



Data Analytics Project

By Ramesh D

SQL Questions:

1. Retrieve all successful bookings:
2. Find the average ride distance for each vehicle type:
3. Get the total number of cancelled rides by customers:
4. List the top 5 customers who booked the highest number of rides:
5. Get the number of rides cancelled by drivers due to personal and car-related issues:
6. Find the maximum and minimum driver ratings for Prime Sedan bookings:
7. Retrieve all rides where payment was made using UPI:
8. Find the average customer rating per vehicle type:
9. Calculate the total booking value of rides completed successfully:
10. List all incomplete rides along with the reason:

Power BI Questions:

1. Ride Volume Over Time
2. Booking Status Breakdown
3. Top 5 Vehicle Types by Ride Distance
4. Average Customer Ratings by Vehicle Type
5. cancelled Rides Reasons
6. Revenue by Payment Method
7. Top 5 Customers by Total Booking Value
8. Ride Distance Distribution Per Day
9. Driver Ratings Distribution
10. Customer vs. Driver Ratings

Data Columns

1. Date
2. C_TAT
3. Time
4. Cancelled_Rides_by_Customer
5. Booking_ID
6. cancelled_Rides_by_Driver
7. Booking_Status
8. Incomplete_Rides
9. Customer_ID
10. Incomplete_Rides_Reason
11. Vehicle_Type
12. Booking_Value
13. Pickup_Location
14. Payment_Method
15. Drop_Location
16. Ride_Distance
17. V_TAT
18. Driver_Ratings
19. Customer_Rating

SQL Answers:

1. Retrieve all successful bookings:

```
SELECT * FROM bookings WHERE Booking_Status = 'Success';
```

2. Find the average ride distance for each vehicle type:

```
SELECT Vehicle_Type, AVG(Ride_Distance) as avg_distance FROM bookings GROUP BY Vehicle_Type;
```

3. Get the total number of cancelled rides by customers:

```
SELECT COUNT(*) FROM bookings WHERE Booking_Status = 'cancelled by Customer';
```

4. List the top 5 customers who booked the highest number of rides:

```
SELECT Customer_ID, COUNT(Booking_ID) as total_rides FROM bookings GROUP BY Customer_ID ORDER BY total_rides DESC LIMIT 5;
```

5. Get the number of rides cancelled by drivers due to personal and car-related issues:

```
SELECT COUNT(*) FROM bookings WHERE cancelled_Rides_by_Driver = 'Personal & Car related issue';
```

6. Find the maximum and minimum driver ratings for Prime Sedan bookings: SELECT

MAX(Driver_Ratings) as max_rating, MIN(Driver_Ratings) as min_rating FROM bookings
WHERE Vehicle_Type = 'Prime Sedan';

7. Retrieve all rides where payment was made using UPI:

SELECT * FROM bookings WHERE Payment_Method = 'UPI';

8. Find the average customer rating per vehicle type:

SELECT Vehicle_Type, AVG(Customer_Rating) as avg_customer_rating FROM bookings
GROUP BY Vehicle_Type;

9. Calculate the total booking value of rides completed successfully:

SELECT SUM(Booking_Value) as total_successful_value FROM bookings WHERE
Booking_Status = 'Success';

10. List all incomplete rides along with the reason:

SELECT Booking_ID, Incomplete_Rides_Reason FROM bookings WHERE Incomplete_Rides =
'Yes';

Power BI Answers:

Segregation of the views:

1. Overall

- Ride Volume Over Time
- Booking Status Breakdown

2. Vehicle Type

- Top 5 Vehicle Types by Ride Distance

3. Revenue

- Revenue by Payment Method
- Top 5 Customers by Total Booking Value
- Ride Distance Distribution Per Day

4. Cancellation

- Cancelled Rides Reasons (Customer)
- cancelled Rides Reasons (Drivers)

5. Ratings

- Driver Ratings
- Customer Ratings

Answers:

1. **Ride Volume Over Time:** A time-series chart showing the number of rides per day/week.
2. **Booking Status Breakdown:** A pie or doughnut chart displaying the proportion of different booking statuses (success, cancelled by the customer, cancelled by the driver, etc.).
3. **Top 5 Vehicle Types by Ride Distance:** A bar chart ranking vehicle types based on the total distance covered.
4. **Average Customer Ratings by Vehicle Type:** A column chart showing the average customer ratings for different vehicle types.
5. **cancelled Rides Reasons:** A bar chart that highlights the common reasons for ride cancellations by customers and drivers.
6. **Revenue by Payment Method:** A stacked bar chart displaying total revenue based on payment methods (Cash, UPI, Credit Card, etc.).
7. **Top 5 Customers by Total Booking Value:** A leaderboard visual listing customers who have spent the most on bookings.
8. **Ride Distance Distribution Per Day:** A histogram or scatter plot showing the distribution of ride distances for different Dates.
9. **Driver Rating Distribution:** A box plot visualizing the spread of driver ratings for different vehicle types.
10. **Customer vs. Driver Ratings:** A scatter plot comparing customer and driver ratings for each completed ride, analyzing correlations.

SQL Questions & Answers

Create Database Ola;

Use Ola;

#1. Retrieve all successful bookings:

Create View Successful_Bookings As

SELECT * FROM bookings

WHERE Booking_Status = 'Success';

#2. Find the average ride distance for each vehicle type:

Create View Avg_ride_distance_for_vehicle As SELECT

Vehicle_Type, AVG(Ride_Distance) as

avg_distance FROM bookings

GROUP BY Vehicle_Type;

#3. Get the total number of cancelled rides by customers:

Create View Cancelled_rides_by_customers As

SELECT COUNT(*) FROM bookings

WHERE Booking_Status = 'cancelled by Customer';

#4. List the top 5 customers who booked the highest number of rides:

```
Create View Top_5_Customers As
SELECT Customer_ID, COUNT(Booking_ID) as total_rides
FROM bookings
GROUP BY Customer_ID
ORDER BY total_rides DESC LIMIT 5;
```

#5. Get the number of rides cancelled by drivers due to personal and car-related issues:

```
Create View Rides_cancelled_by_Drivers_P_C_Issues As
SELECT COUNT(*) FROM bookings
WHERE cancelled_Rides_by_Driver = 'Personal & Car related issue';
```

#6. Find the maximum and minimum driver ratings for Prime Sedan bookings:

```
Create View
Max_Min_Driver_Rating_for_Prime_Sedan As
SELECT MAX(Driver_Ratings) as max_rating,
MIN(Driver_Ratings) as min_rating
FROM bookings WHERE Vehicle_Type = 'Prime Sedan';
```

#7. Retrieve all rides where payment was made using UPI:

```
Create View UPI_Payment As
SELECT * FROM bookings
WHERE Payment_Method = 'UPI';
```

#8. Find the average customer rating per vehicle type:

```
Create View Avg_customer_rating_per_vehicle As
SELECT Vehicle_Type, AVG(Customer_Rating) as avg_customer_rating
FROM bookings
GROUP BY Vehicle_Type;
```

#9. Calculate the total booking value of rides completed successfully:

```
Create View Total_successful_ride_value As
SELECT SUM(Booking_Value) as total_successful_ride_value
FROM bookings
WHERE Booking_Status = 'Success';
```

#10. List all incomplete rides along with the reason:

```
Create View Incomplete_rides_with_reason As  
SELECT Booking_ID, Incomplete_Rides_Reason  
FROM bookings  
WHERE Incomplete_Rides = 'Yes';
```

Retrieve All Answers

#1. Retrieve all successful bookings:

```
Select * From Successful_Bookings;
```

#2. Find the average ride distance for each vehicle type:

```
Select * from ride_distance_for_vehicle;
```

#3. Get the total number of cancelled rides by customers:

```
Select * from Cancelled_rides_by_customers;
```

#4. List the top 5 customers who booked the highest number of rides:

```
Select * from Top_5_customers;
```

#5. Get the number of rides cancelled by drivers due to personal and car-related issues:

```
Select * from Rides_cancelled_by_drivers_P_C_issues;
```

#6. Find the maximum and minimum driver ratings for Prime Sedan bookings:

```
Select * from Min_max_driver_ratings_for_Prime_Sedan;
```

#7. Retrieve all rides where payment was made using UPI:

```
Select * from UPI_Payment;
```

#8. Find the average customer rating per vehicle type:

```
Select * from Avg_customer_rating_per_vehicle;
```

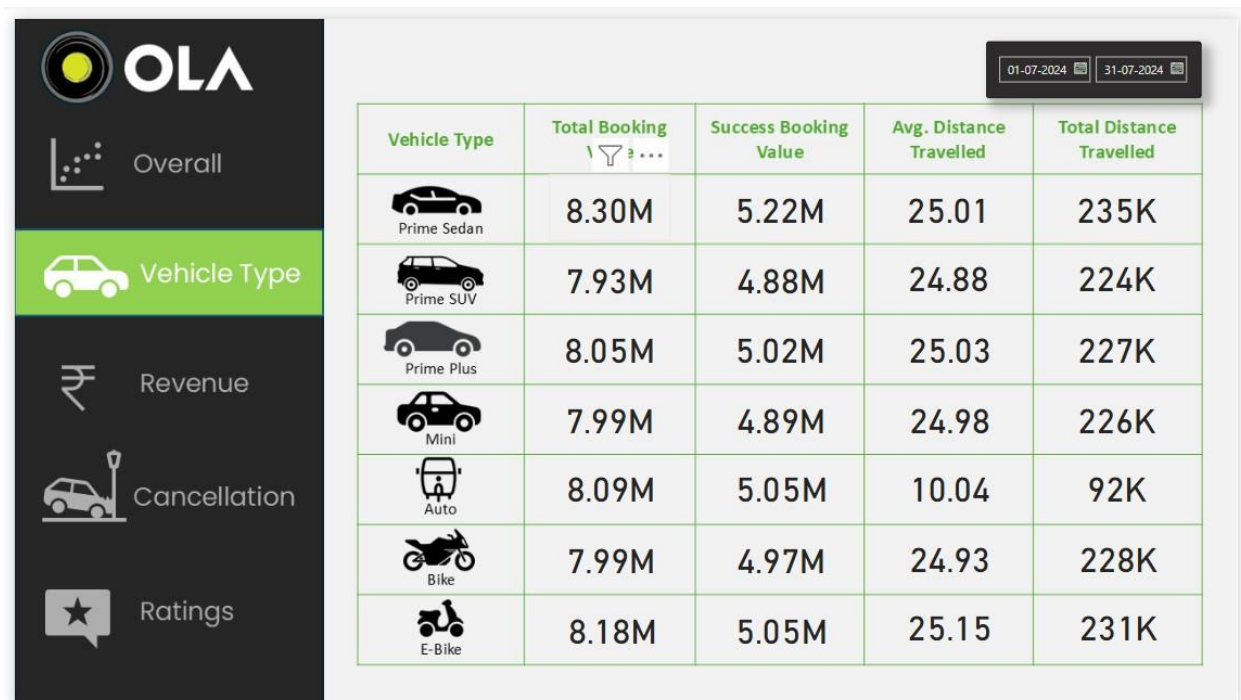
#9. Calculate the total booking value of rides completed successfully:

```
Select * from total_successful_ride_value;
```

#10. List all incomplete rides along with the reason:

Select * from Incomplete_rides_with_reason;

Dashboard Images:



The dashboard provides a detailed breakdown of performance by vehicle type. It includes a sidebar with navigation options: Overall, Vehicle Type, Revenue, Cancellation, and Ratings. The main content area features a date range selector (01-07-2024 to 31-07-2024) and a table with columns for Vehicle Type, Total Booking, Success Booking Value, Avg. Distance Travelled, and Total Distance Travelled.

Vehicle Type	Total Booking	Success Booking Value	Avg. Distance Travelled	Total Distance Travelled
Prime Sedan	8.30M	5.22M	25.01	235K
Prime SUV	7.93M	4.88M	24.88	224K
Prime Plus	8.05M	5.02M	25.03	227K
Mini	7.99M	4.89M	24.98	226K
Auto	8.09M	5.05M	10.04	92K
Bike	7.99M	4.97M	24.93	228K
E-Bike	8.18M	5.05M	25.15	231K

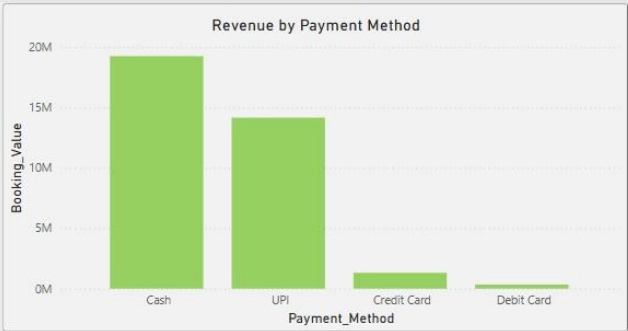
Overall

Vehicle Type

Revenue

Cancellation

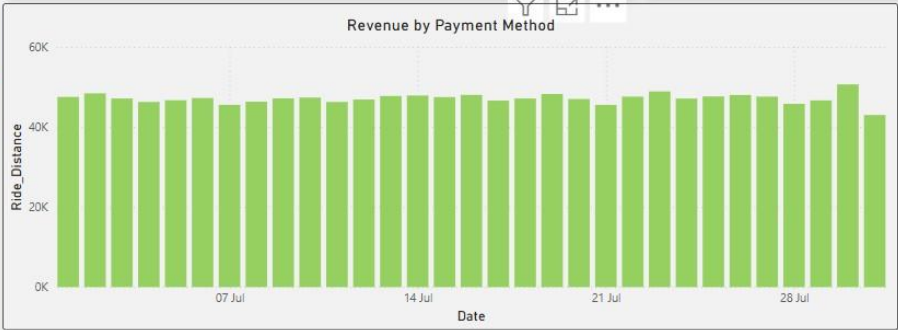
Ratings



Date: 01-07-2024 to 31-07-2024

Top 5 Customers

Customer_ID	Sum of Booking_Value
CID308763	6281
CID353074	6110
CID734557	6177
CID785112	8025
CID836942	6019
Total	32612



Overall

Vehicle Type

Revenue

Cancellation

Ratings

Date: 7/1/2024 to 7/31/2024

Total Bookings	103024
Successed Bookings	63967
Cancelled Bookings	28933
Cancellation Rate	28.18%



