Ola Ride Data Analysis Dashboard Power BI Project Documentation

Project Overview

This project analyzes Ola ride booking data to identify trends in ride demand, revenue patterns, customer behavior, and city-wise performance. The objective is to transform raw ride data into meaningful business insights using a structured analytics workflow.

Tools & Technologies Used

Python for data cleaning, SQL for data analysis, Power BI Desktop for visualization, Streamlit for project presentation, and GitHub for version control.

Dataset Description

The dataset consists of ride-level transactional records including booking date and time, city, ride status, fare amount, distance traveled, and payment mode.

Data Cleaning & Preprocessing

Data cleaning was performed using Python to remove duplicates, handle missing values, standardize categorical fields, correct data formats, remove invalid records, and create time-based features for analysis.

Data Analysis Using SQL

SQL was used to analyze the cleaned dataset to derive insights such as city-wise performance, revenue trends, peak booking hours, cancellation behavior, and payment method usage.

Power BI Visualization

The cleaned and analyzed data was imported into Power BI Desktop to create interactive dashboards using KPIs, filters, and slicers for effective insight generation.

Key Insights

Major cities contribute the highest revenue, ride demand peaks during evening hours, digital payment methods dominate transactions, and cancellation rates increase during peak traffic periods.

Conclusion

This project demonstrates practical skills in Python-based data cleaning, SQL-driven analysis, and Power BI dashboard creation, effectively presented through a Streamlit application.