REQUIREMENTS DOC

RESTAURANT CUSTOMER SATISFACTION

Objective

- Understand Customer Preferences and Behavior:
- Identify Popular Dishes and Services: Determine which menu items or services are most liked by customers.
- Analyze Dining Patterns: Understand peak dining times, frequency of visits, and common customer demographics.

Problems Identified

Limited Menu Options: Lack of variety or options for specific dietary needs (e.g., vegetarian, gluten-free).

Slow Service: Long wait times for seating, order taking, or food delivery.

Inadequate Loyalty Programs: Ineffective loyalty programs that do not incentivize repeat visits.

Target Audience

- Primary – Restaurant Management and Owners
- Secondary – Customer Experience Teams

Use Cases

User story;

Menu Optimization: I want to be able to identify popular and unpopular dishes to refine the menu. For instance, remove items that consistently receive low ratings and introduce new dishes that align with customer preferences.

Acceptance criteria;

Identify Popular Dishes**:**

Selects dishes with an average rating above 4.0 and orders in the top 20%.

Identify Unpopular Dishes:

Selects dishes with an average rating below 3.0 and orders in the bottom 20%.

Determine Overall Customer Preferences:

Provides insights into the most liked ingredients or flavors based on positive reviews

User story;

Peak Time Management: Able to analyze dining patterns to identify peak times and adjust staffing levels accordingly to ensure efficient service and reduce wait times.

Acceptance criteria;

Identify Peak Times:

Selects the busiest time intervals by counting the number of customer visits per hour.

Identify Peak Days:

Selects the busiest days of the week by counting the number of customer visits per day

Determine Average Customer Volume:

Calculates the average number of customer visits per hour over a specified period

Analyze Wait Times During Peak Hours:

Calculates the average wait time for customers during peak hours.

Success Criteria

Restaurant Management and Owners can;

- Improve in customer satisfaction metrics following the implementation of recommendations derived from the analysis.
- Achieve operational improvements, such as reduced wait times or optimized staffing, based on insights from the dataset.
- Identify the main factors driving customer satisfaction and dissatisfaction, such as specific menu items, service quality, or ambiance.
- Identify and calculate key metrics such as average ratings, frequency of visits, and distribution of ratings across different criteria (e.g., food, service, and ambiance).
- Produce comprehensive reports that summarize the analysis, insights, recommendations, and business impact.

Information Needed

Restaurant Management and Owners needs;

- Visit details
- Customer demographics

- Menu and ordering data
- Operational data

Data Needed

- Tools and storage
- Performance metrics
- Historical data
- Menu and ordering data

Data Quality Checks

We need to add measures in place to confirm the dataset contains the data required without any issues – here are some of the data quality checks we need to conduct:

- Row count check
- Column count check
- Data type check
- Duplicate check