DATA ANALYST PROJECT

Excel + SQL + Power BI

GITHUB Repository:
https://github.com/AHK-999/Uber-Data-Analyst-Project-SQL-Excel-Power-BI

Power BI Dashboard:
https://app.powerbi.com/view?r=eyJrIjoiOGUyNjRhYTUtMzUwNS00N2I3LTk0ODUtYWQwNjI1ZmU5NzhlIiwidCI6ImUxNGU3M2ViLTUyNTEtNDM4OC04ZDY3LThmOWYyZTJkNWE0NiIsImMiOjEwfQ%3D%3D

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

SQL Answers Queries:

```
DROP TABLE IF EXISTS uber_table;

CREATE TABLE uber_table (
        Date DATE,
        Time TIME,
        Booking_ID VARCHAR(50),
        Booking_Status VARCHAR(50),
        Customer_ID VARCHAR(50),
        Vehicle_Type VARCHAR(50),
        Pickup_Location VARCHAR(50),
        Drop_Location VARCHAR(50),
        V_TAT INT,
        C_TAT INT,
        Canceled_Rides_by_Customer VARCHAR(150),
        Canceled_Rides_by_Driver VARCHAR(150),
        Incomplete_Rides VARCHAR(50),
        Incomplete_Rides_Reason VARCHAR(150),
        Booking_Value INT,
        Payment_Method VARCHAR(50),
        Ride_Distance INT,
        Driver_Ratings FLOAT,
        Customer_Rating FLOAT
);

SELECT * FROM uber_table LIMIT 10;
```

#1) Retrieve all successfull bookings

```
CREATE VIEW Successfull_Booking AS
SELECT * FROM uber_table
WHERE Booking_Status = 'Success';

--1) Retrieve all successfull bookings
SELECT * FROM Successfull_Booking;
```

#2) Find average ride distance for each vehicle type

```
CREATE VIEW avg_ride_distance_for_each_vehicle AS
SELECT Vehicle_Type, ROUND(AVG(Ride_Distance),2) AS avg_ride_distance
FROM uber_table
GROUP BY Vehicle_Type
ORDER BY avg_ride_distance DESC;

#2) Find average ride distance for each vehicle type
SELECT * FROM avg_ride_distance_for_each_vehicle;
```

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

```
CREATE VIEW Number_Of_Cancelled_Rides AS
SELECT COUNT(Booking_ID) as total_no_cancelled_rides
FROM uber_table
WHERE Booking_Status = 'Canceled by Customer';
```

--3) Get the total number of cancelled rides by customers.
SELECT * FROM Number_Of_Cancelled_Rides ;

#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 ride_bookings
FROM uber_table
GROUP BY Customer_ID
ORDER BY ride_bookings DESC
LIMIT 5;
```

--4) List the top 5 customers who booked the highest number of rides
SELECT * FROM Top_5_Customers;

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

```
CREATE VIEW cancelled_rides_by_drivers_P_C_issues AS
SELECT COUNT(Booking_ID) AS cancelled_rides_drivers FROM uber_table
WHERE Canceled_Rides_by_Driver = 'Personal & Car related issue';
```

-- 5) Get the number of rides canceled by drivers due to personal and car-related issues:
SELECT * FROM cancelled_rides_by_drivers_P_C_issues;

#6) Find the maximum and minimum driver ratings for prime sedan bookings

```
CREATE VIEW Max_Min_Driver_Ratings_For_Prime_Sedan AS
SELECT Vehicle_Type,MAX(Driver_Ratings) AS maximum_rating,MIN(Driver_Ratings) AS minimum_rating
FROM uber_table
WHERE Vehicle_Type = 'Prime Sedan'
GROUP BY Vehicle_Type;
```

-- 6) Find the maximum and minimum driver ratings for prime sedan bookings
SELECT * FROM Max_Min_Driver_Ratings_For_Prime_Sedan;

#7) Retrieve all rides where payment was made using UPI

```
CREATE VIEW UPI_Payments AS
SELECT * FROM uber_table
WHERE Payment_Method= 'UPI'
```

-- 7) Retrieve all rides where payment was made using UPI
SELECT * FROM UPI_payments;

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

```
CREATE VIEW Avg_Customer_Rating_Per_Vehicle_Type AS
```

```
SELECT Vehicle_Type, ROUND(AVG(Customer_Rating)::NUMERIC,2) AS avg_customer_rating
FROM uber_table
GROUP BY Vehicle_Type;

--8) Find the average customer rating per vehicle type:
SELECT * FROM Avg_Customer_Rating_Per_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_booking_value
FROM uber_table
WHERE Booking_Status = 'Success';

--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

```
CREATE VIEW Incomplete_rides_With_reasons AS
SELECT Booking_ID,Incomplete_Rides,Incomplete_Rides_Reason
FROM uber_table
WHERE Incomplete_Rides = 'Yes';

--10) List all incomplete rides along with the reason
SELECT * FROM Incomplete_rides_With_reasons;
```

Power BI Dashboard Preview:

Segregation of the views:

1. Overall
- Ride Volume Over Time
- Booking Status Breakdown

2. Vehicle Type
- Top 5 Vehicle Types by Ride Distance

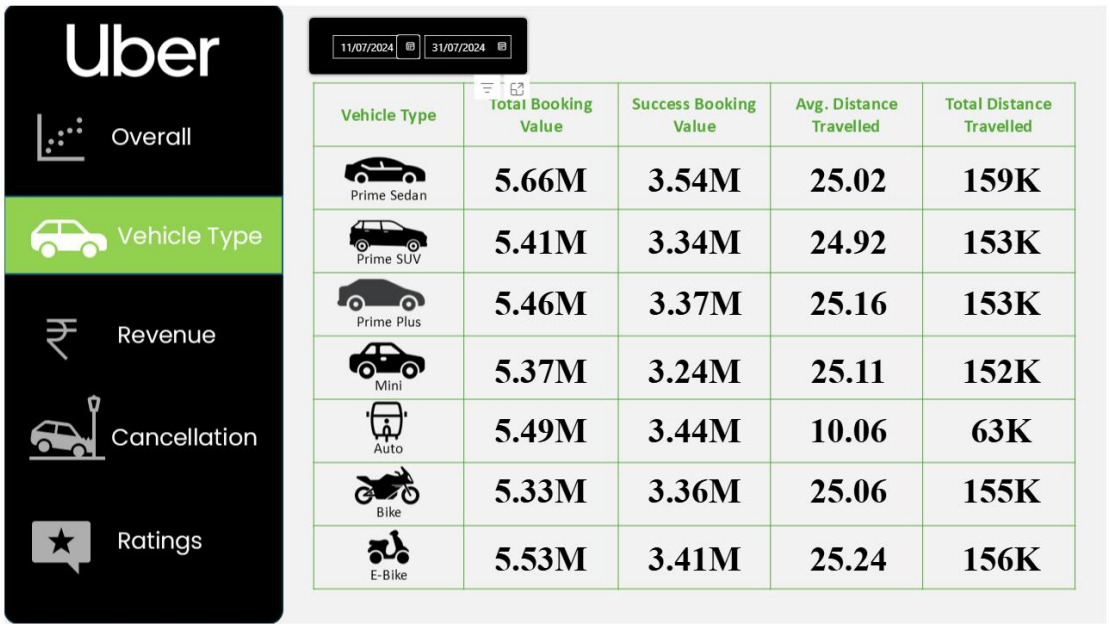
3. Revenue
- Revenue by Payment Method
- Top 5 Customers by Total Booking Value
- Ride Distance Distribution Per Day

4. Cancellation
- Cancelled Rides Reasons (Customer)
- cancelled Rides Reasons(Drivers)

5. Ratings

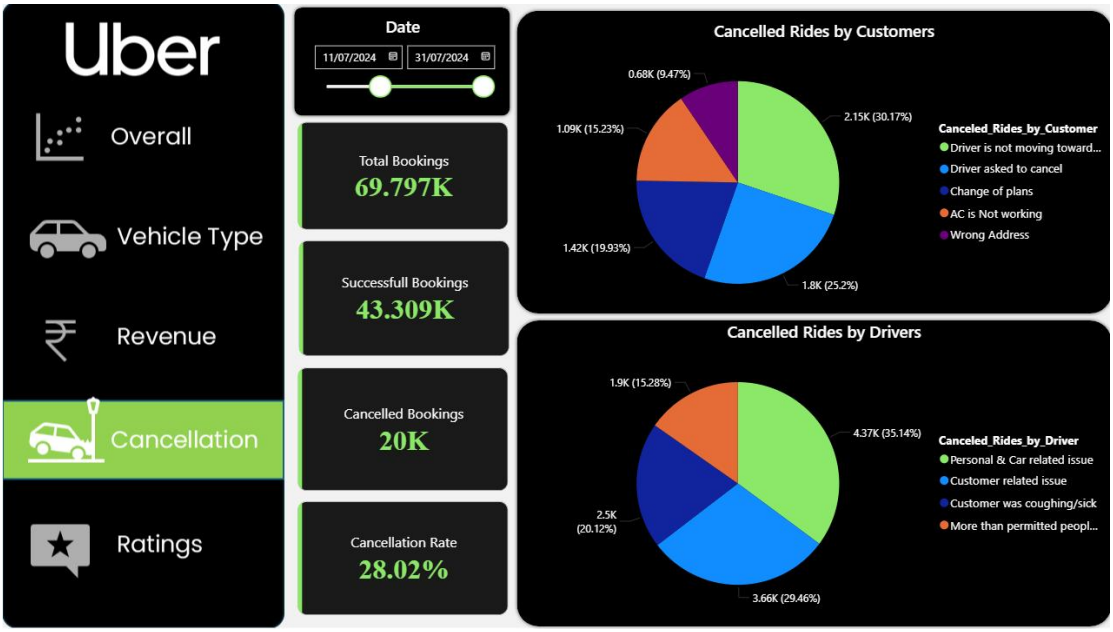
- Driver Ratings
- Customer Ratings

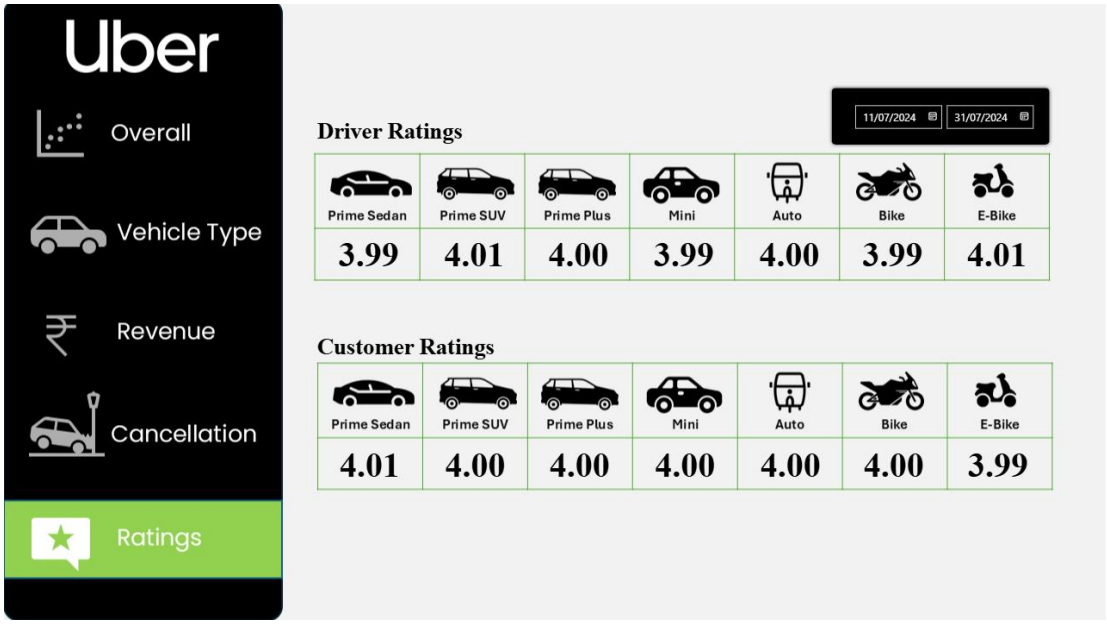
Power BI Dashboard Preview:



Vehicle Type	Total Booking Value	Success Booking Value	Avg. Distance Travelled	Total Distance Travelled
Prime Sedan	5.66M	3.54M	25.02	159K
Prime SUV	5.41M	3.34M	24.92	153K
Prime Plus	5.46M	3.37M	25.16	153K
Mini	5.37M	3.24M	25.11	152K
Auto	5.49M	3.44M	10.06	63K
Bike	5.33M	3.36M	25.06	155K
E-Bike	5.53M	3.41M	25.24	156K


Uber
Overall
Vehicle Type
Revenue
Cancellation
Ratings
Date
11/07/2024
31/07/2024
Top 5 Customers
Customer_ID
Booking Value
CID785112 8025
CID308763 6281
CID353074 6110
CID389515 5970
CID497169 5949
Total 32335
Revenue by Payment Method
Booking Value
10M
5M
0M
Cash
UPI
Credit Card
Debit Card
Payment Method
Revenue by Payment Method
Ride Distance
60K
40K
20K
0K
14 Jul
21 Jul
28 Jul
Date


Uber
Overall
Vehicle Type
Revenue
Cancellation
Ratings
Date
11/07/2024
31/07/2024
Total Bookings
69.797K
Successfull Bookings
43.309K
Cancelled Bookings
20K
Cancellation Rate
28.02%
Cancelled Rides by Customers
0.68K (9.47%)
2.15K (30.17%)
1.09K (15.23%)
1.42K (19.93%)
1.8K (25.2%)
Canceled_Rides_by_Customer
Driver is not moving toward...
Driver asked to cancel
Change of plans
AC is Not working
Wrong Address
Cancelled Rides by Drivers
1.9K (15.28%)
4.37K (35.14%)
2.5K (20.12%)
3.66K (29.46%)
Canceled_Rides_by_Driver
Personal & Car related issue
Customer related issue
Customer was coughing/sick
More than permitted peopl...


Uber
Overall
Vehicle Type
Revenue
Cancellation
Ratings
11/07/2024
31/07/2024
Driver Ratings
Prime Sedan 3.99
Prime SUV 4.01
Prime Plus 4.00
Mini 3.99
Auto 4.00
Bike 3.99
E-Bike 4.01
Customer Ratings
Prime Sedan 4.01
Prime SUV 4.00
Prime Plus 4.00
Mini 4.00
Auto 4.00
Bike 4.00
E-Bike 3.99