Zomato Food Delivery Analysis Project (MySQL Workbench)

Project Summary This project is a comprehensive data analysis case study using a mock Zomato food delivery database. It explores how data-driven decisions can improve business performance in the food delivery ecosystem. By leveraging MySQL, the project answers 20+ critical business questions that span across customer analytics, restaurant operations, rider performance, and sales trends.

Objectives Gain deep insights into customer behavior and preferences

Identify high-performing restaurants and customer churn

Analyze rider delivery performance and rating distribution

Track revenue generation, seasonal trends, and growth over time

Tools & Technology Component

| Component | Description |
| --- | --- |
| Database | MySQL (InnoDB, SQL Mode: STRICT\_ALL\_TABLES) |
| Interface | MySQL Workbench |
| Data Handling | CTEs, Subqueries, Window Functions, Joins |
| Outputs formate | Tabular Queries, Ranked Outputs, Aggregates |

Key Topics & Business Use Cases

Customer Analytics

* Top 5 dishes ordered by a customer in the last 1 year
* High-value customers (spending > ₹100,000)
* Customer segmentation into Gold and Silver
* Customer churn detection (2023 vs 2024)

Restaurant Insights

* Monthly growth ratios using LAG() function
* Popular dishes by city
* Peak day of the week for each restaurant
* Restaurant revenue ranking within each city

Rider & Delivery Analysis

* Rider efficiency based on average delivery time
* Rider earnings per month (8% commission on total orders)
* Rider star rating logic based on delivery time thresholds
  + < 15 min → ⭐⭐⭐⭐⭐
  + 15–20 min → ⭐⭐⭐⭐
  + 20 min → ⭐⭐⭐

Sales & Order Trends

* Sales trend by month across the years
* Most frequent order time slots (2-hour intervals)
* Seasonal demand spikes for specific dishes (Spring, Summer, Winter)
* Orders without delivery (cancellation tracking)

Sample SQL Concepts Used WITH (CTEs)

* LAG(), DENSE\_RANK(), RANK()
* CASE, GROUP BY, HAVING
* DATE\_FORMAT, DAYNAME, HOUR, MONTH
* JOIN (INNER, LEFT), TIMEDIFF, TIME\_TO\_SEC

Outcome

This project demonstrates strong capabilities in SQL for real-world data analysis. It mimics a real Zomato-like ecosystem to extract actionable insights and is ideal to showcase in data analytics, business intelligence, or backend roles.