Cab Booking System Analysis Report

1. Introduction

This report provides a comprehensive analysis of the Cab Booking System using SQL-based insights. The project involves a relational database with tables for customers, drivers, cabs, bookings, trip details, and feedback. The purpose of this analysis is to extract actionable business intelligence such as customer behavior, driver performance, trip trends, and revenue patterns.

2. Database Structure

The database consists of the following key tables:
- Customers: Contains customer information.
- Drivers: Stores details of cab drivers.
- Cabs: Associates drivers with vehicle types (e.g., Sedan, SUV).
- Bookings: Records each cab booking made by customers.
- TripDetails: Logs trip start/end time, distance, and fare.
- Feedback: Captures customer feedback including rating and comments.

3. Key Insights and SQL Analysis

3.1 Customer and Booking Analysis

Query identified customers with successfully completed trips. Insight: 4 customers completed at least one trip.

3.2 Customers with >30% Cancellations

Insight: Highlights customers with over 30% cancellations, identifying risky or unreliable users.

3.3 Busiest Day of the Week

Insight: Sunday (day 7) had the highest number of bookings, useful for resource planning.

3.4 Drivers with Low Ratings (<3)

Insight: Filters drivers with an average rating below 3 in the last 3 months — flagging poor performance.

3.5 Top 2 Drivers by Total Distance

Insight: Identifies the most active drivers by total kilometers driven, useful for recognition and rewards.

3.6 High Cancellation Drivers (>25%)

Insight: Drivers with over 25% cancellations may indicate reliability issues and need attention.

3.7 Monthly Revenue (Last 6 Months)

Insight: Revenue showed a consistent increase over the 6 months leading to March 15, 2025, indicating strong business growth.

3.8 Wait Time Per Pickup Location

Insight: Calculates average wait time per pickup location to optimize driver dispatch and reduce delays.

3.9 Sedan vs SUV Revenue Comparison

Insight: Evaluates total revenue and distance covered by each vehicle type, helping fleet optimization.

3.10 Revenue by Trip Type (Short vs Long)

Insight: Long trips yield higher revenue per ride, but short trips occur more frequently, revealing a volume vs. value tradeoff.

4. Conclusion

The Cab Booking System SQL analysis delivers actionable insights for improving customer service, driver management, fleet utilization, and revenue optimization. Key metrics such as cancellation rates, ratings, revenue patterns, and trip durations can be directly used for strategic decision-making.