



Data Analyst Project Overview

1.Data Collection & Cleaning :

Raw ride data imported and cleaned using **Google Sheets** and **Power BI Power Query**, including handling missing values, inconsistent formats, and column standardization.

2.SQL-Based Data Modeling :

Structured the dataset in **MySQL** using advanced **SQL queries** — joins, aggregations, and filters — to prepare clean, queryable tables for analysis.

3.Interactive Dashboard in Power BI :

Built a dynamic **Power BI dashboard** showcasing key metrics like total rides, peak hours, city-wise distribution, and revenue trends with slicers and filters.

4.Actionable Insights & Storytelling :

Derived insights on user behavior, ride patterns, and operational efficiency. Presented findings with clear visual storytelling to support business decisions

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.

SQL-Based Business Analysis

1. **Designed and executed 10+ targeted SQL queries** to extract actionable insights from Ola ride data.
2. **Booking & Cancellation Analysis:** Retrieved successful bookings, calculated total cancelled rides (customer vs. driver), and listed incomplete rides with reasons.
3. **Customer & Driver Behavior Insights:** Identified top 5 frequent customers, analyzed driver ratings (min/max for Prime Sedan), and cancellation reasons (personal vs. car-related).
4. **Payment & Revenue Breakdown:** Filtered UPI-based payments, calculated total booking value of completed rides.
5. **Vehicle Type Performance:** Computed average ride distance and customer rating per vehicle type using GROUP BY and aggregation functions.

Link of SQL queries :https://github.com/adityasahu2027/Ola_data_analysis_dashboard

Power BI Dashboard Highlights

- **Ride Volume Trends:** Visualized ride counts over time to identify peak usage periods.
- **Booking Status Analysis:** Breakdown of completed, cancelled, and pending bookings.
- **Vehicle Performance:** Ranked top 5 vehicle types by total ride distance.
- **Customer Experience Metrics:** Compared average ratings across vehicle types.
- **Cancellation Insights:** Categorized reasons for ride cancellations (customer vs. driver).
- **Revenue Insights:** Analyzed total earnings segmented by payment method.
- **High-Value Customers:** Identified top 5 customers by total booking value.
- **Daily Ride Patterns:** Explored ride distance distribution across days.
- **Driver Rating Trends:** Visualized rating spread to assess service consistency.
- **Rating Comparison:** Compared customer vs. driver ratings to evaluate satisfaction gaps.

Project Insights

☐ Ride Volume Trends

- ☐ "Peak ride activity was observed during [25 July 2024], indicating high demand during [e.g., weekends or evening hours]. This trend can inform driver allocation and surge pricing strategies."

☐ Booking Status Analysis

- ☐ "Out of total bookings, 62.15% were completed, while 27.98% were cancelled — with 9.87% pending. The cancellation rate suggests potential areas for operational improvement or customer engagement."

☐ Vehicle Performance

- ☐ "Top-performing vehicle type was Bike contributing 44020 km in total ride distance. This suggests a preference for [e.g., comfort or efficiency], which can guide fleet expansion."

☐ Customer Experience Metrics

- ☐ "Average customer ratings varied across vehicle types, with mini car scoring highest at 4.02 out of 5, indicating superior service quality or comfort."

Project Insights

❏ ✖ Cancellation Insights

❏ "Among cancelled rides, 10.16% were customer-initiated, while 17.81% were driver-initiated.

This split highlights the need for better driver reliability or customer expectation management."

💰 Revenue Insights

"Total earnings amounted to 3.547M, with Cash accounting for 55.23% of transactions. This insight can guide payment integration and promotional strategies."

📅 Daily Ride Patterns

"Ride distances peaked on Saturday, with an average of 15.14km per ride. This pattern suggests higher travel demand on specific days, useful for driver scheduling."