



Course: Software Engineering

Project: Crime Reporting

System

Table of Contents

No#	Topics	Description
1	Introduction	Overview of the project's aim and
		objectives.
2	Purpose	Explaining the need for an online crime
		reporting system.
3	Intended Audiences	Identifying the key users and
		stakeholders of the system
4	Scope	Defining the boundaries and benefits of
		the online crime reporting system.
5	Details	Explaining how the system allows
		victims to file FIRs and how the police
		access and handle these reports.
6	Functional Needs	Outlining the specific functions and
		features of the system
7	Advantages	Highlighting the benefits and
		advantages of the system.
8	Strengths And Weaknesses	Analyzing the strengths and weaknesses
		of the system.
9	Use Case Diagram	diagram
10	Fully Dressed Uc Description	Detailed descriptions of key use cases
		including Login, Provide Personal Info,
		Report FIR, Provide Evidence, Inquiry
		Session about Crime, and Feedback.
11	Uc-Id[0012] Configuration	Explaining the configuration message
	Message Of Investigation	related to the Investigation use case.
12	Uc-Id[00011] Online Crime	Providing an overview of the Online
	Reporting System	Crime Reporting System, including its
		success and failure scenarios
13	DFD- level 0	diagram
14	Context Diagram Level-0	Illustrating the high-level system
		context and interactions.
15	DFD – level 1	diagram
16	Overview Diagram Level-1	Providing an overview of data stores,
		external entities, and processes within
		the system.

ONLINE CRIME REPORTING

Introduction to Project

The aim of this project is to develop an online crime report and managing system which is easily accessible to the public. This project provide lot of features to manage all the data in well manner.

This system registers the complaints from people through online and it will also helpful to police department in catching criminals, in system and person can give any complaint at any time.

Purpose of the system

The main purpose of the system is to manage criminal details in a centralized database and provide solution for public to give complaint through online and it is also the purpose of developing the online crime reporting system is for the welfare and safety of the public. Due to some factors in today's time public sometimes do not trust the government officials, due to this they don't ever want to go to the station and file a report. So this system will reconstruct the bridge between the two-public and government officials respectively. So now if anyone want to file a complaint or misconduct, they can do it easily from their home.

Intended Audiences

Intended audiences are given below:

- Crime Reporter
- Online System Management
- Organization
- Crime Investigator

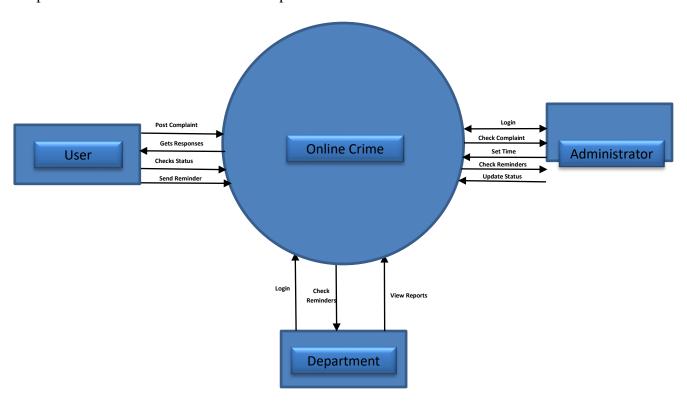
Scope

The main advantage of crime reporting is reducing the crime and disorders. Scope of online crime reporting are given below:

- I. It is easy and can be used freely without complexion.
- II. Online crime report system helps in getting the different police stations to share information and get in contact with one another.
- III. It saves time as a person can lodge an FIR without going to the police station or government organization.
- IV. This has been created as a safety measure for all section of people and societies.
- V. The details of the user/reporters won't show in public.

Details

The victims can file the FIR through the website under various sections. The user can send photo evidence if any outline. The police will have a criminal database through which they can access the records anytime. In this system user's information will be kept confidential and only users complain will be forwarded to the nearest police station.



Functional needs

- Crime reportage forms, progress following, proof attachments.
- Missing national or valuables reportage and search recognition of national and different users 'contribution in finding criminal problems.
- The registration is totally secured and confident.

•

Advantages

- Ensure data accuracy
- Proper control of the higher authority
- Minimize manual data entry

- Greater efficiency
- Better service
- User friendliness and interactive
- Minimum time required: Minimum time needed for the various processing

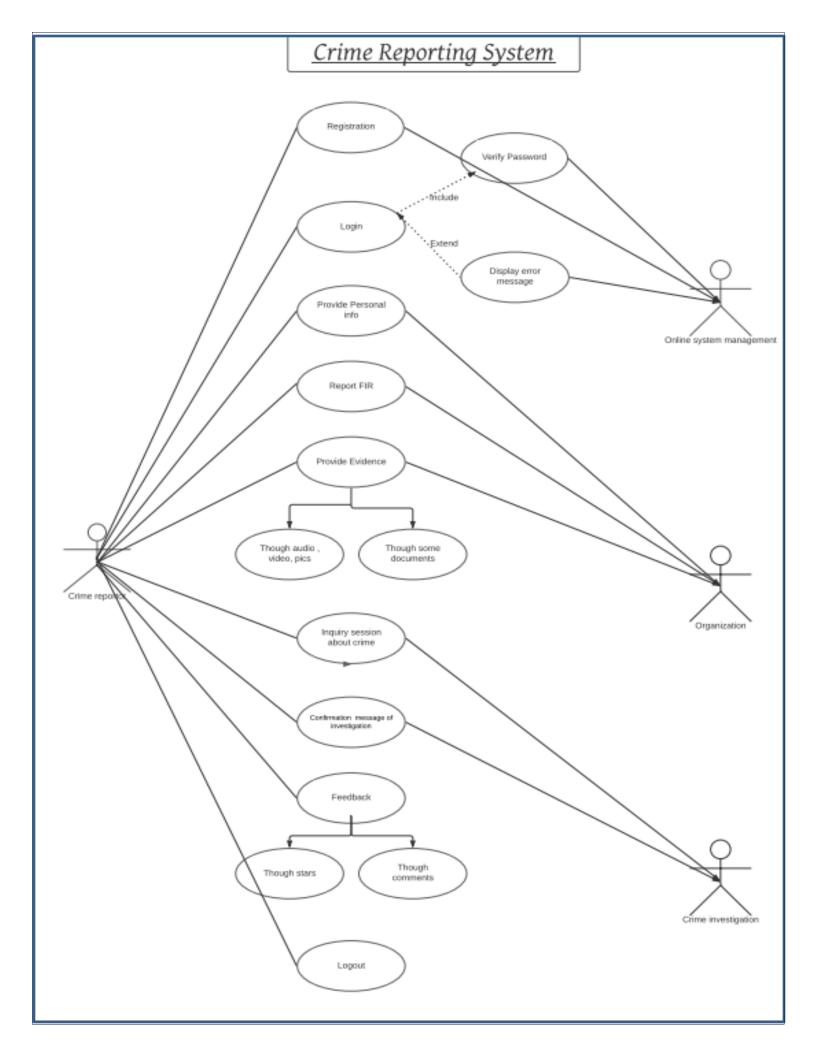
•

Strengths:

- 1. Record keeping
- 2. Online complaint

Weaknesses:

- 1. Time
- 2. FIA
- 3. Revenue
- 4. Security



Fully Dressed Usecase Description

UC Title	Login
UC ID	2
Primary Actor	Crime Reporter
Description	User provides login ID and then login to the system
Pre-Conditions	User registers to the system
Success Scenario	User provides valid login ID and successfully login to the
	system
Failure Scenario	User can't login to the system
	-User provides invalid login ID
	-User retry to login
Post-Conditions	After successful login, system ask to provide personal info

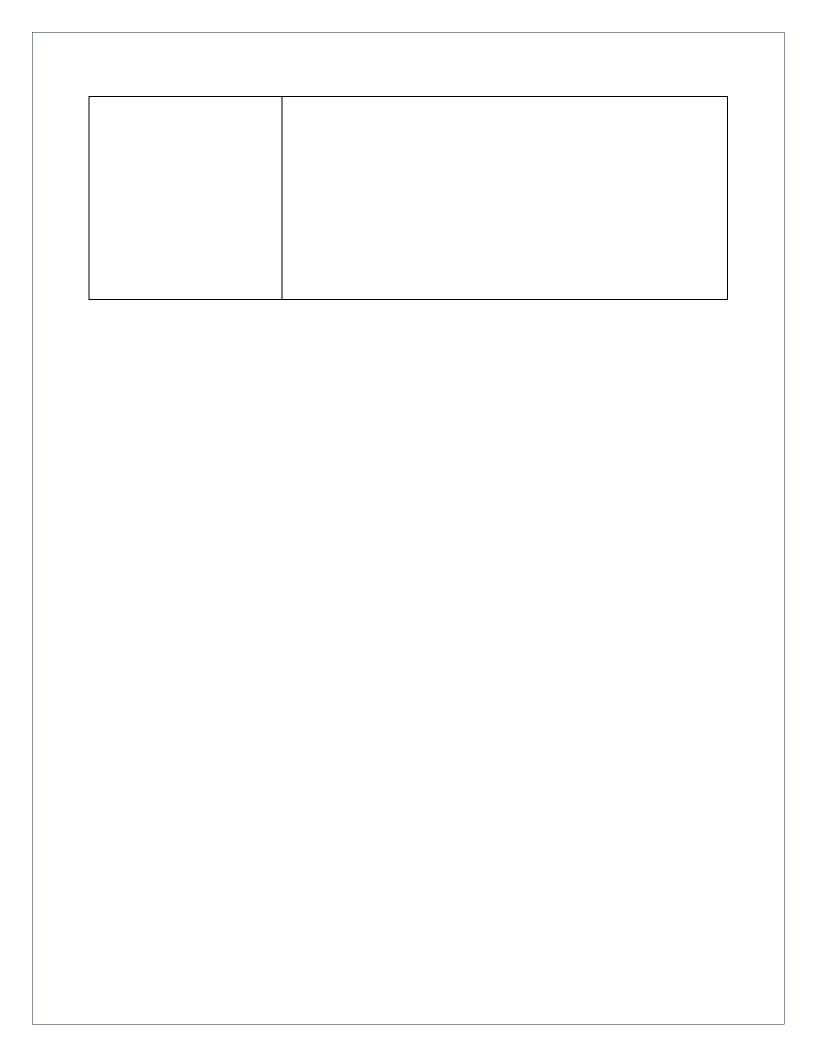
UC Title	Provide Personal Info
UC ID	3
Primary Actor	Crime Reporter
Description	Crime Reporter provides his/her Personal info to report FIR
Pre-Conditions	User login to the system
Success Scenario	User successfully enters the name, phone no, address and CNIC
	no
Failure Scenario	System shows error for not providing correct info
	-User enters wrong CNIC no
	-User re-enter the correct CNIC no
Post-Conditions	User info successfully records and ask to report FIR

UC Title	Report FIR
UC ID	4
Primary Actor	Crime Reporter
Description	Crime reporter fills FIR form to report crime
Pre-Conditions	User logins to the system and provides personal info so that
	system can know who is reporting FIR
Success Scenario	User provides the required brief details of crime and then submit
	the complaint
Failure Scenario	User is unable to fill FIR form
	-System gets hang and ask to restart or wait
	-User is unable to submit complaint
	-User re-submit the complaint
Post-Conditions	Complaint form submits successfully and ask to provide
	evidence

Uc Title.	Provide evidence.
Uc Id.	5.
Primary Actor.	Crime reporter.
Description.	Reporter provides evidence of crime through audio, video, pictures
	or some kind off files /documents.
Pre-Condition.	Reporter report FIR and evidences is ask from reporter.
Success Scerario.	Reporter give evidence and it verified.
Failure Scerario.	System not accepting evidence.
	1-Reporter refresh system and turned in evidence again.
	The evidence is turned out to be fake(system show message of
	fake evidence).
	2-Reporter asked for valid evidence otherwise his/her report of
	FIR cancel.
Post-Condition.	Evidence collect by cybercrime wing-LIA (organization) and
	given to crime investigation for further investigation.

Uc Title.	Inquiry Session about crime.
Uc Id.	6
Primary Actor.	Crime reporter.
Description.	Investigator do inquiry session (interview, interrogation) with the reporter for validity of FIR.
Pre-Condition.	After evidence is verified as valid reporter goes through inquiry session about crime by crime investigator.
Success Scerario.	Inquiry session proof that crime has been committed and provided evidence support report in favor of reporter.
Failure Scerario.	Reporter got scare and confuse during inquiry and give incomplete, irrelevant information which cause confusion. 1-Reporter is asked for another inquiry session.
Post-Condition.	Investigator verified validity of crime and show confirmation message of successful investigation and case the go to court to give justice.

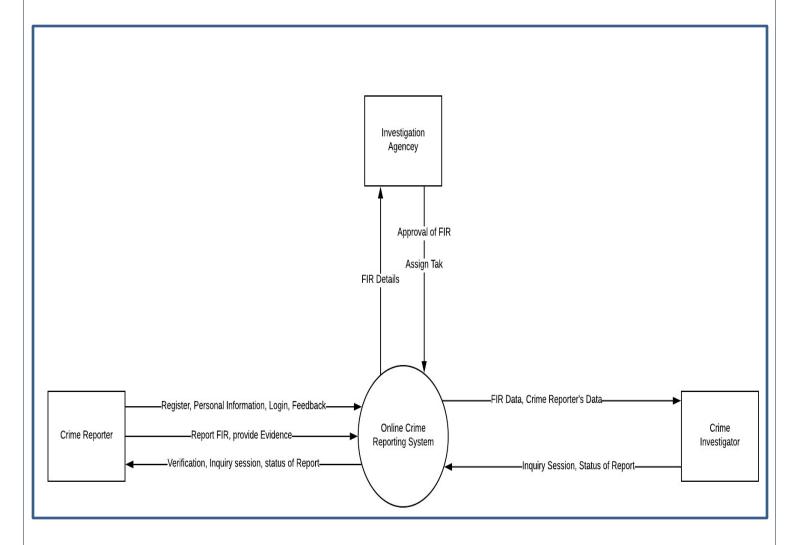
Uc Title.	Feedback.
Uc Id.	8.
Primary Actor.	Crime Reporter
Description.	Reporter gives feedback through stars or through comments.
Pre-Condition.	Reporter's FIR considered and is given attention.
Success Scerario.	Reporter gives feedback and is given respond by system.
Failure Scerario.	Reporter feedback is not turning in and system show message of
	weak internet connection.
	1- Reporter checks internet connection and restart/refresh the
	system and submits feedback.
Post-Condition.	After successfully report FIR and giving feedback reporter logout
	through the system.



UC Title	Online Crime Reporting System
UC ID	00011
Actor	Crime Reporters
Description	The main purpose of the system is to manage criminal details in a centralized database and provide solution for public to give complaint through online
Pre-Conditions	User registers to the account. After Registration user Login to the system.
Success Scenario	 Successful Registration After Login verification user enter to home page User Reports a Crime and Provides Evidence Evidence gets submitted Investigators receives the report's data Investigator Updates the report's status
Failure Scenario	 The crime reporter cannot Register to the system The system shows the error message to fill the registration form correctly Reporter fills the correct information and tries to resubmit User Login Fails System shows alert that User is not recognized User re-enters the correct information to resets the password Reporter is unable to file an FIR System got Hanged and ask to restart or wait User submits the respond and restarts the system Investigator does not receive the FIR System shows the data lost error System shows the message that No report is submitted
Post Condition	Investigator receives the FIR and Submits the FIR status "ON".
Status	Configuration Message of Investigation UC-ID[0012]
Special requirement	Nonfunctional requirements 1. User interface 2. Security issue 3. Error handling 4. Quality issue
Owner	Avengers Software Team

UC Title	Online Crime Reporting System
UC ID	00011
Actor	Reporters
Predecessor	Create an Account / register to the system [UC-ID 0010]
Pre Conditions	User registers to the account.
	After Registration user Login to the system.
Success Scenario	7. Successful Registration
	8. After Login verification user enter to home page
	9. User Reports a Crime and Provides Evidence
	10. Evidence gets submitted
	11. Investigators receives the report's data
	12. Investigator Updates the report's status
Failure Scenario	5. The crime reporter cannot Register to the system
	5.1. The system shows the error message to fill the registration form correctly
	5.2. Reporter fills the correct information and tries to resubmit
	6. User Login Fails
	6.1. System shows alert that User is not recognized
	6.2. User re-enters the correct information to resets the password
	7. Reporter is unable to file an FIR
	7.1. System got Hanged and ask to restart or wait
	7.2. User submits the respond and restarts the system
	8. Investigator does not receive the FIR
	8.1. System shows the data lost error
	8.2. System shows the message that No report is submitted
Post Condition	Investigator receives the FIR and Submits the FIR status "ON".
Status	Configuration Message of Investigation UC-ID[0012]
Frequency of Use	Often in weeks
Context	n/a
Cooperate	n/a

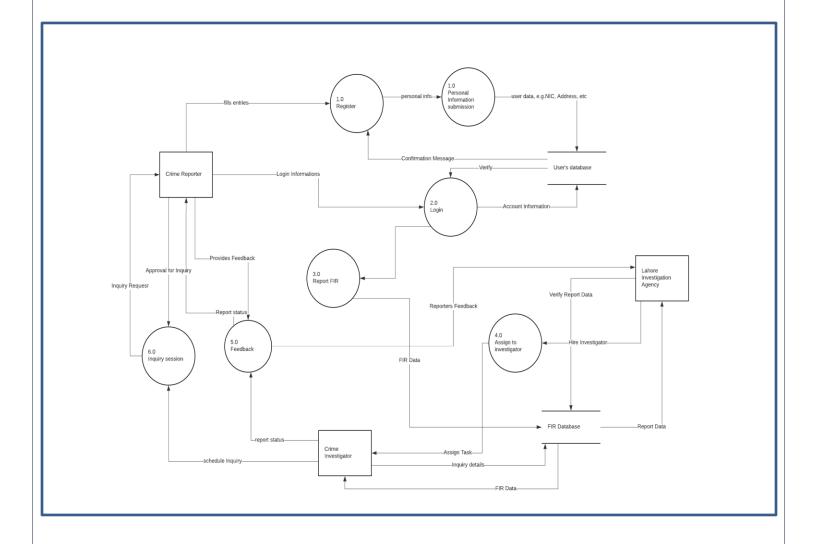
DFD level-0



Description of Context Diagram Level-0:

The Online Crime Reporting System is a system which develops a connection between Crime Reporter (could be victim or the witness), Investigation Agencey, and Crime Investigator. If a Person wants to report an FIR he/she will have to Register on the system and then he/she will have to provide the required Information about themselves. After this step they will be able to Login into the system. If they get verify by the system, they will be able to Submit their FIR along with suspects and Evidence. Once, the FIR is submitted, the online system sends it to the Investigation Agencey. after Authentication of the FIR, Agencey assigns the investigation task to Crime Investigators. Crime Investigator does the Inquires to provide justice. And also reports their progress on the system. After the completion of the process the crime reporter submits their feedback to system.

DFD level-1



Description of Overview Diagram Level-1:

For Overview Diagram the main process is sub divided into 7 main process.

There will be 2 Data store and 3 external entities.

Data Stores:

1) User Database:

- User Database contains data of all the account that has been registered on the system.
- When a user accesses the Online Crime Reporting system to submits an FIR, user has to register, all the information provided by that person it gets stored in the user database table.

- System searches the user database tables to verify a user who tries to login on the system.
- User's feedback also stored in the user database.

2) FIR Database:

• When a crime reporter submits an FIR the FIR's data e.g. (date of reporting, crime date, FIR Id, witness' data, suspect's data, location of crime, etc.) all of this data gets stored in the FIR database.

External Entities:

1) Crime Reporter:

- victim or the witness
- Registers on the online crime reporting system
- Provides personal information
- Logins on the system
- Reports FIR by providing evidence
- Attends Inquiry sessions
- Provides feedback

2) Investigation Agencey:

- Authenticates the FIR
- Assigns the Crime Investigation
- Hires Investigator

3) Crime Investigator:

- Does the inquiries and all the required Investigations
- Reports the systems

Processes:

- **1.0 Register:** Users register themselves in order to access the system.
- **2.0 Personal Information:** Crime Reporter has to provide their personal information in order to report a crime.
- **3.0 Login:** To access the FIR reporting process crime reporter has to Login on the system.
- **4.0 Report FIR:** Crime reporter has to fulfill all the required details to submit their FIR, such as suspects, evidence, location of crime, etc.

investigator				
6.0 Inquiry Sessions: Crime Investigator does the inquiries to fulfill the requirements of the investigation.7.0 Feedback: Crime Investigator reports on the system about the progress of the investigation and after the completion the whole process the crime reporter provides his feedback.				