Khang's Bistro – Analysis

KHANG'S BISTRO

MAIN COURSE

Lo mein Regular and large	$12.00 - 14.00	Walnut Shrimp Regular and large	$16.00 - 18.00
Orange Chicken Regular and large	$16.00 - 19.00	Ma Po Tofu Regular and large	$17.00 - 20.00
Fried Rice Regular and large	$15.00 - 18.00		

SIDES

Egg Rolls	$6.00

General Tso's Chicken Regular and large	$16.00 - 19.00	Crab Rangoon	$7.00
Bourbon Chicken Regular and large	$16.00 - 18.00	Salad	$6.00

DESSERTS

DRINKS

Ice Cream Chocolate, vanilla, strawberry	$ 6.00	Coca Cola 33cl, 1.5l	$ 3.00 - 6.00
Moon Cake	$ 5.00	Sprite 33cl, 1.5l	$3.00 - 6.00
Pumpkin Pie	$7.00	Dr. Pepper 33cl, 1.5l	$3.00 - 6.00
Flan	$ 5.00		

Introduction:

Khang's Bistro is the world's largest Chinese restaurant with fast delivery service through state-of-the-art teleportation devices designed by engineers, allowing us to service anyone in America, at any given moment!

Client Brief:

The restaurant's grand opening was on May 16th, 2023, and since then the restaurant has had 70 orders. Khang wants us to create a relational database with information provided to us through the few weeks it has been open that we can then analyze through SQL queries and visualize through Tableau. The main areas of focus include orders, inventory maintenance, and staff. The goal will be to help Khang monitor overall business performance easily and efficiently.

- Orders – Wants to know information on each individual order which includes, item name, price, quantity, customer name, address, and delivery.
- Inventory – Wants to know when new stock should be ordered, what ingredients are needed for dishes, their quantity based on sizes, and the current stock level for ingredients.
- Staff – Wants to know how many staff members are working and when, as well as their salary and how much each dish costs.

Step 1: Create a relational database

- Custom-made Excel file which includes all information for the database:
  chinese_restaurant.xlsx
- With the provided Excel file, we can now create the database diagram through Quick DBD:
  https://app.quickdatabasediagrams.com/#/d/JLeaX9
- All tables are ultimately outputted into the orders table which includes information on customers, items, and inventory of items.
- Export the created database into SQL script which can be imported by MySQL.

Step 2: Custom SQL queries

- The first query will be used to display order information.

- The second query will be related to the total cost and quantity of ingredients.

- The third query will be used to display the ordered weight, remaining weight, and inventory weight of ingredients.

- The final query will be made to gain insight into staff information such as salary and hours worked.

- Link to full SQL queries: https://github.com/Khangnguyen04/Khangs-Bistro-SQL-Project/blob/main/Khang's%20Bistro

Step 3: Interactive dashboards

- Using Tableau Pro, connect to the MySQL database as a data source.

- The first dashboard will display total orders, sales, and items, average order value; sales by category, top selling items, orders and sales by the hour, orders by address, and orders by delivery.

- The second dashboard will be used for inventory management. We will display the total quantity by ingredient, cost of ingredients, cost of dishes, and how much stock is left remaining after sales.

- The final dashboard will be used to monitor staff insights. We will use the dashboard to display total staff cost, total hours worked, hours worked by each employee, and the cost of each employee.

- Tableau dashboards:

  https://public.tableau.com/app/profile/khang.nguyen4719/viz/KhangsBistroAnalysis/KhangsBistroAnalysis?publish=yes

Final Summary:

- First, we are given a project brief to design a custom database made for Khang's Bistro that will allow Khang to monitor performance.

- Next, we can use this database to create custom SQL queries through MySQL to narrow down and filter the insights we are looking for.
- After the queries are designed, we can now upload our SQL scripts into a visualization tool such as Tableau Pro to display our insights.
- We can now visually track metrics and data for Khang's Bistro which will allow us to monitor the business performance.