FoodHub - Data Analysis

Project: Python Foundations - FoodHub

Context

The number of restaurants in New York is increasing day by day. Many students and busy professionals rely on these restaurants due to their hectic lifestyles. Online food delivery services are a great option, providing access to food from their favorite places.

FoodHub, a food aggregator app, connects users with multiple restaurants through a single platform. It manages customer orders, assigns delivery personnel, and collects ratings—all while earning a margin on each order.

Objective

You've been hired as a Data Scientist at FoodHub. Your task: analyze customer order data to answer key business questions. The goal is to uncover trends that can help improve customer satisfaction and business performance.

Dataset Description

The dataset records various attributes of food orders, including customer ratings, preparation and delivery times, and cuisine types.

Key Findings

Cuisine Performance

- Strong correlation between cuisine type and customer ratings
- Top-rated cuisines: **Indian, Mexican, Japanese, Italian, Chinese**

Delivery Insights

- Orders with delivery times over 60 minutes still maintained a high average rating of **4.21**
- **Weekends** saw faster delivery times compared to weeknights

Revenue

- Average revenue per order: **$3.25**

Recommendations

1. **Improve Search:** Make it easy for users to filter by price and cuisine type.
2. **Cuisine of the Week:** Feature top cuisines weekly with discounts to drive engagement.
3. **Targeted Promotions:** Run special offers for highly rated restaurants like:
   - The Meatball Shop *(Italian)*
   - Blue Ribbon Fried Chicken *(American)*
   - RedFarm Broadway *(Chinese)*
   - Shake Shack *(American)*
   - Blue Ribbon Sushi *(Japanese)*

🏆 Top Restaurants

Overall:

Restaurant	Cuisine	Avg Rating
Sushi of Gari Tribeca	Japanese	4.6
Blue Ribbon Sushi Bar & Grill	Japanese	4.6
Five Guys Burgers and Fries	American	4.6
The Meatball Shop	Italian	4.5
Han Dynasty	Chinese	4.4

Top by Cuisine:

Cuisine	Top Restaurant	Avg Rating
American	Five Guys	4.34
Chinese	Han Dynasty	4.28
Indian	Tamarind TriBeCa	4.40
Italian	The Meatball Shop	4.25
Japanese	Sushi of Gari Tribeca	4.37
Mediterranean	Jack's Wife Freda	4.32
Mexican	Cafe Habana	4.23
Middle Eastern	Cafe Mogador	4.15
Southern	Hill Country Fried Chicken	4.36

Tools Used:

- Python
- Pandas, NumPy
- Seaborn, Matplotlib
- Jupyter Notebook

Project:

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