



Project Report

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Data Columns :

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

SQL:

Create Database ola;

use ola;

select * from bookings;

1. Retrieve all successful bookings:

CREATE VIEW Successful_Bookings AS

select * from bookings where Booking_Status = "Success";

select * from Successful_Bookings;

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

Create View average_ride_distance_for_each_vehicle As

select Vehicle_Type , AVG(Ride_Distance)

AS average_dist from bookings

Group By Vehicle_Type;

select * FROM average_ride_distance_for_each_vehicle;

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

create view numbe_of_cancelled_rides_by_customers AS

select count(*) from bookings

where Booking_Status = "Canceled by Customer";

select * from numbe_of_cancelled_rides_by_customers;

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

select * from bookings;

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 * from bookings;

create view cancelled_by_drivers_P_C_issues AS

select count(Canceled_Rides_by_Driver)

as canceled_by_driver

from bookings

where Canceled_Rides_by_Driver = "Personal & Car related issue";

select * from cancelled_by_drivers_P_C_issues;

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

```
select * from bookings;
create view max_min_driver_ratings AS
select max(Driver_Ratings) as max_ratings,
min(Driver_Ratings) as min_ratings
from bookings
where Vehicle_Type = "Prime Sedan";
```

```
select * from max_min_driver_ratings;
```

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

```
create view rides_UPI_payments AS
select * from bookings
where Payment_Method = "UPI";
```

```
select * from rides_UPI_payments;
```

8. Find the average customer rating per vehicle type:

```
create view avg_customer_ratings AS
select Vehicle_Type, AVG(Customer_Rating)
as customer_ratings
from bookings
group by Vehicle_Type
order by customer_ratings desc;
```

```
select * from avg_customer_ratings;
```

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

```
select * from bookings;
create view total_booking_value_Success_Rides AS
select sum(Booking_Value)
as Total_Booking_Value
from bookings
where Booking_Status = "Success";
```

```
select * from total_booking_value_Success_Rides;
```

10. List all incomplete rides along with the reason:

create view incomplete_rides_with_Reasons AS

select Booking_ID, Vehicle_Type, Incomplete_Rides, Incomplete_Rides_Reason

from bookings

where Incomplete_Rides = "Yes";

select * from incomplete_rides_with_Reasons;

Power BI:

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 Ratings 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.
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Executive Summary

OLA handled **103,024 bookings**, with a **62.09% success rate** and a **28.08% cancellation rate**. Revenue is primarily from Cash and UPI. Prime Sedan, Prime SUV, and E-Bike show strong performance. Both driver and customer ratings are consistently high, around 4.0.

Observations

- **Total Bookings:** 103,024
- **Succeeded Bookings:** 63,967 (62.09%)
- **Top Booking Statuses:** Success (62.09%), Driver Not Found (17.89%), Canceled by Customer (10.19%), Canceled by Driver (9.83%).
- **Vehicle Performance:** Prime Sedan, Auto, and Prime SUV have the highest total booking values. Auto has a significantly shorter average trip distance (10.04 units) compared to others (around 25 units).
- **Revenue:** Dominated by Cash and UPI payments. The top 5 customers contributed \$32,612 in booking value.
- **Cancellations:**
 - **Customer Reasons:** "Driver not moving towards customer" (30.24%) is the leading cause.
 - **Driver Reasons:** "Customer related issue" (35.49%) is the leading cause.
- **Ratings:** Both driver and customer ratings across all vehicle types are consistently high, averaging around 4.0.

Recommendations

1. **Reduce Cancellations:** Focus on addressing "Driver not moving towards customer" (for customer cancellations) and "Customer related issue" (for driver cancellations). Investigate dispatch efficiency, driver incentives, and clearer communication.
2. **Address "Driver Not Found":** The 17.89% of bookings lost due to "Driver Not Found" indicates a supply-demand imbalance. Analysis of peak hours and driver availability is recommended.
3. **Optimize Auto Service:** Leverage Auto's shorter average trip distance for targeted services or pricing models.
4. **Maintain High Ratings:** Continue to monitor and uphold the strong 4.0 average ratings.
5. **Leverage Payment Trends:** Optimize operations around the strong preference for Cash and UPI payments.