If any): User must have valid account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Login Successfully  3. Click on help alert  4. Click Select option  5. Choose option  6. Click submit	<ul style="list-style-type: none"><li>Valid location: gproad-A/237</li><li>Notify nearest police station</li><li>Auto call: 999</li></ul>	User could notify nearest police station and get call from 999		



<b>7. Back</b>				
<b>Post Condition:</b>				

<b>Project Name: Urban area and social crime detection</b>		<b>Test Designed by: Md. Atikur Rahman</b>		
<b>Test Case ID: FR_11_2</b>		<b>Test Designed date: 11/16/2022</b>		
<b>Test Priority (Low, Medium, High): High</b>		<b>Test Executed by: Md. Atikur Rahman</b>		
<b>Module Name: Help Alert</b>		<b>Test Execution date:</b>		
<b>Test Title: send help alert when feel unsafe and emergency</b>				
<b>Description: Test help alert in website feature page</b>				
<b>Precondition (If any): User must have valid account</b>				
<b>Test Steps</b>	<b>Test Data</b>	<b>Expected Results</b>	<b>Actual Results</b>	<b>Status (Pass/Fail)</b>
<b>1. Go to the website</b> <b>2. Login Successfully</b> <b>3. Click on help alert</b> <b>4. Click Select option</b> <b>5. Choose option</b> <b>6. Click submit</b> <b>7. Back</b>	<ul style="list-style-type: none"><li>Valid location: kllp/234</li><li>Notify failed nearest police station</li><li>No Auto calls</li></ul>	User couldn't notify nearest police station and will not get any responded call		
<b>Post Condition:</b>				

Project Name: Urban area and social crime detection		Test Designed by: Rasel		
Test Case ID: FR_11_3		Test Designed date: 11/16/2022		
Test Priority (Low, Medium, High): High		Test Executed by: Rasel		
Module Name: Help Alert		Test Execution date:		
Test Title: send help alert when feel unsafe and emergency				
Description: Test help alert in website feature page				
Precondition (If any): User must have valid account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Login Successfully 3. Click on help alert 4. Click Select option 5. Choose option 6. Click submit 7. Back	Back to the Previous Page: Click	The system should take the user to the home page from Help Alert page		
Post Condition:				

## 12. Find Family and Friends

Project Name: Urban area and social crime detection		Test Designed by: Md. Atikur Rahman	
Test Case ID: FR_12_1		Test Designed date: 11/16/2022	
Test Priority (Low, Medium, High): High		Test Executed by: Md. Atikur Rahman	
Module Name: Find Family and Friends		Test Execution date:	

**Test Title: Find way and find family members and friends**

**Description: Test present location, find location way and trace family members and friends.**

**Precondition (If any): User must have valid account and valid current location**

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
<b>1. Go to the website</b> <b>2. Login Successfully</b> <b>3. Click on Find Family and Friends</b> <b>4. Click Select option</b> <b>5. Choose option</b> <b>6. Click submit</b> <b>7. Back</b>	<ul style="list-style-type: none"><li>• <b>Valid location: rproad-A/237</b></li><li>• <b>Trace nearest family members or friends</b></li><li>• <b>Notify nearest police or any other emergency organizations of traced person</b></li></ul>	<b>User could find his/her family member or friends and notify nearest emergency organizations of traced person</b>		
<b>Post Condition:</b>				

<b>Project Name:</b> Urban area and social crime detection		<b>Test Designed by:</b> Md. Atikur Rahman		
<b>Test Case ID:</b> FR_12_2		<b>Test Designed date:</b> 11/16/2022		
<b>Test Priority (Low, Medium, High):</b> High		<b>Test Executed by:</b> Md. Atikur Rahman		
<b>Module Name:</b> Find Family and Friends		<b>Test Execution date:</b>		
<b>Test Title:</b> Find way and find family members and friends				
<b>Description:</b> Test present location, find location way and trace family members and friends.				
<b>Precondition (If any):</b> User must have valid account and valid current location				
<b>Test Steps</b>	<b>Test Data</b>	<b>Expected Results</b>	<b>Actual Results</b>	<b>Status (Pass/Fail)</b>
1. Go to the website  2. Login Successfully  3. Click on Find Family and Friends  4. Click Select option  5. Choose option  6. Click submit  7. Back	<ul style="list-style-type: none"><li>Valid location: rrr/2245</li><li>Can't trace nearest family members or friends</li><li>Can't notify nearest police or any other emergency organizations of traced person</li></ul>	User couldn't find his/her family member or friends and couldn't notify nearest emergency organizations of traced person		
<b>Post Condition:</b>				

<b>Project Name:</b> Urban area and social crime detection  <b>Test Case ID:</b> FR_12_3  <b>Test Priority (Low, Medium, High):</b> High		<b>Test Designed by:</b> Rasel  <b>Test Designed date:</b> 11/16/2022  <b>Test Executed by:</b> Rasel		
<b>Module Name:</b> Find Family and Friends		<b>Test Execution date:</b>		

<b>Test Title:</b> Find way and find family members and friends  <b>Description:</b> Test present location, find location way and trace family members and friends.  <b>Precondition (If any):</b> User must have valid account and valid current location				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Login Successfully 3. Click on Find Family and Friends 4. Click Select option 5. Choose option 6. Click submit 7. Back	Back to the Previous Page: Click	The system should take the user to the home page from find family members and friends page		
<b>Post Condition:</b>				

### 13. Medical Helpline

<b>Project Name:</b> Urban area and social crime detection		<b>Test Designed by:</b> Md. Atikur Rahman		
<b>Test Case ID:</b> FR_13_1		<b>Test Designed date:</b> 11/16/2022		
<b>Test Priority (Low, Medium, High):</b> High		<b>Test Executed by:</b> Md. Atikur Rahman		
<b>Module Name:</b> Medical Helpline		<b>Test Execution date:</b>		
<b>Test Title:</b> Ask for medical help				
<b>Description:</b> Test medical help responses from nearest medical centers				
<b>Precondition (If any):</b> User must have valid account and valid location				
<b>Test Steps</b>	<b>Test Data</b>	<b>Expected Results</b>	<b>Actual Results</b>	<b>Status (Pass/Fail)</b>

<b>1. Go to the website</b> <b>2. Login Successfully</b> <b>3. Click on medical helpline</b> <b>4. Click Select option</b> <b>5. Choose option</b> <b>6. Click submit</b> <b>7. Back</b>	<ul style="list-style-type: none"> <li>• <b>Valid location: Bpoad-A/558</b></li> <li>• <b>Notify nearest medical centers</b></li> <li>• <b>Auto call: 222</b></li> <li>• <b>Contract with nearest medical centers</b></li> </ul>	<b>User could notify nearest medical centers and get call from 222</b>		
<b>Post Condition:</b>				

<b>Project Name: Urban area and social crime detection</b>		<b>Test Designed by: Md. Atikur Rahman</b>		
<b>Test Case ID: FR_13_2</b>		<b>Test Designed date: 11/16/2022</b>		
<b>Test Priority (Low, Medium, High): High</b>		<b>Test Executed by: Md. Atikur Rahman</b>		
<b>Module Name: Medical Helpline</b>		<b>Test Execution date:</b>		
<b>Test Title: Ask for medical help</b>				
<b>Description: Test medical help responses from nearest medical centers</b>				
<b>Precondition (If any): User must have valid account and valid location</b>				
<b>Test Steps</b>	<b>Test Data</b>	<b>Expected Results</b>	<b>Actual Results</b>	<b>Status (Pass/Fail)</b>
<b>1. Go to the website</b> <b>2. Login Successfully</b> <b>3. Click on medical helpline</b> <b>4. Click Select option</b> <b>5. Choose option</b> <b>6. Click submit</b> <b>7. Back</b>	<ul style="list-style-type: none"><li>• <b>Valid location: dddAC-67/90</b></li><li>• <b>Can't notify nearest medical centers</b></li><li>• <b>No auto calls</b></li><li>• <b>Can't contract with nearest medical centers</b></li></ul>	<b>User couldn't notify nearest medical centers and will not get any responded call</b>		

**Post Condition:**

<b>Project Name:</b> Urban area and social crime detection		<b>Test Designed by:</b> Md. Atikur Rahman		
<b>Test Case ID:</b> FR_13_3		<b>Test Designed date:</b> 11/16/2022		
<b>Test Priority (Low, Medium, High):</b> High		<b>Test Executed by:</b> Md. Atikur Rahman		
<b>Module Name:</b> Medical Helpline		<b>Test Execution date:</b>		
<b>Test Title:</b> Ask for medical help				
<b>Description:</b> Test medical help responses from nearest medical centers				
<b>Precondition (If any):</b> User must have valid account and valid location				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Login Successfully 3. Click on medical helpline 4. Click Select option 5. Choose option 6. Click submit 7. Back	Back to the Previous Page: Click	The system should take the user back to the home page from Medical Helpline page		
<b>Post Condition:</b>				

## 14.Settings

Project Name: Urban Areas Crime Detection and Public Safety System			Test Designed by: Md. Aminul Islam	
Test Case ID: FR_14_1			Test Designed date:11/16/22	
Test Priority (Low, Medium, High): Medium			Test Executed by: Md. Aminul Islam	
Module Name: Settings Session			Test Execution date: 11/16/22	
Test Title: Verify the settings options				
Description: Test options in settings working perfectly				
Precondition (If any): User must have valid account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the account settings  2. Change general information  3. Change password  4.Change E-mail  5.Change Phone Number  6. Change Language	First name: Karim  Last name: dewan  Old Password: Karim01  New Password: KARIM012	System feature should work perfectly according to the user need		



7. Back To the Previous Page	Confirm Password: <b>KARIM012</b>  Change E-mail: <a href="mailto:karim@gmail.com">karim@gmail.com</a>  Change Phone Number: <b>01789*****</b>			
Post Condition:				

Project Name: Urban Areas Crime Detection and Public Safety System			Test Designed by: Md. Aminul Islam	
Test Case ID: FR_14_2			Test Designed date:11/16/22	
Test Priority (Low, Medium, High): Medium			Test Executed by: Md. Aminul Islam	
Module Name: Settings Session			Test Execution date: 11/16/22	
Test Title: Verify the settings options				
Description: Test options in settings working perfectly				
Precondition (If any): User must have a valid account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the account settings  2. Change general information  3. Change password  4.Change E-mail  5.Change Phone Number	Firstname:Karim01  Lastname:dewan11  Old Password: Karim01<>  New Password: KARIM012::	The system shouldn't change the information of the user in the system feature if the given information are invalid		

6. Change Language	Confirm Password: KARIM012::			
7. Back To the Previous Page	Change E-mail: <a href="mailto:karim@gmail.com">karim@gmail.com</a>			
	Change Phone Number: 01789*****			
Post Condition:				

Project Name: Urban Areas Crime Detection and Public Safety System			Test Designed by: Md. Aminul Islam	
Test Case ID: FR_14_3			Test Designed date:11/16/22	
Test Priority (Low, Medium, High): Medium			Test Executed by: Md. Aminul Islam	
Module Name: Settings Session			Test Execution date: 11/16/22	
Test Title: Verify the settings options				
Description: Test options in settings working perfectly				
Precondition (If any): User must have a valid account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the account settings  2. Change general information  3. Change password  4.Change E-mail  5.Change Phone Number  6. Change Language  7. Back To the Previous Page	Back to the Previous Page: Click	The system should take the user back to the home page from Settings Session		

Post Condition:				

## 15. Previous Crime Experience

Project Name: Urban Areas Crime Detection and Public Safety System			Test Designed by: Md. Aminul Islam	
Test Case ID: FR_15_1			Test Designed date:11/16/2022	
Test Priority (Low, Medium, High): High			Test Executed by: Md. Aminul Islam	
Module Name: The Experience of previous Crime			Test Execution date:11/16/2022	
Test Title: Experience of previous Crime				
Description: Test Experience of previous Crime feature working perfectly				
Precondition (If any): User must have a valid account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Login into the System  3.Previous Crime Experience  4.Back to the previous page	Text: On April 21, 2018, a female student of Uttara University was sexually harassed by three workers of Turag Paribahan.....  .....	Using the AI the system will approve the Experience		
Post Condition:				

<b>Project Name: Urban Areas Crime Detection and Public Safety System</b>  <b>Test Case ID: FR_15_2</b>	<b>Test Designed by: Md. Aminul Islam</b>  <b>Test Designed date:11/16/2022</b>
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Test Priority (Low, Medium, High): High			Test Executed by: Md. Aminul Islam	
Module Name: The Experience of previous Crime			Test Execution date:11/16/2022	
Test Title: Experience of previous Crime				
Description: Test Experience of previous Crime feature working perfectly				
Precondition (If any): User must have a valid account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website  2. Login into the System  3.Previous Crime Experience  4.Back to the previous page	Text: ***** ***** *****	If the Given Text by the user is violent/hateful and not relevant then the system shouldn't accept the Experience text.		
Post Condition:				

<b>Project Name: Urban Areas Crime Detection and Public Safety System</b>	<b>Test Designed by: Md. Aminul Islam</b>
<b>Test Case ID: FR_15_3</b>	<b>Test Designed date:11/16/2022</b>
<b>Test Priority (Low, Medium, High): High</b>	<b>Test Executed by: Md. Aminul Islam</b>
<b>Module Name: The Experience of previous Crime</b>	<b>Test Execution date:11/16/2022</b>
<b>Test Title: Experience of previous Crime</b>	
<b>Description: Test Experience of previous Crime feature working perfectly</b>	
<b>Precondition (If any): User must have a valid account</b>	

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
<b>1. Go to the website</b> <b>2. Login into the System</b> <b>3.Previous Crime Experience</b> <b>4.Back to the previous page</b>	<b>Back to the Previous Page: Click</b>	The system should take the user back to the home page from The Experience of previous Crime page		
<b>Post Condition:</b>				

### Final Lab Task 3

#### Lab-Task-4 (Part-A)

\* Codes of Line = 6000

Organic project

$$Effort = PM = \text{Coefficient} \langle \text{Effort Factor} \rangle * (SLOC/1000)^P$$

$$\text{Coefficient} \langle \text{Effort factor} \rangle = 2.4$$

$$P = 1.05$$

$$T = 0.38$$

$$PM = 2.4 * (6000/1000)^{1.05}$$

$$= 15.75$$

$$\text{Development time} = DM = 2.50 * (PM)^T$$

$$= 2.50 * (15.75)^{0.38}$$

$$= 7.12$$

Development time is more than 7 days

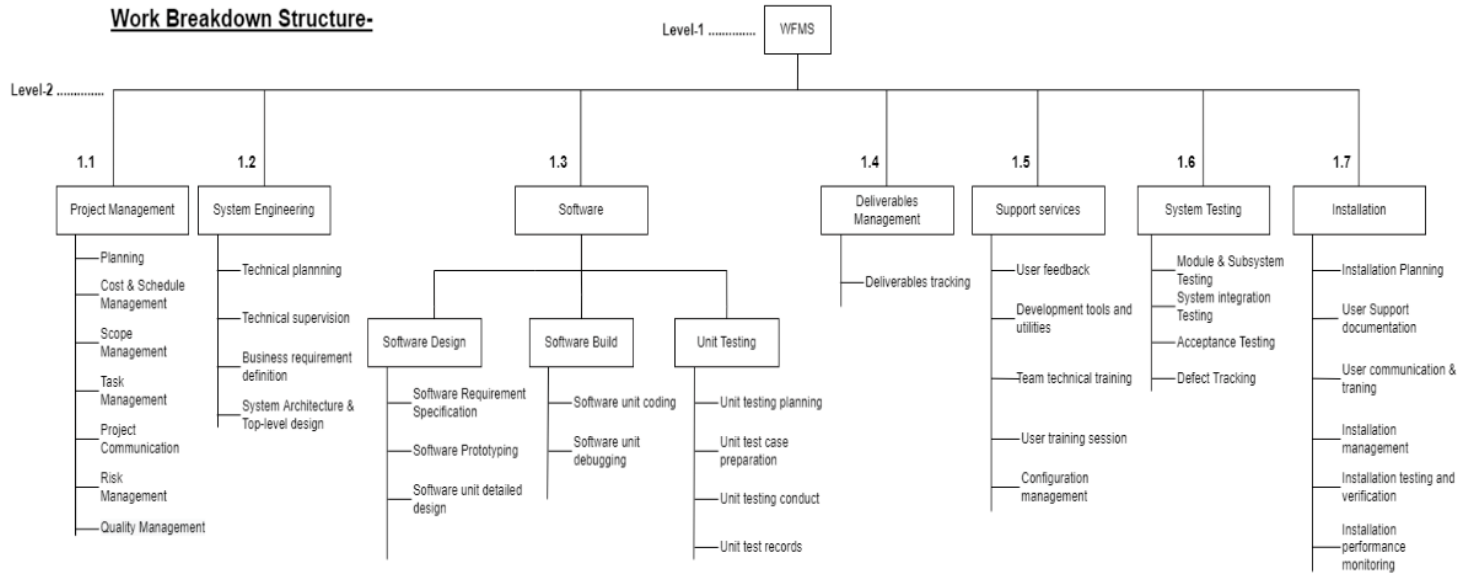
$$\text{Required Number of people, } ST = \frac{PM}{DM}$$

$$= \frac{15.75}{7.12}$$

$$\approx 2$$

## Final Lab Task 5

### Work Breakdown Structure-



## Final Lab Task 6

### Project Scheduling

Our project has 36 planned work tasks that are estimated to require (28\*22) 616person-days to complete.

BAC = 616.00

Task	Planned Effort	Actual Effort
1	3	4
2	5	5.5
3	4	3.5
4	3	3
5	3	3.5
6	5	4.5
7	3	3
8	5	5
9	5	6
10	3	3
11	6	
12	15	
13	10	
14	11	



Total Task=36.

BCWP=39

BCWS=81

ACWP=41

BAC = 616.00

$SPI = BCWP / BCWS = 39 / 81 = 0.48148$

$SV = BCWP - BCWS = 39 - 81 = -42 \text{ person-day}$

$CPI = BCWP / ACWP = 0.95$

$CV = BCWP - ACWP = -2 \text{ person-day}$

$\% \text{ schedule for completion} = BCWS / BAC = 81 / 616.00$   
 $= 13.15\% \text{ [% of work scheduled to be done at this time]}$

$\% \text{ complete} = BCWP / BAC = 39 / 616.00$   
 $= 6.33\% \text{ [% of work completed at this time]}$

## Risk Analysis

Risks	Category	Probability	Impact	RMMM
Size estimate may be significantly low	PS	60%	2	
Larger number of users than planned	PS	30%	3	
Less reuse than planned	PS	70%	2	
End-users resist system	BU	40%	3	
Delivery deadline will be tightened	BU	50%	2	
Funding will be lost	CU	40%	1	
Customer will change requirements	PS	50%	2	
Technology will not meet expectations	TE	50%	1	
Lack of training on tools	DE	80%	3	
Staff inexperienced	ST	30%	2	
Staff turnover will be high	ST	60%	2	
*Lack of management problem	ST	10%	3	
*Lack of commitment and technological leadership	ST	40%	3	
*Real time performance problems	DE	20%	2	
*Resources not ready on time	DE	10%	2	

### Impact values

- Catastrophic – 1
- Critical – 2
- Marginal – 3
- Negligible – 4