

# EDA-on-NYC-Taxi-Data

- Conducting an Exploratory Data Analysis (EDA) on New York City taxi data and visualizing it through countplots, distribution plots (displot), and histograms using Python and its libraries.

To view the project (Google Collab) -

> <https://colab.research.google.com/drive/19kFrstu3P3W4sWwYIQZpRkkkB5Vd7t2>

## About the project

Exploratory Data Analysis (EDA) is a critical step in data analysis, helping us understand the structure, patterns, and characteristics of a dataset. In this example, we'll perform EDA on New York City taxi data using Python and various libraries. We'll visualize the data using countplots, distribution plots (displot), and histograms to gain insights. In which we performed Descriptive and Diagnostic Analysis. We have used the NYC taxi dataset from Kaggle for this project -> <https://www.kaggle.com/competitions/nyc-taxi-trip-duration>

## Libraries Used:

- Numpy
- Pandas
- Matplotlib
- Seaborn

## VISUALIZATIONS

**Plot 1. Distribution of Passenger Count**

**Plot 2. Distribution of each day in a week**

**Plot 3. Trip Duration Distribution**

**Plot 4. Distribution of pickup timezone**

**Plot 5. Distribution of active hours - pickup and drop off**

**Plot 6: Distribution of pickup and dropoff months**

**Plot 7. Distribution of total pickup hour**