# **Restaurant Order Analysis**

## Project Overview

This project involves analyzing customer data from The Taste of the World Cafe to evaluate the reception of a new menu. The objective was to identify successful and underperforming menu items, understand customer preferences, and extract actionable insights to inform business decisions. This project utilized SQL queries to analyze the 'menu\_items' and 'order\_details' tables.

## Problem Statement

The Taste of the World Cafe recently introduced a new set of offerings. As a data analyst, the challenge was to delve into customer data to evaluate the reception of the new menu. The goal was to identify successful and underperforming menu items, understand customer preferences, and extract actionable insights to inform business decisions.

## Objectives and Steps Followed

### Objective 1: Evaluate Menu Items

**Tasks:**

1. Determine the number of items on the menu.
2. Identify the least and most expensive items on the menu.

### Objective 2: Analyze Italian Dishes

**Tasks:**

1. Count the number of Italian dishes on the menu.
2. Find the least and most expensive Italian dishes.

### Objective 3: Analyze Menu Categories

**Tasks:**

1. Count the number of dishes in each category.
2. Calculate the average dish price within each category.

### Objective 4: Explore Order Details

**Tasks:**

1. Determine the date range of orders.
2. Count the number of orders and items ordered within this date range.

### Objective 5: Analyze Specific Orders

**Tasks:**

1. Identify orders with the most items.
2. Count the number of orders with more than 12 items.

### Objective 6: Combine Data for Comprehensive Analysis

**Tasks:**

1. Combine the 'menu\_items' and 'order\_details' tables into a single table.

### Objective 7: Identify Most and Least Ordered Items

**Tasks:**

1. Find the least and most ordered items.

### Objective 8: Analyze Top Orders by Revenue

**Tasks:**

1. Identify the top 5 orders that spent the most money.
2. Provide details of the highest spend order, including specific items purchased.

## Database Design and Tools Used

* **Database**: MySQL
* **Modeling Tools**: MySQL Workbench

## SQL Commands and Techniques Used

* **Statements**: SELECT
* **Clauses**: WHERE, GROUP BY, ORDER BY, DISTINCT, HAVING, LIMIT
* **Functions**: MIN, MAX, AVG, COUNT
* **Joins**: LEFT JOIN