

MES COLLEGE OF ENGINEERING, KUTTIPPURAM  
DEPARTMENT OF COMPUTER APPLICATIONS  
20MCA245 – MINI PROJECT

---

PRO FORMA FOR THE APPROVAL OF THE THIRD SEMESTER MINI PROJECT

---

*(Note: All entries of the pro forma for approval should be filled up with appropriate and complete information. Incomplete Pro forma of approval in any respect will be rejected.)*

Mini Project Proposal No : \_\_\_\_\_  
(Filled by the Department)

Academic Year : 2021-2022

Year of Admission : 2020

1. Title of the Project : INTELLIGENT CRIME SCENE RECOMENDATION

2. Name of the Guide : Dr.Geevar C Zacharias

3. Number of the Student: MES20MCA-2014

4. Student Details (in BLOCK LETTERS)

Name BHAVIJITH V Roll Number 14 Signature

1.

Date: 1/11/2021

**Approval Status :** Approved / Not Approved

Signature of  
Committee Members

**Comments of The Mini Project Guide**

Dated Signature

Initial Submission :

First Review :

Second Review :

**Comments of The Project Coordinator**

Dated Signature

Initial Submission:

First Review

Second Review

Final Comments :

Dated Signature of HOD

# INTELLIGENT CRIME SCENE

## RECOMMENDATION

BHAVIJITH V

### **Introduction & Objectives:**

There are lots of crimes are happening around us such as robbery, murder, smuggling etc. There might be similarities to many crimes for example there might be homicides that of similar patterns or robbery that of similar patterns. Police investigates such cases and find out the similarities in the modus operandi of those crimes. But for these findings they have to search and refer a series of case diaries and first investigation reports (FIR). This is a time-consuming job. And some officers might not able find the similarities in many cases too. In such cases there is an urgent need for an automatic intelligent crime recommending system to improve the efficiency of the investigation while saving human power and material resources.

### **HARDWARE AND SOFTWARE REQUIREMENT**

The selection of hardware is very important in the existence and proper working of any software. Then selection hardware, the size and capacity requirements are also important.

☐ Processor - Intel x86

☐ Speed - 1.1 GHz

☐ RAM - 700 MB (min)

☐ Hard Disk - 150 MB

Key Board - Standard Windows Keyboard

☐ Mouse - Two or Three Button Mouse

☐ Monitor – SVG

### **SOFTWARE REQUIREMENTS:**

One of the most difficult tasks is selecting software for the system, once the system requirements is found out then we have to determine whether a particular software package fits for those system requirements. The application requirement:

☐ Operating System - Windows 7 or Above, Android

☐ Technology - Python, Java

☐ Backend - MySQL

☐ Platform used - JetBrains, PyCharm, Android Studio

☐ Web Browser - Google Chrome, Fire fox, Microsoft Edge

☐ Front End - HTML, CSS, JAVASCRIPT

☐ Frame work - Flask

## **PROBLEM DEFINITION AND INITIAL REQUIREMENTS**

### **Existing System:**

At least for now there is no existing system that intelligently recommend cases that has similar modus operandi. The existing system is a completely done manually by the investigation officers. There are lots of efforts and researches are involved in a crime investigation. Many human powers and material resources are consumed during the process of investigation.

### **Proposed System:**

The proposed system is an automated intelligent similar crime detecting system that using recommendation and natural language processing (NLP). The existing system finds out similarities in various crimes and recommend crime scenes. By this a crime investigation will become more efficient by consuming less human power and material resources but gives us results immediately

## **BASIC FUNCTIONALITIES OF PROJECT**

### **Functional Module:**

#### **Natural language processing (NLP)**

Natural language processing (NLP) refers to the branch of computer science and more specifically, the branch of artificial intelligence or AI concerned with giving computers the ability to understand text and spoken words in much the same way human beings can. NLP drives computer programs that translate text from one language to another, respond to spoken commands, and summarize large volumes of text rapidly—even in real time. There's a good chance you've interacted with NLP in the form of voice-operated GPS systems, digital assistants, speech-to-text dictation software, customer service chatbots, and other consumer conveniences. But NLP also plays a growing role in enterprise solutions that help streamline business operations, increase employee productivity, and simplify mission-critical business processes.

#### **Recommendation**

Recommender systems are algorithms aimed at suggesting relevant items to users.

Recommendation systems used to recommend valid and useful suggestion to the user. By using various data, we can recommend the useful information about any system regarding the information.

#### **User Modules**

There are three types of modules. Admin, Police, forensic. Each of them have distinct login section each of them can login their account section by conforming their unique

##### **1. Admin**

Admin can login the system using username and password. Admin can control the overall system and should have the functionality to monitor overall process.

Admin can control the overall workflow.

- Add and manage police
- View crime report
- Assign work to police & view report
- View case status
- View feedback

## 2. Police

Police can login the app using his/her unique username and password and they can do the functionalities that are given below

- Add new case
- Add crime report
- View recomentations
- View work and upload report
- View \ Update crime report
- Update case and feedback



