**Uber Ride Analysis in US Based**

Conduct a comprehensive analysis of Uber ride data to uncover key insights. The analysis will focus on identifying:

1. **Most frequently booked vehicle types**
2. **Most common pickup locations**
3. **Most common drop-off locations**
4. **Trip distance patterns and distributions**
5. **Additional data-driven insights** such as peak ride times, average trip durations, and fare trends

**Trip ID -** that uniquely identifies a single Uber ride in the dataset.

**Pickup Time -** refers to the **exact date and time** when a passenger is picked up by the Uber driver and the trip

**Drop-off Time -** refers to the **exact date and time** when a passenger is dropped off at their destination and the Uber trip ends.

**Passenger Count -** refers to the **number of passengers** who were in the vehicle during a single Uber trip.

**Trip Distance -** refers to the total distance travelled during a ride, typically measured in **miles** (in the U.S.).

**Pickup Location ID -** is a unique numeric or alphanumeric code that represents the **geographic zone or area** where the trip started.

**Drop-off Location ID -** is a unique identifier for the **zone or area** where the trip ended.

**Fare Amount -** is the **total base fare** charged for the trip, excluding tips and additional fees.

**Surge Amount -** is the **additional charge** applied during periods of high demand (surge pricing).

**Vehicle Type -** refers to the category of Uber service selected for the trip. Common types in the U.S. include:

* **UberX** – Standard rides for up to 4 people
* **Uber XL** – Larger vehicles for up to 6 people
* **Uber Black** – Premium black car service
* **Uber Green** – EV Vehicle.
* **Uber Comfort** – Newer, more spacious cars

**Payment Type -** indicates the method used to pay for the ride. In the U.S., common types include:

* **Credit Card**
* **Debit Card**
* **PayPal**
* **Apple Pay / Google Pay**
* **Uber Cash**

**Location Table**

Uber trip data in conjunction with a location reference table to uncover meaningful insights. Specifically, the analysis aims to:

1. **Identify the most frequently booked vehicle types**
2. **Determine the most common pickup and drop-off locations**
3. **Map pickup and drop-off location IDs to actual city names using the location table**

**Location id** - assigned to a specific geographic area or zone.

**Location** - A **named zone or neighbourhood** associated with a Location ID. It typically represents a smaller area within a city, such as a district or borough.

**City -** The **larger municipal area** in which the location or zone is situated.