Ola Data Analytics Project Report

# 1. Project Title

Ola Data Analytics Project

# 2. Objective

To analyze large-scale transportation data from a ride-hailing service to uncover insights into booking trends, cancellation rates, customer behavior, and revenue generation using SQL, Excel, and Power BI.

# 3. Dataset Description

The dataset consists of over 100,000 rows and 19 columns. Key attributes include booking status, customer IDs, vehicle types, payment methods, and timestamps. A smaller version (10,000 rows) is available for testing and prototyping.

# 4. Tools & Technologies Used

- Microsoft Excel (Data Cleaning)  
- SQL (Data Querying & Analysis)  
- Power BI (Data Visualization)

# 5. Data Cleaning Process

Initial data preprocessing was performed in Excel. Duplicates were removed, and extra whitespace was trimmed. This ensured accuracy and consistency before performing analysis.

# 6. SQL Analysis

Several SQL queries were written to explore the dataset. For example:  
  
- Total bookings per month  
- Cancellation rate by vehicle type  
- Revenue trends by payment method  
- Most active customers by number of rides  
  
These insights were used to shape the dashboard visuals.

# 7. Power BI Dashboard

The final dashboard included:  
- Ride volume over time  
- Booking status distribution  
- Revenue by payment method  
- Top customer statistics  
  
Power BI features such as slicers, filters, and dynamic visuals were used to enhance interactivity and clarity.

# 8. Key Insights

- Peak booking hours were during morning and evening commute times.  
- Sedan vehicles had the highest cancellation rates.  
- Credit card was the most preferred payment method.  
- A small segment of users contributed to a large share of bookings.

# 9. Conclusion

The project demonstrates a full-cycle data analytics workflow, from data cleaning to querying and dashboarding. It provides actionable insights that could be valuable for improving service quality and customer satisfaction in ride-hailing platforms.