#### VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Jnana Sangama, Belagavi-590018, Karnataka



#### A MINI PROJECT REPORT ON

#### "CRIME INVESTIGATION PORTAL"

Submitted in partial fulfillment of requirements for the award of 5<sup>th</sup> semester,

# BACHELOR OF ENGINEERING IN COMPUTER SCIENCE & ENGINEERING

Submitted By: SANTHOSH RAAJ G (USN: 1MJ19CS145)

Under the Guidance of
Mrs. K. Manisha
Assistant Professor,
Department of Computer Science & Engineering



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
MVJ COLLEGE OF ENGINEERING
BANGALORE-67
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#### An Autonomous Institute

## MVJ COLLEGE OF ENGINEERING Whitefield, Near ITPB, Bangalore-67

#### DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

#### **CERTIFICATE**

PORTAL" is a bonafide work carried out bySANTHOSH RAAJ G (1MJ19CS145), a bonafide student of MVJ College of Engineering in partial fulfillment for the award of degree of Bachelor of Engineering in Computer Science & Engineering of the Visvesvaraya Technological University, Belagavi during the year 2021-22. It is certified that all the corrections/suggestions indicated for Internal Assessment have been incorporated in the Report. The Mini Project Report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said degree.

Signature of the Guide Signature of the HOD (Mrs. K. Manisha) (Prof. Tamilarasi.R)

**Signature of the Examiners** 

Internal	External

## **ABSTRACT**

This Crime Reporting System is in PHP, CSS, JavaScript. Talking about the features of this system, it just contains the user section. The user (victims) can submit their complaints, while the officers can manage the complaints of all users who have submitted the complaints.

## **ACKNOWLEDGEMENT**

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## Chapter 1

## INTRODUCTION

Database is an organized collection of data. The data is typically organized to model aspects of reality in a way that supports processes requiring information. A DBMS makes it possible for users to create, read, update and delete data in a database. The DBMS essentially serves as an interface between the database and users or application programs, ensuring that data is consistently organized and remains easily accessible.

The main aim of criminal investigation system software is to maintain and work upon all the complaints of the common people in various departments. This asp.net programmed system works to maintain all the records for managing crime across the city. It is a motion detecting software which keeps an eye on all the activities going on in that particular area.

This system is being used to report all the crimes. Whenever a crime is being suspected or any unwanted activity is suspected than the system will record the activity and saved it as database for further assistance. The system also keep track of all the criminals from their past to present in order to maintained a good environment and so that in future if the criminal do any of the wrong activity than police can use the database which is being already stored in the servers for assisting that criminal activity.

## **Chapter 2**

## **SYSTEM REQUIREMENTS**

## 2.1 Hardware Requirements

Operating System: Windows 7 or later
Processor: Intel Pentium 4 or later

Memory: 2 GB minimum, 4 GB recommended

Screen resolution: 1280\*1024 or larger

**Application Window Size:** 1024\*680 or larger

**Internet Connection:** Not required

## 2.2 Software Requirements

☐ **Client :** Operating System(any)

☐ **Web Server**: Apache HTTP server

□ **Database**: Maria DB

☐ Language: HTML

## Chapter 3

#### PROBLEM DESCRIPTION

In the proposed system, all the work is done on computer and all the data is being saved in the database server which can assist in future tragedies and theft can be caught easily. The proposed system is highly programmed using asp.net technology in which once you entered the data, you can access all the data at once using a single click of the mouse in a couple of seconds. Image comparing and capturing will be an easy task once we start using this software. This software actually helps in keeping away all the criminal activities and thus increasing the good vibes in the environment. Every big and small organization should have this highly integrated software to keep their organization away from any kind of criminal activities.

The given software has three kind of modules:

- Admin: All the activities which had been recorded into the database or all the motions that had been saved
  is only visible to the authorized persons or admins of the software. No every common person have the
  rights to check all the motions, images and all the activities and data that have been recorded into the
  system database.
- 2. Criminal: Criminal details along with their activities or what crime they did is being maintained into a separate module and the admin always keep an eye on the database.
- 3. Common people: The software also keep the track on all the details related to the common people so that in future in case any reference is needed than just a simple click will help to solve out all the problems.

## **Chapter 4**

## **SYSTEM DESIGN**

### 4.1 ER Diagram:

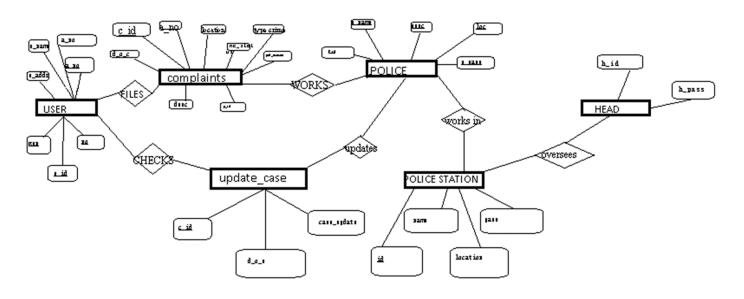


Fig 4.1 ER diagram for.

## **4.2** table Diagram:

	#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra	Action		
	1	c_id 🔑	int(11)			No	None		AUTO_INCREMENT	Change	Drop	▼ More
	2	a_no	bigint(12)			No	None			Change	Drop	<b>▼</b> More
	3	location	varchar(50)	latin1_swedish_ci		No	None			⊘ Change	Drop	<b>▼</b> More
	4	type_crime	varchar(50)	latin1_swedish_ci		No	None			⊘ Change	Drop	▼ More
	5	d_o_c	date			No	None			⊘ Change	Drop	▼ More
	6	description	varchar(7000)	latin1_swedish_ci		No	None			⊘ Change	Drop	<b>▼</b> More
	7	inc_status	varchar(50)	latin1_swedish_ci		Yes	Unassigned				Drop	<b>▼</b> More
	8	pol_status	varchar(50)	latin1_swedish_ci		Yes	null			Change	Drop	<b>▼</b> More
	9	p_id	varchar(50)	latin1_swedish_ci		Yes	Null			⊘ Change	Drop	<b>▼</b> More

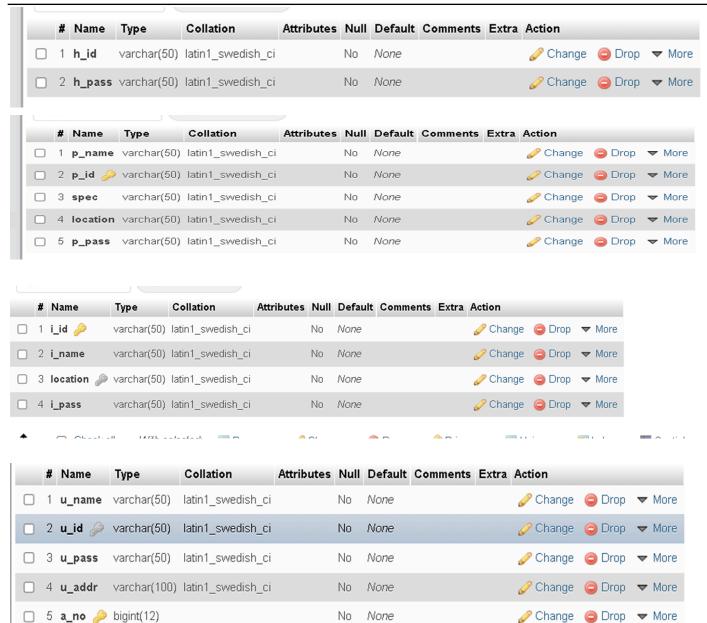


Fig 4.2

None

None

Change

Change

Drop More

Drop More

No

No

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra	Action		
1	c_id	int(11)			No	None				Drop	▼ More
2	d_o_u 🔑	timestamp			No	current_timestamp()			Change	Drop	▼ More
3	case_update	varchar(200)	latin1_swedish_ci		No	None			⊘ Change	Drop	▼ More

varchar(15)

bigint(10)

6 gen

7 mob 🔎

latin1\_swedish\_ci

#### 4.3 Normal Forms

#### 1. NF

Definition If a relation contain composite or multi-valued attribute, it violates first normal form, or a relation is in first normal form if it does not contain any composite or multi-valued attribute. A relation is in first normal form if every attribute in that relation is singled valued attribute.

A table is in

1NF if:

- 1. There are only Single Valued Attributes.
- 2. Attribute Domain does not change.
- 3. There is a Unique name for every Attribute/Column.
- 4. The order in which data is stored, does not matter.

#### 2. NF

Second Normal Form (2NF) is based on the concept of full functional dependency. Second Normal Form applies to relations with composite keys, that is, relations with a primary key composed of two or more attributes. A relation with a single-attribute primary key is automatically in at least 2NF. A relation that is not in 2NF may suffer from the update anomalies.

To be in second normal form, a relation must be in first normal form and relation must not contain any partial dependency. A relation is in 2NF if it has No Partial Dependency, i.e., no non-prime attribute (attributes which are not part of any candidate key) is dependent on any proper subset of any candidate key of the table

In other words, A relation that is in First Normal Form and every non-primary-key attribute is fully functionally dependent on the primary key, then the relation is in Second Normal Form (2NF).

#### **3.** NF

A relation is in third normal form, if there is no transitive dependency for non-prime attributes as well as it is in second normal form.

A relation is in 3NF if at least one of the following condition holds in every non-trivial function dependency  $X \rightarrow Y$ :

- 1. X is a super key.
- 2. Y is a prime attribute (each element of Y is part of some candidate key). In other words.

A relation that is in First and Second Normal Form and in which no non-primary-key attribute is transitively dependent on the primary key, then it is in Third Normal Form (3NF).

All the tables in crime investigation Management System satisfy all the three normal forms.

## Chapter 5

#### **IMPLEMENTATION**

#### 5.1 Introduction to software used

#### **Description**

To run this project you must have installed virtual server i.e XAMPP on your PC (for Windows). MYSQL Server for the creation of the Backend of the project and PHP for the Frontend creation.

#### 5.1.1 PHP

#### **Description**

Stands for "Hypertext Preprocessor." (It is a recursive acronym) PHP is an HTML - embedded Web scripting language. This means PHP code can be inserted into the HTML of a Web page. When a PHP page is accessed, the PHP code is read or "parsed" by the server the page resides on. The output from the PHP functions on the page are typically returned as HTML code, which can be read by the browser.

#### **5.1.2 MySQL**

#### **Description**

MySQL, pronounced either "My S-Q-L" or "My Sequel," is an open source relational database management—system. It is based on the structured query language (SQL), which is used for adding, removing, and modifying information in the database. Standard SQL commands, such as ADD, DROP, INSERT, and UPDATE can be used with MySQL.

#### **5.2 CODE**

#### **Database Connection**

```
-- phpMyAdmin SQL Dump
-- version 4.8.0.1
-- https://www.phpmyadmin.net/
--
-- Host: 127.0.0.1
-- Generation Time: Dec 17, 2018 at 04:19 PM
```

```
SET SQL MODE = "NO AUTO VALUE ON ZERO";
SET AUTOCOMMIT = 0;
  `c id` int(11) NOT NULL,
 ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

```
(1, 123214521452, 'Tollygunge', 'Robbery', '2018-12-06', 'My Home has been Robbed.',
ENGINE=InnoDB DEFAULT CHARSET=latin1;
INSERT INTO `head` (`h id`, `h pass`) VALUES
('head@kp', 'head');
  `spec` varchar(50) NOT NULL,
 ENGINE=InnoDB DEFAULT CHARSET=latin1;
INSERT INTO `police` (`p name`, `p id`, `spec`, `location`, `p pass`) VALUES
('Jay Singh', 'a102', 'All', 'Anandapur', 'jay'),
('Suvendu Ghosh', 't101', 'Robbery', 'Tollygunge', 'suvendu');
```

```
`i id` varchar(50) NOT NULL,
 ENGINE=InnoDB DEFAULT CHARSET=latin1;
INSERT INTO `police station` (`i id`, `i name`, `location`, `i pass`) VALUES
('shivam@tollygunge', 'Shivam', 'Tollygunge', 'shivam');
 'd o u' timestamp NOT NULL DEFAULT CURRENT TIMESTAMP,
 ENGINE=InnoDB DEFAULT CHARSET=latin1;
(1, '2018-12-17 10:32:06', 'Criminal Verified'),
(1, '2018-12-17 10:32:15', 'Criminal Interrogated'),
```

```
`a no` bigint(12) NOT NULL,
 `mob` bigint(10) NOT NULL
 ENGINE=InnoDB DEFAULT CHARSET=latin1;
'Male', 9854123654);
```

```
ALTER TABLE `police station`
 ADD PRIMARY KEY (`i id`),
ALTER TABLE `user`
ALTER TABLE `complaint`
 MODIFY `c id` int(11) NOT NULL AUTO INCREMENT, AUTO INCREMENT=2;
```

## Chapter 6

## **SCREENSHOTS**

Fig: 6.1 Home Page

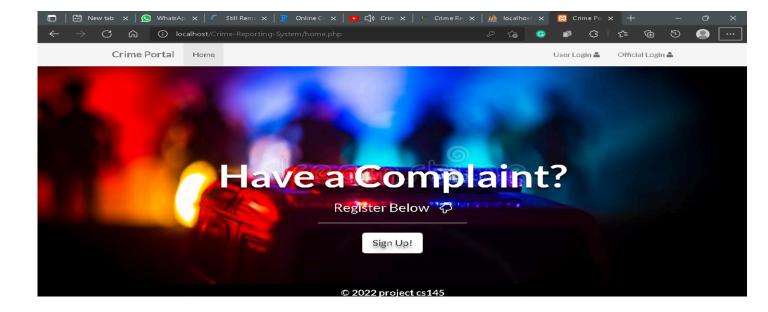
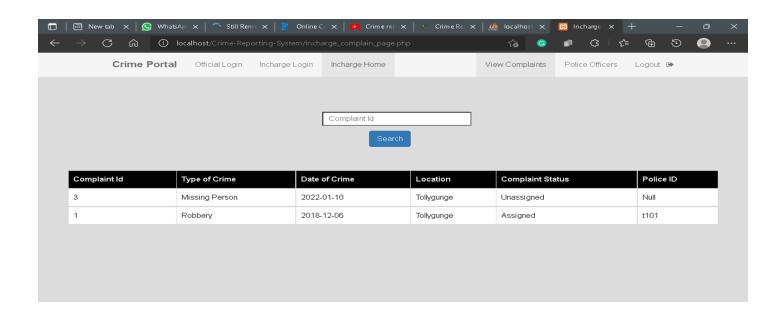


Fig: 6.2 Admin Login Page



## **Chapter 7**

## **CONCLUSION & FUTURE SCOPE**

This project enables the users and the police personal to wok efficiently and saves time and effort to manually record all cases in files . it automates most of the work done the project teaches us the essential skills like:

- Using system analysis and design techniques.
- Understanding the database handling and query processing.
- Automation of entire system improves the efficiency.

#### Future scope of the work:

The future plan is to use the help of Artifical intelligence and machine learning to help the police personal to perform their duties efficiently.

## **REFERENCES**

- ☐ During the course of this project reference to the following materials were made
- 1. HTML & CSS: The Complete Reference, Fifth Edition Paperback 1 July 2017
- 2. Fundamentals of Database Systems, Ramez Elmasri and Shamkant B. Navathe, 7<sup>th</sup> Edition, 2017, Pearson.
- 3. Eloquent JavaScript, 3rd Edition: A Modern Introduction to Programming Paperback Illustrated, 4 December 2018
- 4. <u>www.geeksforgeeks.com</u> and <u>www.stackoverflow.com</u>.