

## CHAPTER 1

### INTRODUCTION

#### 1.1 Introduction to Crime Reporting System

According to World Bank definition, "E-government refers to the use by government agencies of information technologies like wide area network, the internet and mobile computing that have the ability to transform relations with citizens, businesses and other arms of government". It contributes to public security. The police personnel would also be able to identify any criminals and this is possible if a database is available for any citizens including criminals' and innocents' all information. For the public safety there would be record about the wanted persons, suspected criminals' history, stolen cars, cases, news and events, contact details, recommendations and so on.

**Online Crime Reporting System** is intended to provide total computerized information system support for the work of the police. Its primary activities are not transparency-related, but help provide police officers with information on criminal cases and on criminals. The person who registered the case could also get access to case details and progress at any point, either by going to any police station and requesting an officer to access their case on E-police, or by accessing their case details online via the application using an FIR code number that is issued at the time of registration. Available case details would include the FIR, actions taken, actions pending, other crime details, etc. The victim could lodge a complaint if they see from accessing case details that the case has not been registered properly, or that there has been no progress made on the case since it was last accessed. Finally, senior officers in the police service could also use E-police to monitor case details and progress. All of this affects the transparency of case handling, and the accountability of police officers

#### 1.2 Objectives

- The objectives of this work are free access of the citizens for their queries and complaints, establishing database for citizens FIR, Report and for police personnel. The normal public in India are afraid to give a complaint in police station because they are filled with a false fear about the police department. An online complaint registering system will solve the fears of public and will also help the police department in catching criminals. An online solution is very useful as the solution is inherently distributive.

## CHAPTER 2

# REQUIREMENT ANALYSIS

### 2.1 Functional Requirements

- Administrator should be able to create/edit a virtual police station (PS) which represents a real police station as a first time setup.
- Police station has several departments like Law and Order, Women Protection, Cybercrime, Traffic and control, CBI, etc. Separate module for each dept would be needed.
- When a complaint is made it undergoes various processes like FIR, Charge Sheet, Property Seizure, court disposal etc all these activities are performed by a PS.
- Maintaining the criminal information state wise/area wise/age wise is mandatory
- Sharing of case details with Police Station in other states is needed.
- Communication between officers is mandatory through forum, chat, polls.
- The magistrate should be able to access the case details and provide/deny the arrest warrant
- Police officers often export the FIR copy to PDF format

### 2.2 Non-Functional Requirements

- Secure access of confidential data (user's details/FIR details). SSL can be used.
- 24 X 7 availability.
- Better component design to get better performance at peak time.
- Flexible service based architecture will be highly desirable for future extension.

## CHAPTER3

# SOFTWARE REQUIREMENT SPECIFICATION

### 3.1 Software Requirements

- Operating System: Windows 7 or Higher
- Programming Language: HTML, CSS, PHP and JavaScript.
- Tools/Software: Sublime Text Editor, XAMPP, Bootstrap Framework.

### 3.2 Hardware Requirements

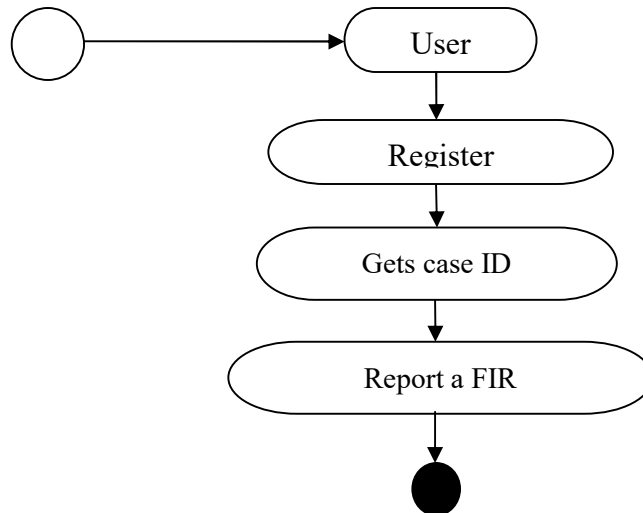
- Processor: Pentium Core 2 Duo or higher.
- Processor Speed: 333MHz or higher.
- Internet Connection: Required.
- RAM: 512MB or higher
- Adequate Power Supply and Graphics Processor.

## CHAPTER 4

### ANALYSIS DESIGN

#### 4.1 Flow of the Website

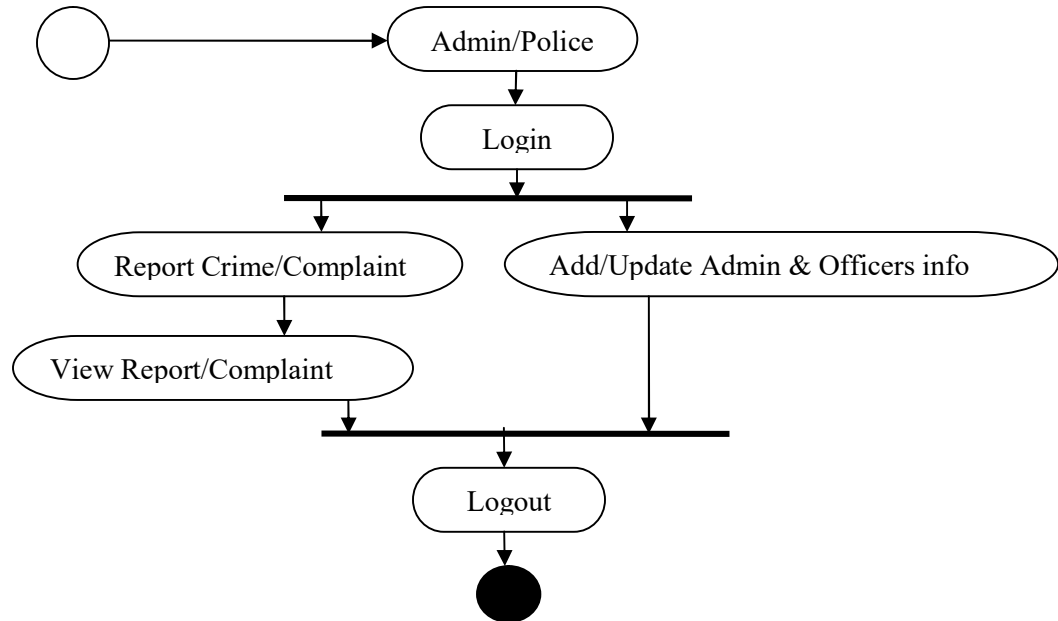
##### 1. User



**Fig 4.1:** User Registration

- Uses logins to the portal
- Registers the compliant
- Gets the unique id for registration
- Using id he can check the status of the compliant

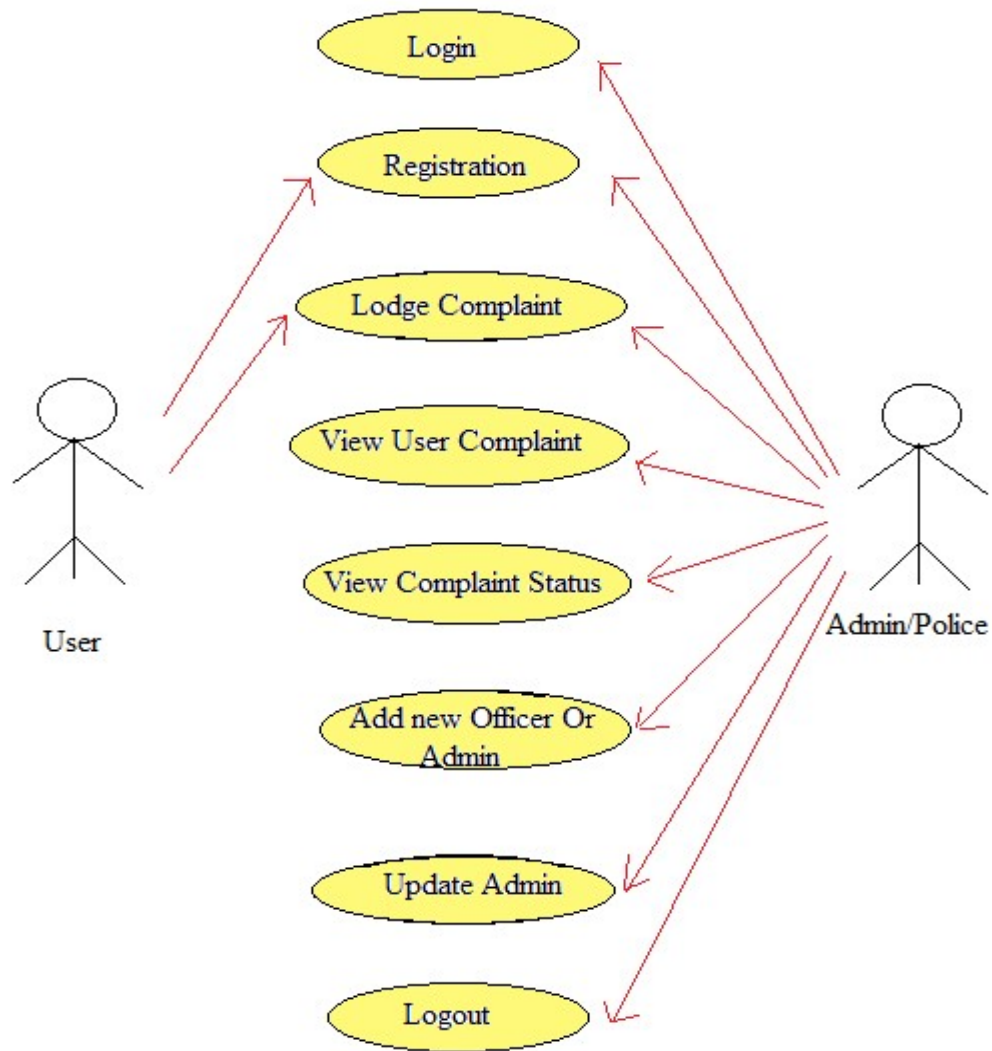
## 2. Admin/Police



**Fig 4.2:** Admin/Police Response

- Logins to the portal
- Report Crime/Complaint
- Views the compliant
- Add/Update Admin & Officers info
- Sends the status

## 4.2 Use Case Diagram



**Fig 4.3:** Use Case Diagram

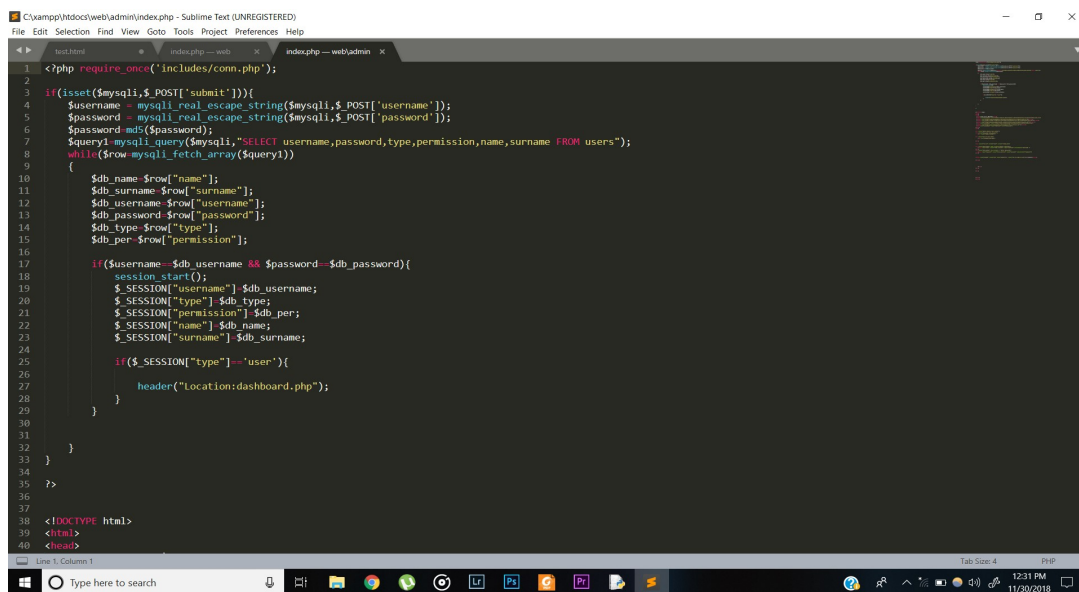
- ❖ There are two types of users:
  - Administrator/Police
  - Victim/End Users
  
- ❖ The Victim uses the website by:
  - Opening the portal and going through different services.
  - Registering the complaint by adding description, email id and personal information.
  - Filing the FIR
  
- ❖ The administrator uses the website by:
  - Creating a database for storing all the FIRs
  - Creating necessary forms in the front-end and links it to the database.
  - Views the complaint and can get back to them via their e-mail.
  - Adds new Officer in database.
  - Updates the information of Police Officers and Admin.

## CHAPTER 5

### IMPLEMENTATION

#### 5.1 Implementation Overview

- There are three main technologies used in the implementation of the website:
  - HTML, CSS and JavaScript
  - Bootstrap Framework
  - PHP
- Most of the front-end development was brought about through HTML and Bootstrap's CSS and JavaScript Framework classes.



```
1 <?php require_once('includes/conn.php');
2
3 if(isset($_POST['submit'])){
4     $username = mysqli_real_escape_string($mysqli,$_POST['username']);
5     $password = mysqli_real_escape_string($mysqli,$_POST['password']);
6     $password = md5($password);
7     $query1 = mysqli_query($mysqli,"SELECT username,password,type,permission,name,surname FROM users");
8     while($row = mysqli_fetch_array($query1))
9     {
10         $db_name = $row['name'];
11         $db_surname = $row['surname'];
12         $db_username = $row['username'];
13         $db_password = $row['password'];
14         $db_type = $row['type'];
15         $db_per = $row['permission'];
16
17         if($username == $db_username && $password == $db_password){
18             session_start();
19             $_SESSION['username'] = $db_username;
20             $_SESSION['type'] = $db_type;
21             $_SESSION['permission'] = $db_per;
22             $_SESSION['name'] = $db_name;
23             $_SESSION['surname'] = $db_surname;
24             if($_SESSION['type'] == 'user'){
25                 header("Location: dashboard.php");
26             }
27         }
28     }
29 }
30
31
32
33 }
34
35 ?>
36
37
38 <!DOCTYPE html>
39 <html>
40 <head>
```

**Fig 5.1.1** Code for admin login

This code allow the admin to login by checking the username and password



```

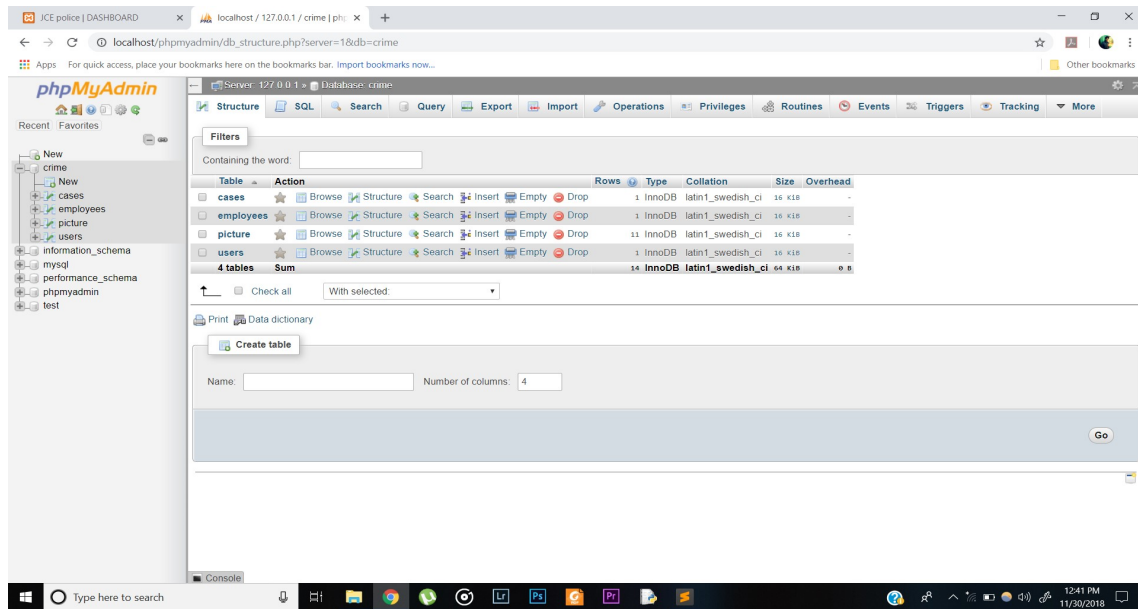
63 $fileName = $file['name'];
64 $fileTmpName = $file['tmp_name'];
65 $fileSize = $file['size'];
66 $fileError = $file['error'];
67 $fileType = $file['type'];
68 $fileExt = explode('.', $fileExt);
69 $fileActualExt = strtolower(end($fileExt));
70 $allowed = array('jpg', 'jpeg', 'png');
71
72
73 $sql_n = "SELECT * FROM employees WHERE phone = '$phone'";
74 $res_n = mysqli_query($mysqli, $sql_n);
75 $sql_e = "SELECT * FROM employees WHERE email = '$email'";
76 $res_e = mysqli_query($mysqli, $sql_e);
77 if(mysqli_num_rows($res_e) > 0){
78 }
79 <div class="alert alert-danger samuel animated shake" id="sams1">
80 <a href="#" class="close" data-dismiss="alert">&times;</a>
81 <strong> Danger! </strong><?php echo'sorry the email is already allocated to someone';></div>
82 <?php
83 }elseif(mysqli_num_rows($res_n) > 0){
84 }
85 <div class="alert alert-danger samuel animated shake" id="sams1">
86 <a href="#" class="close" data-dismiss="alert">&times;</a>
87 <strong> Danger! </strong><?php echo'sorry the phone is already allocated to someone';></div>
88 <?php
89 }
90 else{
91
92 $sql = "INSERT INTO employees(name,surname,email,joined,gender,phone,tmp,employee_id)VALUES('$name','$surname','$email','$joined','$gender','$
93 phone','$tmp','$employee_id')";
94 $results = mysqli_query($mysqli,$sql);
95 if(in_array($fileActualExt, $allowed)){
96 if($fileError == 0){
97 if($fileSize < 1000000){
98 $fileNameNew = "user".".$tmp".".$fileActualExt;
99 $fileDestination = "admin/assets/image/uploads/" . $fileNameNew;
100 move_uploaded_file($fileTmpName, $fileDestination);
101 $sql = "INSERT INTO picture(name,tmp)VALUES('$fileNameNew','$tmp')";
102 mysqli_query($mysqli,$sql);

```

**Fig 5.1.2** Code for Client registration  
This code allows the user to file a proper complaint

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	int(11)			No	None		AUTO_INCREMENT	Change Drop Primary Unique Index Spatial Fulltext More
2	name	varchar(30)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial Fulltext More
3	surname	varchar(30)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial Fulltext More
4	email	varchar(40)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial Fulltext More
5	username	varchar(20)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial Fulltext More
6	password	varchar(32)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial Fulltext More
7	joined	varchar(30)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial Fulltext More
8	type	varchar(10)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial Fulltext More
9	permission	varchar(10)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial Fulltext More
10	gender	varchar(1)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial Fulltext More
11	phone	varchar(20)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial Fulltext More

**Fig 5.1.3** Admin Table  
This table stores the username, password and other details of admin



**Fig 5.1.3** Crime database

This is the crime database where all the portal related database is stored

## 5.2 Website Screenshots

### 5.2.1 User Side Webpages

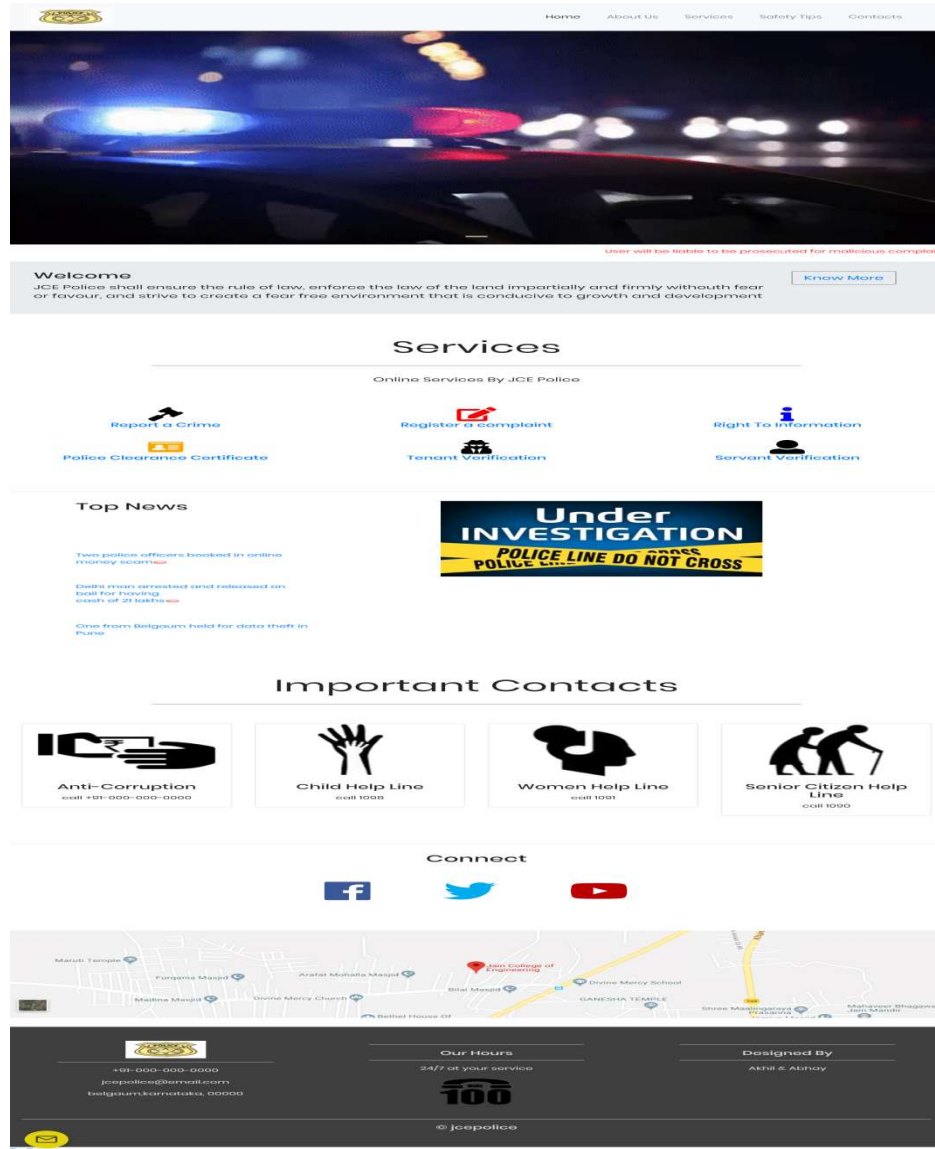
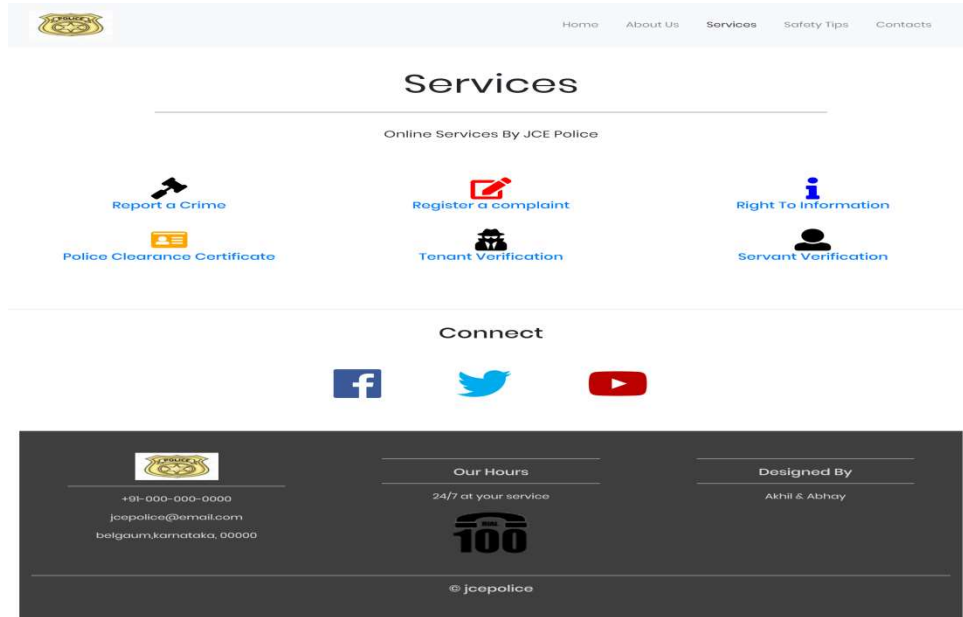


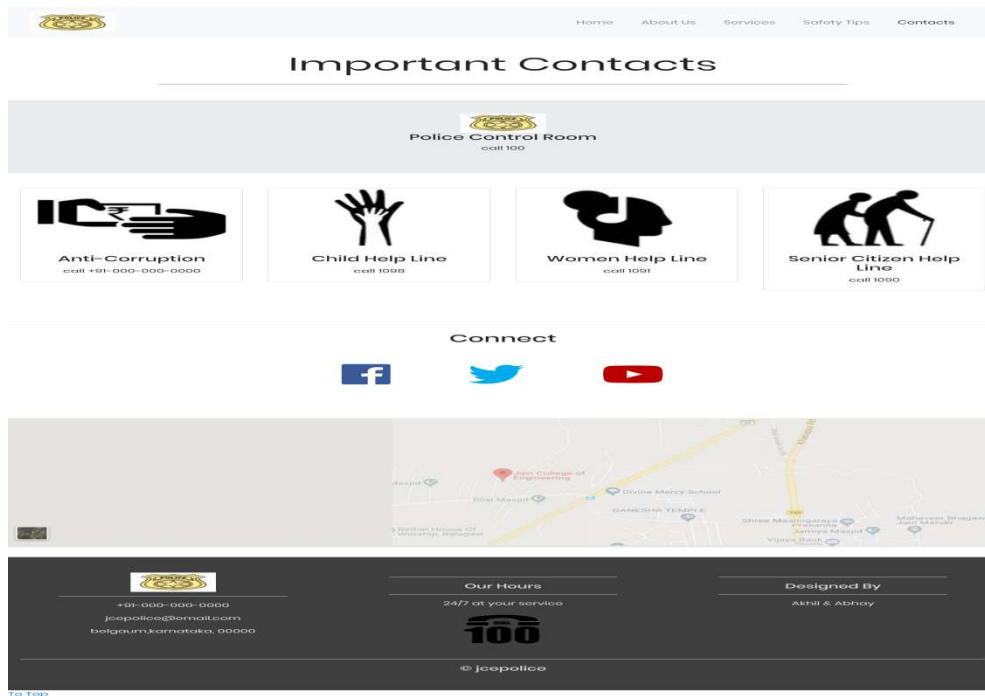
Fig 5.2.1.1: Index Page

When the user visits the website, this is the first page which he encounters. It contains information about the e-portal of Belagavi Police in which all the information, Services Offered, Important Contacts are displayed.



**Fig 5.2.1.2:Services Page**

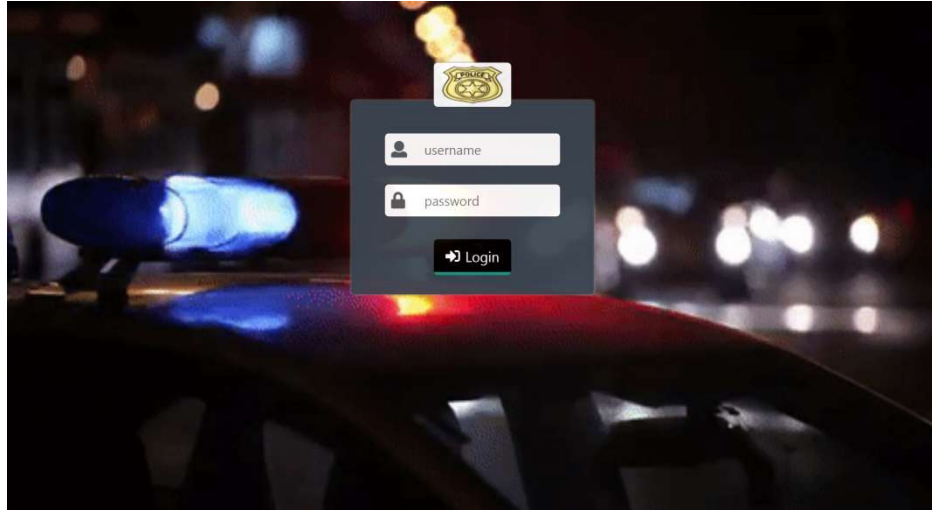
This page give links for different services provided by the Belagavi E-police  
Like report a crime, register a complaint and right to information



**Fig 2.1.3: Services Page**

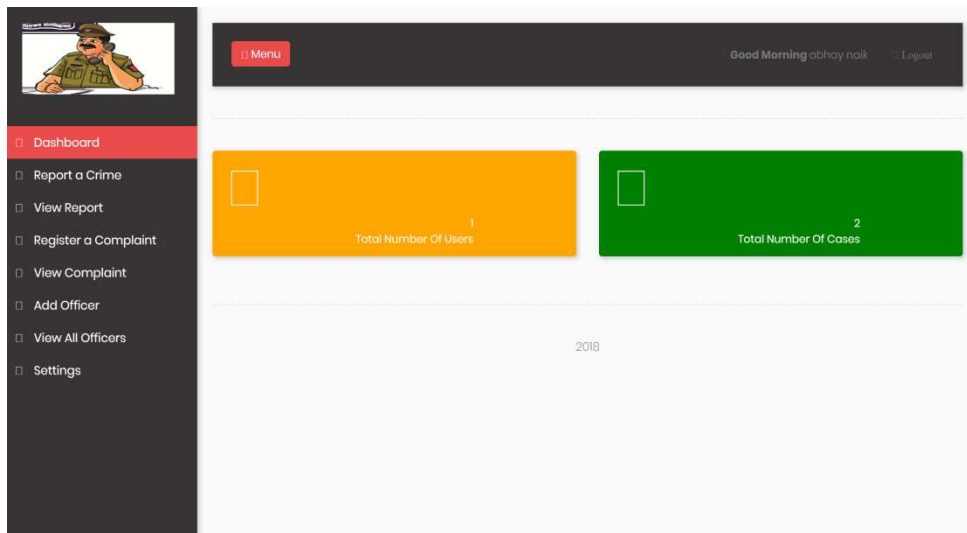
The second half of the page gives access to the important links

## 5.2.2 Admin Side Webpage



**Fig5.2.2.1:Admin Login**

Using this page admin can login in to the admin portal



**Fig 5.2.2.2: Admin Dashboard**

This is admin dashboard where admin can navigate through different options like report and view crime, add employees and change password

Report Evidence

Name  Surname

Email  Phone

Evidence  No file chosen Gender

2018

**Fig 5.2.2.3: Report Crime**  
Form for reporting crime where only admin can do

View

Show 10 entries Search:

No	Name	Surname	Email	Phone	Gender	Action
1	abhay	naik	abhaynaik999777@gmail.com	9509309469	M	<input type="button" value="View"/> <input type="button" value="Remove"/>
2	kian	mnv	prtinaiik00@gmail.com	2147483647	M	<input type="button" value="View"/> <input type="button" value="Remove"/>
3	vivek	pawaskar	yparkale07@gmail.com	2147483647	M	<input type="button" value="View"/> <input type="button" value="Remove"/>
4	abhi	gjkth	abhaynaik1997@yahoo.com	2637204043	M	<input type="button" value="View"/> <input type="button" value="Remove"/>
5	akhil	kapali	kapali@gmail.com	2638762431	M	<input type="button" value="View"/> <input type="button" value="Remove"/>
6	vivek	kapali	vivek@kapali.com	7760928339	M	<input type="button" value="View"/> <input type="button" value="Remove"/>
7	jisj	mnv	ji@gmail.com	7204043706	M	<input type="button" value="View"/> <input type="button" value="Remove"/>

Showing 1 to 7 of 7 entries Previous 1 Next

2018

**Fig 5.2.2.4: View Report**  
In this page admin can view the details of the compliant and respond to it

**CHAPTER 6****TESTING****6.1 Login System Test Cases**

<b>S.No.</b>	<b>Inputs</b>	<b>Expected Output</b>	<b>Actual Output</b>	<b>Result</b>
1.	For logging in: ❖ Username : valid Password : valid	Log in	Logged in	PASS
2.	For logging in: ❖ Username : valid Password : invalid	Error Message	Error Message	PASS
3.	For logging in: ❖ Username : invalid Password : invalid	Error Message	Error Message	PASS
4.	For logging in: ❖ Username: invalid Password : valid	Error Message	Error Message	PASS
5.	For logging in: ❖ Username: invalid Password : invalid	Error Log in	Logged in	FAIL
6.	For logging in: ❖ Username: invalid Password : valid	Error Log in	Logged in	FAIL
7.	For logging in: ❖ Username: empty Password: empty	Error Message	Error Message	PASS

**Table 6.1:Login System Test Cases**

## 6.2 Database Operations Test Cases

S.No.	Inputs	Expected Output	Actual Output	Result
1.	For Database Insertion: ❖ Empty Fields : No Valid Inputs: Yes	Insert into Database	Inserted into Database	PASS
2.	For Database Insertion: ❖ Empty Fields: Yes Valid Inputs: Yes	Error Message	Error Message	PASS
3.	For Database Insertion: ❖ Empty Fields: No Valid Inputs: No	Error Message	Error Message	PASS
4.	For Database Insertion: ❖ Empty Fields: Yes Valid Inputs : No	Error Message	Error Message	PASS
5.	For Database Insertion: ❖ Empty Fields: No Valid Inputs: Yes	Insert into Database	Inserted into Database	FAIL
6.	For Database Insertion: ❖ Empty Fields: Yes Valid Inputs: Yes	Insert into Database	Inserted into Database	FAIL
7.	For Database Insertion: ❖ Empty Fields: No Valid Inputs : No	Insert into Database	Inserted into Database	FAIL
8.	For Database Insertion: ❖ Empty Fields: Yes Valid Inputs : No	Insert into Database	Inserted into Database	FAIL

**Table 6.2:** Database Operations Test Cases



## CONCLUSION

CRS is for any city is very important. This portal is set up to reduce the crime rate in the city and increase the awareness about the crime happening in the city. CRS is working for public safety where there would be records about wanted persons, suspected criminals. This system helps the people leaving in the city by reducing the time taken to lodge the complaint manually and speed up the investigation process. Thus this system will help the people specially the people from remote areas to lodge the complaint and make use of the services provided by the CRS from their convenient places

## REFERENCES

- [1] Fundamentals of Web Development by Randy Conolly and Ricardo Hoar, Pearson Education 2015.
- [2] Bootstrap Documentation: <https://getbootstrap.com/docs/4.1/getting-started/introduction/>
- [3] w3schools.com PHP reference: [https://www.w3schools.com/php/php\\_ref\\_overview.asp](https://www.w3schools.com/php/php_ref_overview.asp)