



CSE471

Software Requirements Specification for Online Women Crime Reporting System

Group-09

Md. Rifat Uddin 17101016

Maharab Kibria 17101319

Ilmi Tabassum 17101130

Nafisa Tabassum Abonti 17101465

Section:02

System Request

Project sponsor: Government (Informant IT sector; e.g.: -RAB)

Business need: The application focuses on helping women so that the majority of them can report anonymously about sexual harassments, abuse of muscularity, domestic violence on them or their neighbors. The purpose of the application wants to bring light in proper justice to reduce crime rate on women.

Business Requirements: Women doesn't feel safe to report about crime as they can be blackmailed, threatened and might further stigmatize if data falls in wrong hands. The functionalities that the system has to be listed in is:

- The victim can report anonymously concerning their safety issue.
- While anonymous reporting the system will keep track by enabling "anomaly mode".
- The app uses blockchain to create an encrypted space to prevent confidential information being leveled.
- To prevent misguiding information or false reports the other side of the system will be able to verify the reports by the help of evidence provided.

Business Value: The application will help to overcome the problem of communication gap between the victims and the crime handling system. AS the violence regarding women has increased rapidly, the government is more concerned about the crime remain unreported which encourage further ruse in illegal activities. So, it is expected that the government and other NGO's will be interested in safeguarding victims.

Conservatives estimates of intangible value: -

- Prevent victim from further repeating of victimization.
- As the application is trustworthy; so, this will encourage women to report cases resulting in better communication.
- The more case will be solved via the help of the app the more the brand recognition will increase.
- The advertisements in

Software Requirement Specification (SRS)

Introduction:

Purpose: The aim of this project is to develop an online women crime reporting and management system. The project has been initiated to help women in Bangladesh and report anonymously about sexual abuse and other domestic violence. The application will be most useful for defense for searching details of crimes.

Target Audience: The stake-holders, Project Analyst, developers, testers and project managers.

Target Use: The main purpose of this project is to bring justice to those women who are being harassed, molested, abused, teased and raped in our country putting the safety security and privacy of the women. This system helps the user by providing a platform where women can express their experience anonymously without revealing her own identity. The primary user of this system are the harassed, molested, abused, teased and raped women and secondary user who will get the information from the primary users are the higher level of the police department. Women will share their experience and the police will be able to know about this immediately as for women it is not possible to go to police station immediately and some women can't get the courage to place a GD in the station. User can login in fully encrypted way and the user can add photo of the incident or the suspect or her wound.

To sum up, this document will help project sponsor, business analyst, system analyst, infrastructure analyst, project manager and users to get the ins and out of the Online Women Crime Reporting System.

Scope:

- ❖ The application will reduce investigation cost by 73%
- ❖ Government based advertisement and alert message via app will increase benefits exponentially over year based on user satisfaction estimated 7% increasement of the total income.
- ❖ The app will start to income enormous amount of benefit estimated to be \$1.2 million USD over 5 year's contracts.

Risk Identification and Management:

Technical Risk:

- The application stuck with the problem of the browser because it is depended on the browser technology as the website is going to be opened at the user side in the browser where any user can use any of the browsers available.
- Our project is developed under the data documents lists of various hardware products of the user and according to their needs.
- Project Risk: As this application is developed for crime reporting, security has been given special importance. Privacy is a basic requirement expected by the users.
- In our project there is a very less requirement for budget because the only environment here is the computer and internet access. When this project is used as the real application so economic risks does not matter so much in our application.

Overview:

User Needs: In our country, more than average number of women come from conservative family. They live in a society where they do not feel safe to live independently as they are victimized of domestic violence are scared to report a crime happening against them because they can be either blackmailed or threatened. So, these women need a proper reporting system where they can report a crime or file a case against the criminal anonymously with proper privacy. They need to feel secure about the evidence that they are willing to share and most importantly they need rapid action taken against the crime. All this facility is included in our women Crime reporting application. Our application is built to help this victimized audience and decrease the rate of domestic violence and sexual abasement against women.

Assumptions:

- Surveillance cost for the system till stabilization - \$925000
- Server Cost- \$500000
- The system will be able to operate in windows, Linux, Macintosh and android environments.
- It will be able to run in any kind of web browser and will be able to read and write word documents, HTML and PHP.
- The response time is less than 5s.
- The system will be able to use 24 hours, 365 days per year.

Functional Requirements:

i. Reporting Requirements:

- Victim/user can anonymously report but must fill up the station she wants to report on.
- User reporting will be put into security meter based on the keywords of her description.
- Agreement on sharing location and media files and contacts is the base before running the app.

ii. Platform Requirements:

- Android is the primary platform where user will mostly be reporting on the other hand, web-based support system is the main platform of police station.
- Database servers will be update by system usage and police-station/victim cannot manually change any data. Only admin will have that privilege.

iii. Interface Requirements:

- The Victim interface will contain export system environment for image/videos & audio files with description.
- The stations interface will contain report reported on and severity of it.

iv. Security & Data Management:

- All the data sent by user and handled by stations will only be stored to a certified database with enough encrypted legacy.
- Regularity of system is based on immediate reports, so it has to be working 24X7.

Non-Functional Requirements:

1. Operational Requirements:

- The system will be able to operate in windows, Linux, Macintosh and android environments.
- The system will be able to read and write word documents, HTML and PHP.
- The System will be able to import.
- The system will be able to work on any web browser
- The system will be able to integrate with the existing inventory system.

2. Performance Requirements:

- The response time is less than 5s.
- The inventory database will be updated according to statistics collected during investigation.
- The interaction between the user and the system will not delay more than 5s.
- The system will be available for use 24 hours, 365 days per year.

3. Security Requirement:

- The application uses an encrypted space where victim can share notes, photos, screenshots, documents and audio.
- Only direct law enforcement IT sector can see the personal records of staff.
- The system includes all available safeguards from virus, worms, Trojan horses etc.

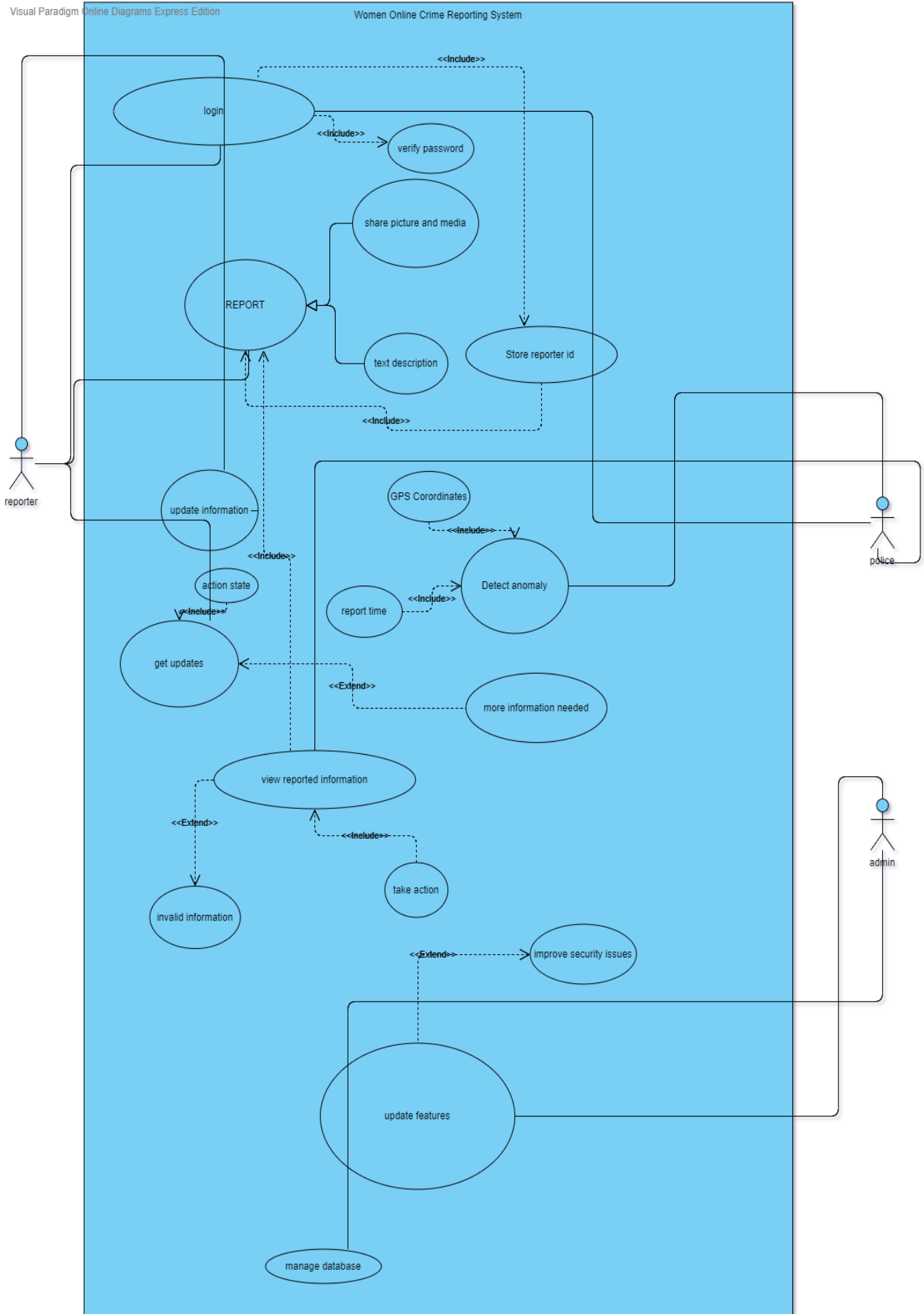
4. Cultural and Political:

- Personal data and information are protected in compliance with Data Protection Act.
- No political party or the government itself will have the right to moderate the database results itself.

5. External Interface:

- Our System will be built by using HTML and PHP language.
- It will be able to operate in windows, Linus, Macintosh and android environments.

Use-Case Diagram

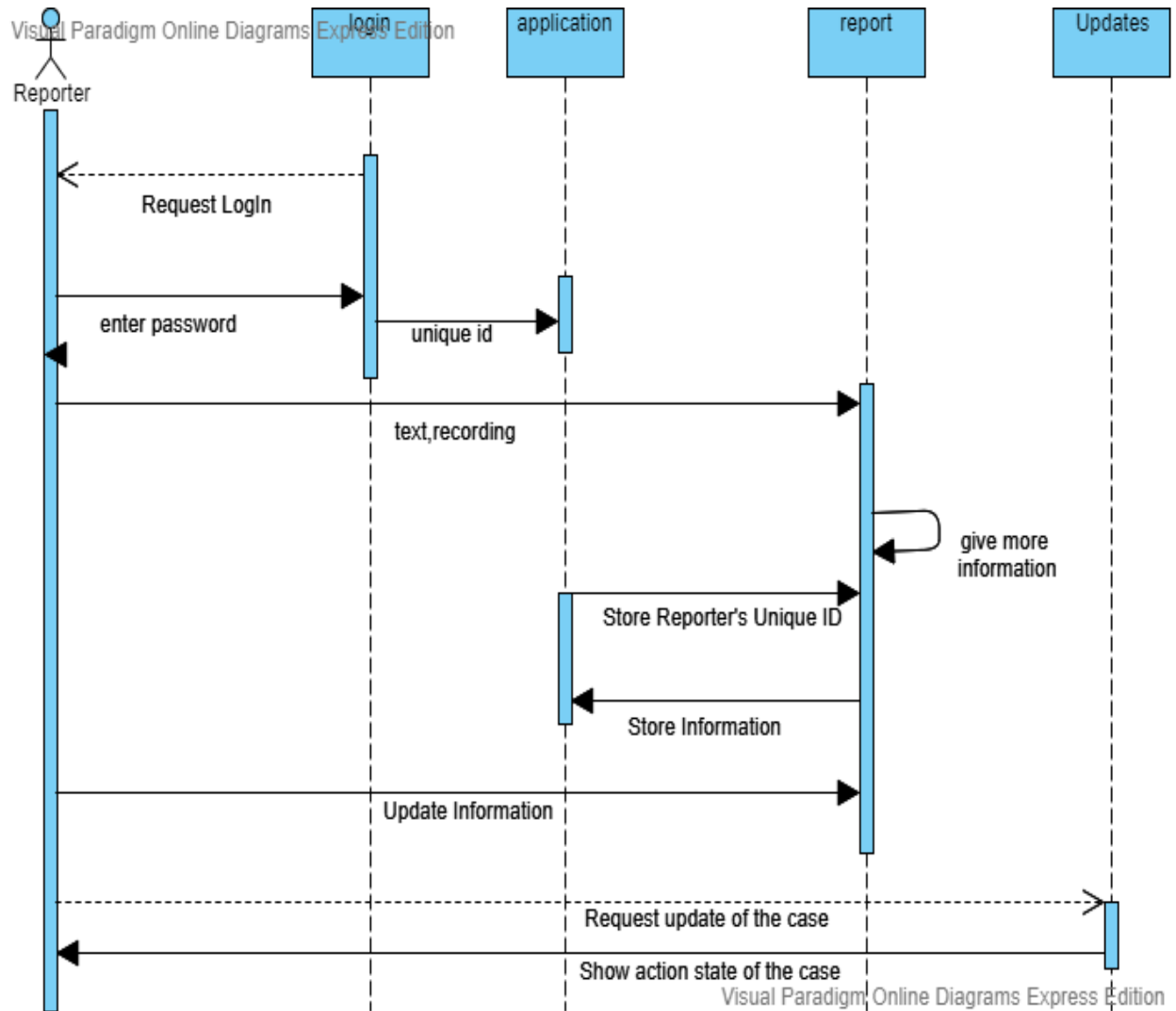


Use-Case Diagram Explanation:

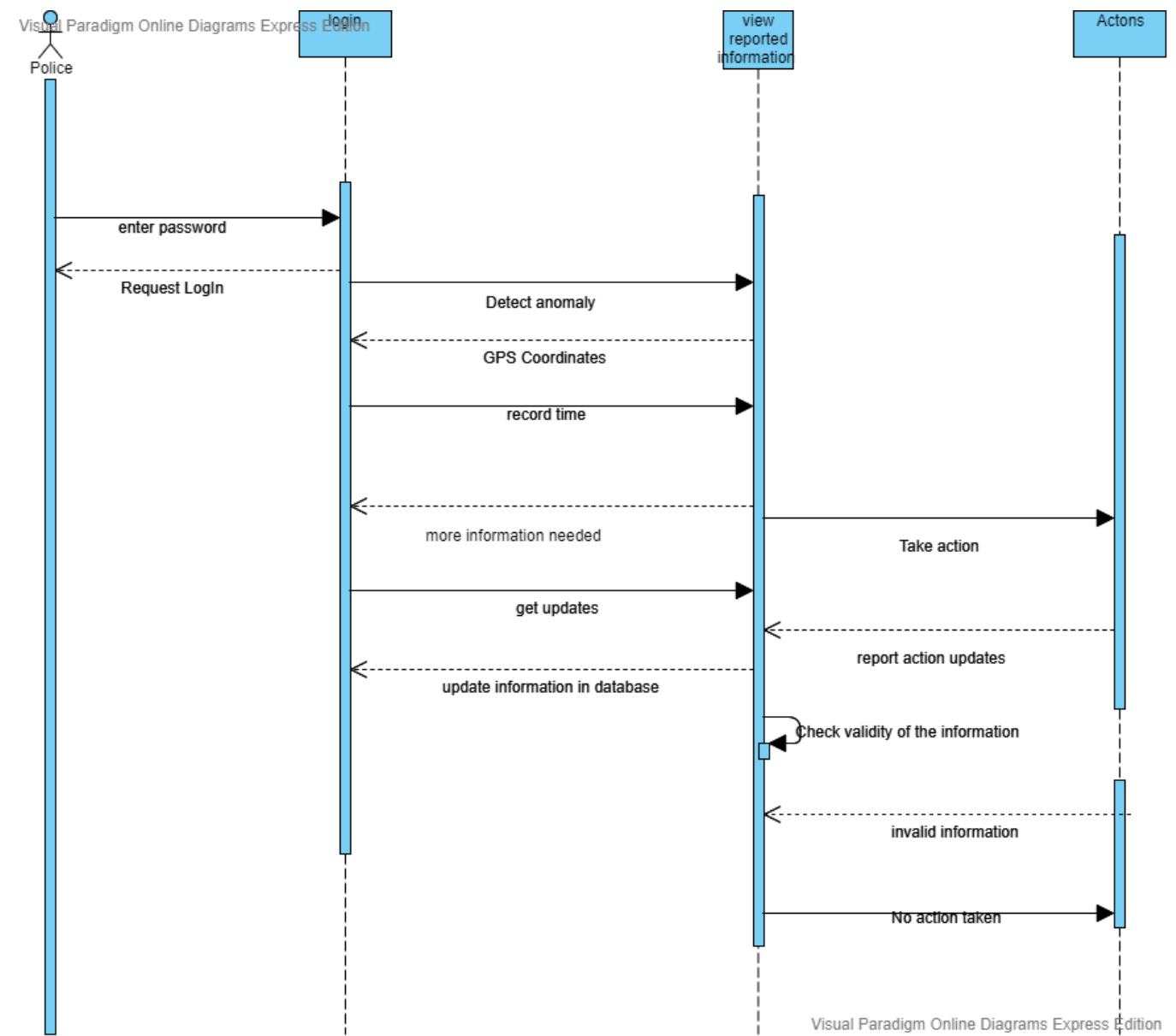
A use case diagram at its simplest is a representation of a user's interaction with the system that shows the relationship between the user and the different use cases in which the user is involved. Use case diagram consists of actor such as reporter, admin and police. The reporter can login, report, update information and get updates whether the action is taken or not. The police can also login, view reported information and detect anomaly using Global Positioning System (GPS) and store the reported time in a database. The police will take action on a basis of information provided by the reporter. If the police need more information, he can ask the reporter to update information. Admin can update features by improving the security issues and manage the database.

Sequence Diagram

For Reporter:



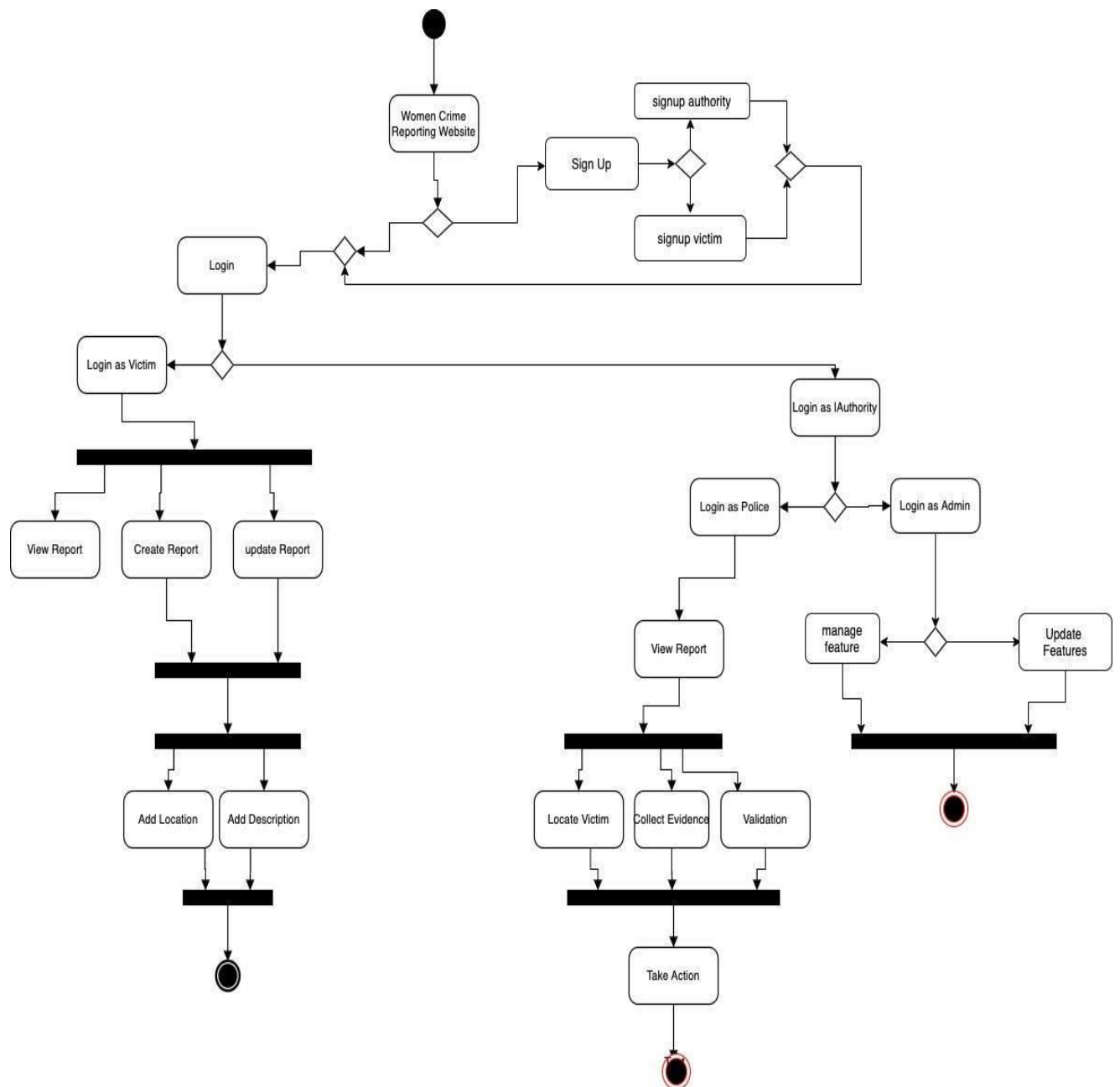
For Police:



Sequence Diagram:

Sequence diagrams describe interactions among classes in terms of an exchange of messages over time. We have made 2 sequence diagrams as both police and reporter plays very important roles and both have various different functions and activities. The lifeline for reporter consists of login, application, report and updates. The lifeline for police consists of login, view reported information and actions. Both actors have various call, self and return messages.

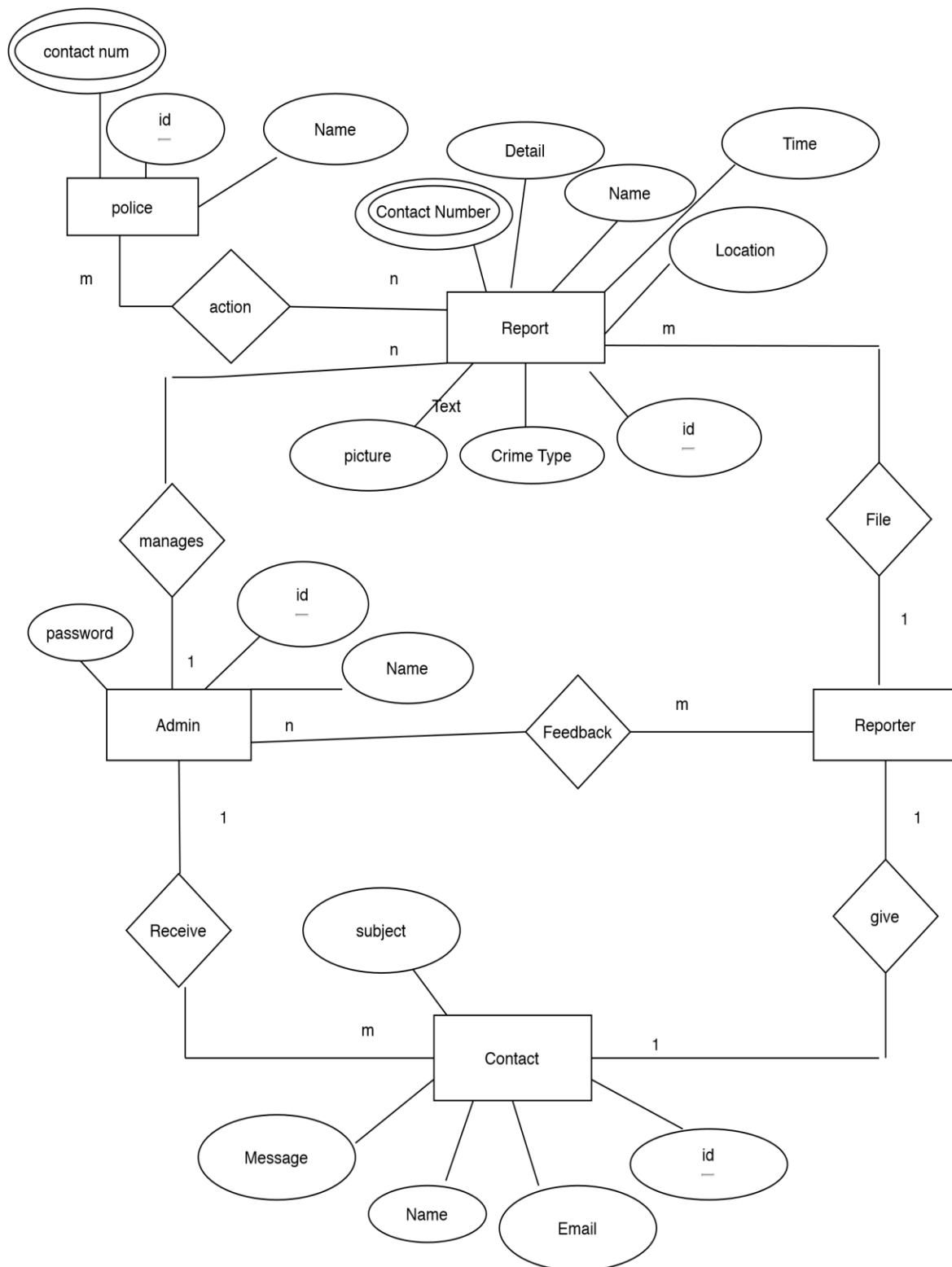
Activity Diagram



Activity Diagram Explanation:

When a person visits the website, at first s/he can see the homepage where they can Login or Sign Up. If the person is already registered, they can login as victim or authority. Authority can be two types: police and administration. If the person is not registered, he can sign up then login to the system. If the person login as a victim she can create a report. If she has already reported, she can view, update or delete the report. When creating a report, the victim must add location and description of the incident. The victim can edit their location and description later. If the person login as police he can view the report, can validate the report, can locate victim, can collect evidence. After collecting all this the police can take action according to the report. The admin can manage the entire system, they can update the system can add features.

ER Diagram



ER Diagram Explanation:

An entity relationship diagram is a structural diagram for use in database design which shows relation between two or more entities. In our ER diagram report, reporter, admin, police and contact are the entities. The entity report has attributes named location, name, detail, contact number (multivalued), time, picture, crime type, id (key attribute). Report has one to one relationship with the entity 'Police'. Police has contact number, id and name attributes. Reporter has one to many relations with 'Admin' and 'Reporter' entity. Admin has three attributes called name, id and password and a many to many relationships with reporter. Admin has one to many relations with contact and one to one relation with reporter. Contact has attributes called subject, name, id, email, message.