

SWIFT BITES

A Food Delivery System

Definition: Our innovative food delivery platform revolutionizes the customer experience by providing a seamless, hassle-free ordering process from local food establishments. Through our user-friendly website, patrons can effortlessly access diverse menus and place orders with just a few clicks. Our dedicated team collaborates with restaurants to ensure swift order preparation and dispatch. Offering multiple payment options, including credit/debit cards and cash on delivery, our service not only enhances customer satisfaction but also fosters the growth of local restaurants.

Capturing data for business:

1. Restaurants data
 - a. Restaurant Id
 - b. Menu
 - c. Address
 - i. Apartment/building
 - ii. Street
 - iii. City
 - iv. State
 - d. Zip code
 - e. Contact Number
 - f. Contact Email
 - g. Facility
 - h. Operating Hours
2. Item Data]
 - a. Item ID
 - b. Item Name
 - c. Item Description
 - d. Cuisine Type
 - e. Price
 - f. Calories
 - g. Item Type
 - h. Ingredients
 - i. Allergy Information
 - j. Preparation Time
3. Reviews Data
 - a. Review ID
 - b. Rating
 - c. Review Category
 - d. Comment

4. Customers data

- a. Customer ID
- b. Name
- c. Email
- d. Contact Number
- e. Address
- f. Zip code
- g. Date of birth
- h. Joined Date
- i. Favorite Foods

5. Order Data

- a. Order ID
- b. Delivery Person
- c. Order Date
- d. Order Time
- e. Items
- f. Quantity
- g. Delivery Charges
- h. Distance from restaurant
- i. Estimated Delivery time
- j. Order time
- k. Prepared time
- l. Out for delivery time
- m. Delivered time
- n. Completion time
- o. Cancellation time
- p. Refund time
- q. Payment Time
- r. Flag
- s. Tip Amount

6. Employee Data

- a. Employee ID
- b. Zip code
- c. Name
- d. Address
- e. Date of birth
- f. Gender
- g. Contact Number
- h. Pay per hour
- i. Joining Date
- j. Total working hours

Business Goals

1. **Identify the most popular restaurants (by orders):** The goal is to see which restaurants get the most orders. This can help in determining which restaurants are more popular and might need more delivery personnel, and it can also be useful for marketing purposes.
2. **Find the most liked food items (by orders):** The goal is to identify the most frequently ordered food items. This can help in managing inventory and may guide restaurants in deciding which dishes to promote.
3. **Determine the busiest areas (by zip code) in terms of the number of orders:** The goal is to see which areas have the most orders. This can help in ensuring that enough delivery personnel are allocated to these areas for better and faster delivery service.
4. **Find out the average rating for each restaurant:** This can provide insights about customer satisfaction and can be used in promoting restaurants or helping restaurants with lower ratings improve their services.
5. **Find out top rated of delivery employee with their total working hours, total number of orders they delivered, average tip amount they received:** to identify employee who deserve promotion or demotion.
6. **Find the average delivery time per restaurant:** This can provide insights about the efficiency of each restaurant's delivery and can be used to promote restaurants with shorter delivery times or to help slower restaurants improve their processes.
7. **Identify the customers who order the most:** This can help in recognizing the most loyal customers and perhaps offer them special promotions or rewards.
8. **Find the distribution of order volumes throughout the day** to enable more efficient staffing and resource allocation.
9. **Identify the peak order hour for each zip code** to improve delivery service and manage resources efficiently in specific regions.
10. **Identify the most popular cuisine type in each quarter** to inform menu planning, marketing promotions, and supply chain management.
11. **Track the number of new customers joining the service each quarter (Winter, Spring, Summer, and Fall)** to analyze seasonal trends in customer acquisition and adapt marketing efforts accordingly.

12. **Identify the most preferred cuisine in a specific state** to inform restaurant partnership decisions and targeted marketing efforts.
13. **Determine the average number of orders per month for each restaurant** to understand the sales volume, predict future trends, and manage resources effectively.
14. **Identify potentially fraudulent customer** behavior to mitigate risk, prevent losses, and ensure a smooth service operation.
15. **Calculate the average processing time for each restaurant** to identify potential areas of improvement and streamline operations for enhanced customer satisfaction.
16. **Generate detailed sales reports for a specific restaurant** to understand revenue streams, evaluate product performance, and make data-driven decisions for menu planning and inventory management.
17. **Identify the top 10 most successful items in terms of sales across all restaurants** and understand which restaurants those items belong to for benchmarking and competitive analysis.
18. **Determine the number of delivery personnel available in each zip code and the corresponding number of orders in those areas** for improved delivery service management and efficiency.
19. **Find the customers' preferred payment method (Credit or Debit) for each quarter of the particular year** to improve payment systems and potentially enhance marketing strategies.
20. **Finding the preferences and behaviors of customers**, including their preferred cuisines, ordering patterns, and payment methods, we aim to develop a sophisticated recommendation engine. This system will offer personalized restaurant and dish suggestions, promotional offers, and tailor the user interface to individual tastes, enhancing overall customer engagement and satisfaction.