**Zomato Data Analysis**

This project provides an in-depth analysis of Zomato's restaurant dataset to uncover insights into customer preferences, restaurant performance, and regional trends. Using Python and essential data analysis libraries, this project aims to extract actionable information for strategic decision-making in the food and hospitality industry.

**Project Overview**

This analysis focuses on:

* Understanding restaurant popularity by cuisine, location, and rating.
* Identifying trends in pricing across different regions.
* Analyzing customer ratings and reviews to gauge overall satisfaction.
* Exploring the relationship between various factors such as cost, rating, and restaurant type.

**Key Features**

1. **Data Cleaning and Preparation**: Removing duplicates, handling missing values, and preparing data for analysis.
2. **Exploratory Data Analysis (EDA)**:
   * Distribution analysis for variables such as rating, cost, and cuisine.
   * Insights into customer preferences based on location and cuisine.
3. **Data Visualization**:
   * Visual representations of key insights (e.g., most popular cuisines, average costs per region).
   * Use of libraries like Matplotlib and Seaborn to enhance readability and insight extraction.
4. **Statistical Analysis**: Using statistical techniques to understand correlations and trends.

**Technologies Used**

* **Python**: Core programming language.
* **Pandas & NumPy**: Data manipulation and cleaning.
* **Matplotlib & Seaborn**: Data visualization.
* **Jupyter Notebook**: For iterative analysis and visual presentation.

**Results and Insights**

Key findings include:

* Identification of the top cuisines and restaurants in different regions.
* Analysis of average pricing trends across locations.
* Insights into customer rating patterns.

**Getting Started**

1. Clone the repository:

bash

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git clone https://github.com/yourusername/zomato-data-analysis.git

1. Install the required packages:

bash

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pip install -r requirements.txt

1. Run the Jupyter Notebook to explore the analysis.

**Future Enhancements**

* Integrating machine learning models to predict customer satisfaction.
* Expanding the analysis to incorporate more datasets for richer insights.