

Ride Booking Company- Exploratory Data Analysis

(EDA)

Objective:

Perform exploratory data analysis (EDA) on the given dataset from a ride-booking company operating in multiple Indian cities. The aim is to gain insights into customer behavior, ride trends, vehicle preferences, and fare distributions.

Dataset Description:

The dataset contains 10,000 ride bookings with the following columns: -

- 1)Date:** The date of the ride.
- 2)Time:** The time of the ride.
- 3)Booking ID:** Unique identifier for each booking.
- 4)Booking Status:** Whether the ride was Completed, Cancelled, or Ongoing.
- 5) Customer ID:** Unique identifier for each customer.
- 6)Vehicle Type:** Type of vehicle chosen for the ride.
- 7)City:** The city where the ride was booked.
- 8)Pickup Location:** Starting point of the ride.
- 9)Drop Location:** Ending point of the ride.
- 10) Fare (INR):** Total fare charged for the ride.

Tasks to Perform:

1. Load and clean the dataset (check for missing values, duplicates, etc.).
2. Analyze booking trends over time (daily/weekly/monthly).
3. Identify the most popular vehicle types and cities.
4. Examine fare distributions across different vehicle types and cities.
5. Visualize booking status frequencies.
6. Segment customers based on booking patterns.
7. Identify any anomalies or interesting patterns in the data.

Bonus: Try clustering, feature engineering, or predictive modeling (e.g., fare prediction or cancellation prediction) based on EDA results.

