# **Criminal Investigation Tracker with Suspect Prediction**

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Abstract—We're to propose a criminal investigation tracker system that tracks the investigation status of criminal cases with detail logs and also predicts primary suspects. The system is initiated to help agencies like Police Departments, CBI, and other such department's to follow up investigation process and track status of multiple cases at a time. The system keeps detail logs of a case which includes case information, people involved, discourse, previous criminal records of those involved, Items fetched on scene and other detail information. The system expect the type of case, allows admin to modify the status of investigation, add more images of crime, items found on scene etc. this enables sanctioned officers to check case status and appearance into its status online and also update any supported and important information as and when needed. The system also provides feature of a suspect-prediction algorithm. Supported sort of case, intellectual property, land, personal or other entities involved the system studies past cases, it studies past criminal records of these involved and supported this data it provides suggestions of suspected persons during a logical order. The system is meant to assist investigation teams to figure collectively on cases, coordinate and also speed up the method by suggesting logical suspects supported data provided.

**Keywords:** Investigation, crime, digital, prediction, suspect, evidence

#### I. INTRODUCTION

Whenever a case against the crime is filed the investigation always starts from the scratch directly from the evidences found at the crime location and therefore the eye witnesses present at the crime location. On the idea of the statement given by the attention witnesses about the crime and therefore the criminal who committed that crime. the method of the investigations starts, on reduce the strain of the cops we're getting to implement a system as criminal investigation tracker with suspect prediction which will

help the officers to hurry up the method of investigation and track status of ongoing case by predicting out the first suspects on the idea of the records. Crime is an awful and illegal act against law for doing wrong things out of which someone are often punished by police authorities and government. A criminal may be a one that has committed or is involved any quite crime. Crimes are a social nuisance and price our society nearly in several ways. In our society the rate is growing very rapidly especially women face many of such crime problems. the rationale for this could be the low pronouncement of guilt. About 10% of criminals commit 50% of crimes. this technique helps keep over the patterns in crime scenario i.e. whether it's increasing or decreasing and if increasing then what are the matter areas, the primary phase of the project gives the brief overview of the project and its objective. the most objective is to seek out and predict the probable suspect for the unsolved cases from the criminal records present within the database within the system. Here, within the initial stage the admin adds the officer to the system then add them to a specific case that they're getting to investigating individually, because the Officers are added to a specific case, the officer will add the small print of the criminal in their database and once the knowledge associated with the criminal is over then the second phase would began. The second phase focuses firstly over making the project towards its ultimate goal. Once, the info of criminal is added to the database the officer files the FIR and every one the small print of the victim and criminal is added. Herein, we consider predicting the crime, how the crime had taken place with the assistance by using the choice tree algorithm. Their growth, depreciation and other associated results concerning the crime scenario. On the idea of the case type, belongings, land properties, relationships and other such aspects related to the previous crime logs involved and supported the respective information the prominent suspects are predicted and are suggested during a logical order.

### II. EXISTING SYSTEM

Crime is essentially "unpredictable" event. it's not constrained by space and time. It entirely depends on human behavior. There are often huge range of crime activities, for instance, from illegal driving to terrorism attacks. Various activities performed by criminal generate great deal of data and again this information are often present in sort of formats. due to this analysis of crime data becomes very difficult. data processing may be a useful process for extracting important information from great deal of knowledge. In era criminals use more advance technologies to commit the crime, on the opposite hand there's inadequate use of technology in crime prevention and criminal identification. Since large data and more complex queries got to be processed, a more powerful system is required for the analysis of crime data.

# III. PROPOSED SYSTEM

Find and predict the probable suspect for the unsolved cases from the criminal records present within the database within the system. Make projects which help the agencies like CBI, CID & other such bureaus to hurry up their investigation process & track status of multiple cases at a time. Make projects which help the agencies like CBI, CID & other such bureaus to hurry up their investigation process & track status of multiple cases at a time. Find and predict the probable suspect for the unsolved cases from the criminal records present within the database within the system. The requirement for a computerized platform for crime record management can't be exaggerate. The criminal investigation tracker enhances proper and efficient management of criminal records. Thereby helping in making informed decisions and improving reliability thus improving enforcement operation. This leads to a lower rate within the country thereby increasing national security.

# IV. SYSTEM DESIGN & METHODOLOGY

The system perceive the sort of case, allows the admin to modify the status of investigation, add more images of crime, items found on scene etc. The criminal investigation trackers intensify proper and achieve maximum management of records. Thereby helping in making informed decisions and improving reliability thus improving enforcement operation. This leads to a lower rate within the country thereby increasing national security.

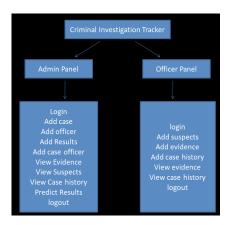


Fig. System Architecture



Fig. Methodology

Activity Diagram

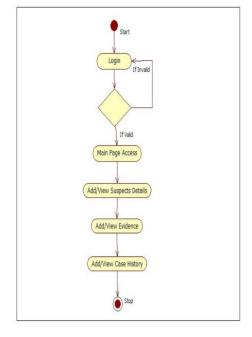


Fig. Activity Flow

# Use Case Diagram

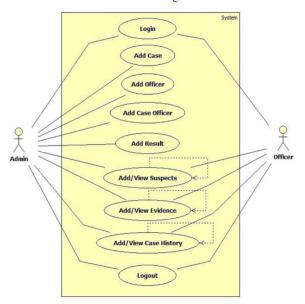


Fig. Use Case Diagram

# V. CONCLUSION

The necessity for a computerized platform for crime logs management can't be over-stress. The criminal investigation tracker enhances proper and efficient management of criminal records. Thereby helping in making informed decisions and improving reliability thus

improving enforcement operation. This leads to lower rate within the country thereby increasing national security.

## VI. REFERENCES

- Criminal Investigation tracker using suspect prediction, Aakash Desai, Gautami Shinde, Omkar Narvekar, VarshaBh, 2017
- [2] Criminal Investigation tracker using suspect prediction, Dr. C. S. Shinde, Miss. Priyanka More, Miss. Sandhya Sonkamble, Miss. Nayana Pati, Miss. Krutika Kulkarni, 2019
- [3] Enabling Real Time Crime Intelligence Using Mobile GIS and Prediction Methods, M. Saravanan, Rakhi Thayyil and Shwetha Narayanan, 2013
- [4] Criminal Investigation Tracker with Suspect Prediction, Gouri Nair, Himanshi Rana, Yash Salvi, John Kenny, 2020
- [5] Bogomolov, Andrey and Lepri, Bruno and Staiano, Jacopo and Oliver, Nuria and Pianesi, Fabio and Pentland, Alex.2014. Once upon a crime: Towards crime prediction from demographics and mobile data, Proceedings of the 16th International Conference on Multimodal Interaction.
- [6] Yu, Chung-Hsien and Ward, Max W and Morabito, Melissa and Ding, Wei.2011. Crime forecasting using data mining techniques, pages 779-786, IEEE 11th International Conference on Data Mining Workshops (ICDMW).
- [7] Kianmehr, Keivan and Alhajj, Reda. 2008. Effectiveness of support vector machine for crime hot-spots prediction, pages 433-458, Applied Artificial Intelligence, volume 22, number 5.
- [8] Toole, Jameson L and Eagle, Nathan and Plotkin, Joshua B. 2011 (TIST), volume 2, number 4, pages 38, ACM Transactions on Intelligent Systems and Technology.
- [9] Wang, Tong and Rudin, Cynthia and Wagner, Daniel and Sevieri, Rich. 2013. pages 515530, Machine Learning and Knowledge Discovery in Databases.