Zomato Restaurant Data Analysis Project for Data Analyst

Problem Statement:

In the competitive landscape of the food delivery and restaurant discovery industry, understanding customer preferences and enhancing service quality are crucial for business success. Zomato, a prominent player in this market, offers extensive data that can be analyzed to gain valuable insights into user behavior, restaurant ratings, and dining trends. The project aims to address the challenge of analyzing Zomato's restaurant data to uncover patterns, correlations, and trends that can aid restaurant owners and marketers in making informed decisions. Specifically, the project seeks to achieve the following objectives:

1. **Data Aggregation and Visualization:** Consolidate various data sources into a unified DataFrame and visualize key metrics to identify trends and patterns in restaurant ratings, online order options, and customer reviews.
2. **Relationship Analysis:** Examine the relationship between online ordering options and restaurant ratings to understand how convenience features impact customer satisfaction and ratings.
3. **Text Analysis:** Perform unigram, bigram, and trigram analysis on customer reviews to extract meaningful insights and sentiments that reflect customer preferences and experiences.
4. **Geospatial Analysis:** Extract geographical coordinates from the data and create heat maps to visualize the concentration of restaurants and their ratings across different regions, providing a geographical perspective on dining trends.
5. **Task Automation:** Develop scripts to automate repetitive tasks in the data analysis process, enhancing efficiency and ensuring accuracy in data processing and visualization.

By addressing these objectives, the project aims to equip restaurant owners and marketers with detailed insights into customer behavior and dining trends, enabling them to enhance their services and target their audience more effectively. This comprehensive analysis seeks to improve the overall customer experience and drive business growth through data-driven decision-making.