Mini Project Activity

**Phase-1**

**Define Problem statement**

The Crimes in Boston dataset capturing the type of incident as well as when and where it occurred, a well-known dataset in the field of machine learning and data analysis, contains measurements of different fields of crime given by BPD. This project aims to perform an in-depth exploratory data (EDA) and statistical analysis of the crime dataset to gain insights into the characteristics of these incidents that are provided by Boston Police Department to initial details surrounding an incident to which BPD officers respond and capturing the type of incident as well as when and where it occurred in and make meaningful conclusions.

Related of data collection of stated problem

* Define Problem Data
* collect the data from assigned source
* Understanding of Dataset

**Create project plan and product backlog**

**Objective:**

1. Data collection and loading
2. Data Preprocessing
3. Exploratory data analysis

4. Statistical analysis

5. Report writing

To perform an in-depth exploratory data analysis (EDA) and statistical analysis of the Crimes in Boston dataset, you can follow these steps:

1. **Data collection and loading:**

* **Identify and prepare data sources**
* **Choose a data loading tool**
* **Configure the data loading tool**
* **Load the data**

1. **Data preparation and cleaning:**

* Import the necessary libraries
* Load the dataset
* Check for missing values and outliers
* Clean and prepare the data for analysis

1. **Exploratory data analysis:**

* Get an overview of the data
* Identify the most common crimes
* Identify the most crime-prone areas
* Analyses the temporal distribution of crimes
* Analyses the relationship between different crime variables

1. **Statistical analysis:**

* Perform statistical tests to identify significant relationships between crime variables
* Develop predictive models to forecast future crime rates

1. **Report writing:**

* Write a report that summarizes the findings of the analysis and provides recommendations for reducing crime in Boston

**Create Git Repository**

1. Go to the GitHub homepage.
2. Click on the **plus icon** in the top right corner of the page, and select **“New repository”** from the dropdown menu.
3. On the next page, enter a name for your repository in the **“Repository name”** field.
4. Optionally, add a description of your repository in the **“Description”** field.
5. Choose whether you want your repository to be public or private.
6. If you want to initialize your repository with a README, select the **“Add a README file”** checkbox.
7. Click on the **“Create repository”** button.