Taste of The World Cafe Project

Data-Driven Menu Optimization: Analyzing Sales Performance and Customer Preferences for Taste of the World Cafe"

Project Overview:

The Taste of the World Cafe is excited to launch a new menu at the start of the year. To ensure the success of this new menu, we need to conduct a comprehensive analysis to gain valuable insights into customer preferences and item performance. Our goal is to leverage SQL to identify key patterns and trends that will inform our decisions and optimize the menu offerings. The project will focus on the following areas:

Menu Item Performance:

- Objective: Determine which menu items are performing well and which are underperforming.

- Details: Analyze sales data to evaluate the popularity and profitability of each menu item. This includes examining sales volume, revenue generated, and customer feedback associated with each item.

Top Customers:

- Objective: Identify the cafe's top customers based on their purchasing behavior.

- Details: Use SQL to segment customers by their total spending, frequency of visits, and overall engagement with the cafe. This will help pinpoint the most valuable customers who contribute significantly to the cafe's revenue.

Customer Preferences:

- Objective: Understand which menu items are favored by the top customers.

- Details: Analyze the purchasing patterns of the top customers to identify their preferred menu items. This involves examining their order history and identifying any trends or preferences that may indicate which items they like best.

Approach:

- **Data Collection:** Gather and clean relevant data from the cafe’s sales and customer databases.

- **SQL Analysis:** Use SQL queries to perform detailed analyses on the dataset, focusing on sales performance, customer segmentation, and preference identification.
- **Reporting:** Generate insightful reports and visualizations to present findings and recommendations for optimizing the new menu.

This analysis will provide actionable insights to help Taste of the World Cafe make data-driven decisions, enhancing customer satisfaction and boosting overall sales performance.

Task

1. To better understand the items table find the number of rows in the table, the least and most expensive items, and the item prices within each category
    - View the menu_items table and write a query to find the number of items on the menu
    - What are the least and most expensive items on the menu?
    - How many Italian dishes are on the menu? What are the least and most expensive Italian dishes on the menu?
    - How many dishes are in each category? What is the average dish price within each category?
2. To better understand the orders table find the date range, the number of items within each order, and the orders with the highest number of items.
    - View the order_details table. What is the date range of the table?
    - How many orders were made within this date range? How many items were ordered within this date range?
    - Which orders had the most number of items?
    - How many orders had more than 12 items?

3. To combine the items and orders tables, find the least and most ordered categories, and dive into the details of the highest spend orders.
    - Combine the menu_items and order_details tables into a single table (hint: when joining tables you always start with the transactional/master table then the details/lookup tables). When you have a transactional table you would want to use a left join to keep all the information in the transactional table and anything that is in the transactional table and not in the details table comes as null in the details table. If you were to do an inner join/join it would return only the items that exists in both tables
    - What were the least and most ordered items? What categories were they in?
    - What were the top 5 orders that spent the most money?
    - View the details of the highest spend order. Which specific items were purchased?
    - BONUS: View the details of the top 5 highest spend orders

Data Dictionary

menu_items table

- **menu_item_id:** Unique ID of a menu item
- **item_name:** Name of a menu item
- **category:** Category or type of cuisine of the menu item
- **price:** Price of the menu item (US Dollars $)

order_details table

- **order_details_id:** Unique ID of an item in an order
- **order_id:** ID of an order
- **order _date:** Date an order was put in (MM/DD/YY)
- **order_time:** Time an order was put in (HH:MM:SS AM/PM)
- **item_id:** Matches the menu_item_id in the menu_items table