

A Final Review Report
On
CRIME ANALYTICS DASHBOARD

*Submitted in partial fulfillment of the
requirement for the award of the degree of*

BACHELOR OF TECHNOLOGY
in
Computer Science Engineering



Under The Supervision of :

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BONAFIDE CERTIFICATE

Certified that this project report “Crime Analytics ” is the bonafide work of “Akhil Kumar Jha & Piyush Kumar” who carried out the project work under my supervision.

SIGNATURE OF DEAN

SIGNATURE OF SUPERVISOR

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ABSTRACT

Using data analysis to study, we are analyzing the trends of crime, how they are increasing in various states of the country. In this, we are going to implement a dynamic dashboard through which the visualizations are going to take place. In this analysis, we provide visualization of every part of the country's various crimes.

INTRODUCTION

Criminals are a threat to the entire world. Despite all of the efforts to reduce crime rates, crimes continue to occur often in all parts of the world, and we are all vulnerable. India's crime index is 44.16 in 2020, making it one of the top 60 countries most affected by criminals.

The rate of crime is rising on a daily basis as current technologies and high-tech ways assist criminals in carrying out their unlawful activities. According to the Crime Record Bureau, crimes such as burglary and arson have increased, while crimes such as murder, sex abuse, and gang rap have climbed. Data about crime will be gathered from a variety of blogs, news outlets, and websites. The massive data is used to create a crime report database as a record.

Since 1800, the criminology department has played a role in the investigation of crimes. Crime is a societal annoyance that costs our society a lot of money in a variety of ways. The Indian government has also taken measures to build apps and software for State and Central Police to utilise in conjunction with the National Crime Records Bureau (NCRB). According to research approximately 10% of offenders are responsible for approximately 50% of all crimes.

LITERATURE REVIEW

For the police or the investigative team, crime analysis duties can be a time-consuming procedure. When offenders depart a crime scene, they leave behind traces that can be exploited to identify the perpetrators.

The crime sequence and patterns that several offenders follow when committing a crime make evaluating the crime simple. This technique entails a number of steps that must be performed in order to identify the offenders and obtain more information based only on clues or information provided by locals.

PROBLEM FORMULATION

By doing these analytics we can conclude how the crime is increasing at which rate in which areas. We can visualize the crime scene area by google map API on the dynamic dashboard. Through dashboards, we are visualizing the trends of crime areas dynamically.

REQUIRED TOOLS

Language - R language, Javascript

Frameworks - R shiny

Editor - Vs code, R studio

Version control - Git & GitHub

WORK PLAN LAYOUT

> PHASE 1 (Building The Dashboard)

Week 1 to 2

- The building of the dashboard begins
- Adding some dynamic effects into it

Week 3 to 4

- Adding some visualizations into the dashboards
- Test the visualization on the provided data set
- Publish on the “Heroku” app for live the dashboard

> PHASE 2 (Visualizations)

Week 5 to 7

- Adding the visualization into the dashboard
- Testing on data set
- Update the dashboard for live updates

Week 8 to 9

- Adding the map API for visualization
- Test the API on the provided data set
- Make it live for updates
- Release the dashboards for analytics purpose

ARCHITECTURE DIAGRAM

