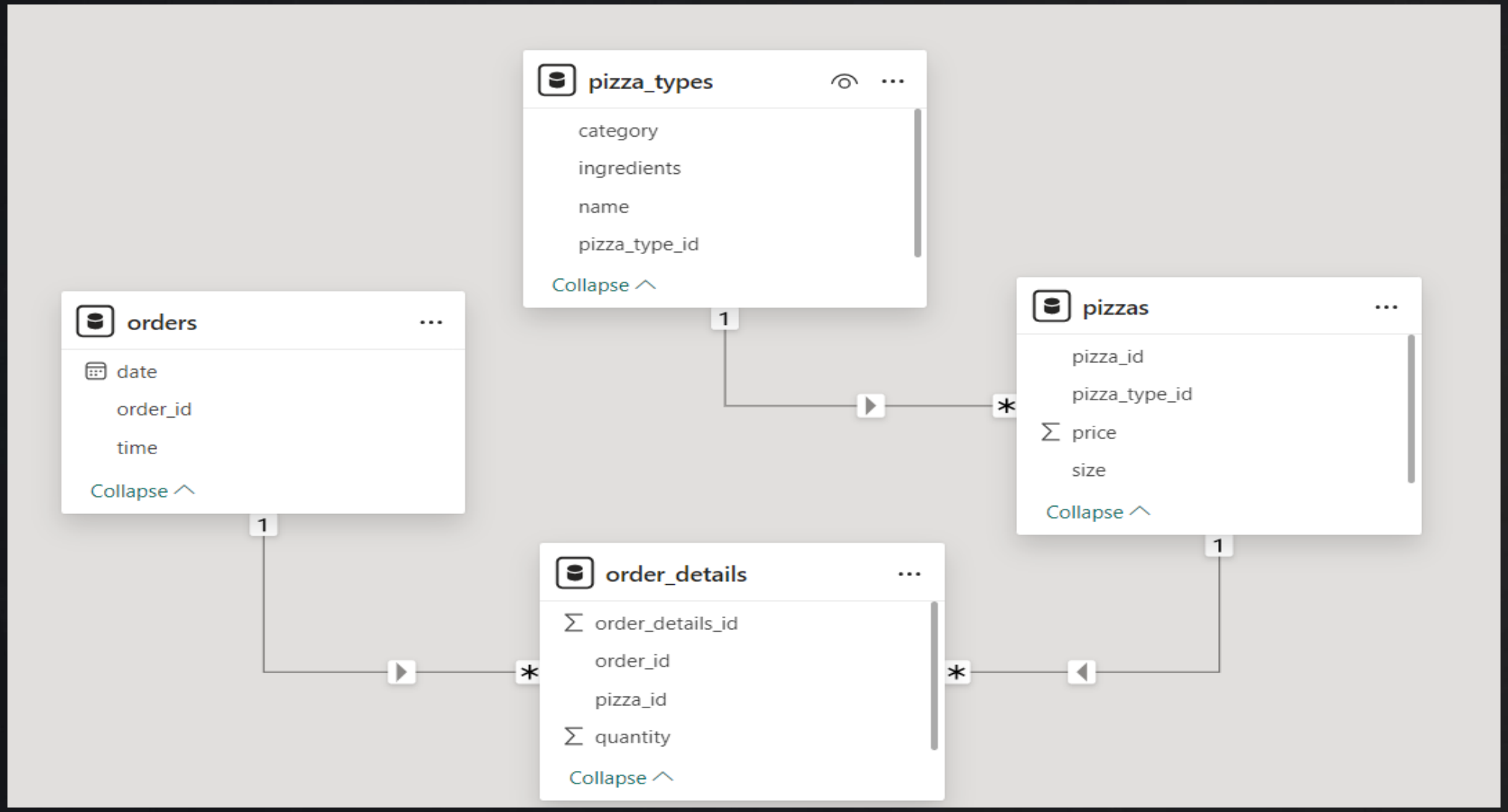

SQL PROJECT ON
PIZZA SALES

INTRODUCTION

Hello, my name is Shubham Singh. In this project, I have utilized SQL queries to analyze and solve various questions related to pizza sales data. The focus of this project is to extract valuable insights and trends by efficiently querying the dataset. Through this process, I have demonstrated my ability to work with SQL to handle real-world data scenarios and provide meaningful analysis.

SCHEMAS


pizza_types
category
ingredients
name
pizza_type_id
Collapse
orders
date
order_id
time
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pizzas
pizza_id
pizza_type_id
price
size
Collapse
order_details
order_details_id
order_id
pizza_id
quantity
Collapse
1
*

Q. Retrieve the total number of orders placed ?

```sql
SELECT
    COUNT(order_id) AS Total_Orders
FROM
    orders;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	Total_Orders
▶	21350

Q. Calculate the total revenue generated from pizza sales ?

```
SELECT
    ROUND(SUM(pizzahut.orders_details.quantity * pizzahut.pizzas.price),
            2) AS Total_Revenue
FROM
    pizzahut.orders_details
        JOIN
    pizzahut.pizzas ON pizzahut.orders_details.pizza_id = pizzahut.pizzas.pizza_id;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Total_Revenue
817860.05

Q. Identify the most common pizza size ordered ?

```sql
SELECT
    pizzahut.pizzas.size AS Pizza_Size,
    COUNT(pizzahut.orders_details.order_details_id) AS Order_Count
FROM
    pizzas
        JOIN
    orders_details ON pizzahut.pizzas.pizza_id = pizzahut.orders_details.pizza_id
GROUP BY Pizza_Size
ORDER BY Order_Count DESC;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Pizza_Size	Order_Count
L	18526
M	15385
S	14137
XL	544
XXL	28

Q. List the top 5 most ordered pizza types along with their quantities ?

```sql
SELECT
    pizzahut.pizza_types.name AS Pizza_Name,
    SUM(pizzahut.orders_details.quantity) AS Quantity
FROM
    pizza_types
        JOIN
    pizzas ON pizzahut.pizza_types.pizza_type_id = pizzahut.pizzas.pizza_type_id
        JOIN
    orders_details ON pizzahut.pizzas.pizza_id = pizzahut.orders_details.pizza_id
GROUP BY Pizza_Name
ORDER BY Quantity DESC
LIMIT 5;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

Pizza_Name	Quantity
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

Q. Join the necessary tables to find the total quantity of each pizza category ordered?

```sql
SELECT
    pizzahut.pizza_types.category AS Category,
    SUM(pizzahut.orders_details.quantity) AS Total_Ordered
FROM
    pizzahut.pizza_types
        JOIN
    pizzahut.pizzas ON pizzahut.pizza_types.pizza_type_id = pizzahut.pizzas.pizza_type_id
        JOIN
    pizzahut.orders_details ON pizzahut.pizzas.pizza_id = pizzahut.orders_details.pizza_id
GROUP BY category
order by Total_Ordered desc;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Category	Total_Ordered
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

Q. List the top 5 most ordered pizza types along with their quantities ?

```sql
SELECT
    pizzahut.pizza_types.name AS Pizza_Name,
    SUM(pizzahut.orders_details.quantity) AS Quantity
FROM
    pizza_types
        JOIN
    pizzas ON pizzahut.pizza_types.pizza_type_id = pizzahut.pizzas.pizza_type_id
        JOIN
    orders_details ON pizzahut.pizzas.pizza_id = pizzahut.orders_details.pizza_id
GROUP BY Pizza_Name
ORDER BY Quantity DESC
LIMIT 5;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

Pizza_Name	Quantity
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

Q. Determine the distribution of orders by hour of the day ?

```
SELECT
    HOUR(pizzahut.orders.order_time) AS Hour,
    COUNT(pizzahut.orders.order_id) AS Order_Count
FROM
    pizzahut.orders
GROUP BY Hour
ORDER BY Order_Count DESC;
```

Result Grid | Filter Rows:

Hour	Order_Count
12	2520
13	2455
18	2399
17	2336
19	2009
16	1920
20	1642
14	1472
15	1468
11	1231
21	1198
22	663
23	28
10	8
9	1

Q. Join relevant tables to find the category-wise distribution of pizzas ?

```
SELECT
    pizzahut.pizza_types.category,
    COUNT(pizzahut.pizza_types.name)
FROM
    pizzahut.pizza_types
GROUP BY pizzahut.pizza_types.category;
```

Result Grid | Filter Rows:

category	COUNT(pizzahut.pizza_types.name)
Chicken	6
Classic	8
Supreme	9
Veggie	9

Q. Group the orders by date and calculate the average number of pizzas ordered per day ?

```sql
SELECT
    ROUND(AVG(Quantity), 0) as Avg_Pizza_Ordered_Per_Day
FROM
    (SELECT
        pizzahut.orders.order_date AS Date,
            SUM(pizzahut.orders_details.quantity) AS Quantity
    FROM
        pizzahut.orders
    JOIN pizzahut.orders_details ON pizzahut.orders.order_id = pizzahut.orders_details.order_id
    GROUP BY Date) AS Total_Quantity
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Avg_Pizza_Ordered_Per_Day
138

Q. Determine the top 3 most ordered pizza types based on revenue ?

```sql
SELECT
    pizzahut.pizza_types.name AS Pizza_Name,
    ROUND(SUM(pizzahut.pizzas.price * pizzahut.orders_details.quantity),
            0) AS Revenue
FROM
    pizzahut.pizza_types
        JOIN
    pizzahut.pizzas ON pizzahut.pizza_types.pizza_type_id = pizzahut.pizzas.pizza_type_id
        JOIN
    pizzahut.orders_details ON pizzahut.orders_details.pizza_id = pizzahut.pizzas.pizza_id
GROUP BY Pizza_Name
ORDER BY Revenue DESC
LIMIT 3;
```

Result Grid | Filter Rows:

Pizza_Name	Revenue
The Thai Chicken Pizza	43434
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41410

Q. Calculate the percentage contribution of each pizza type to total revenue ?

```
SELECT
    pizzahut.pizza_types.category,
    (ROUND(SUM(pizzahut.orders_details.quantity * pizzahut.pizzas.price) / (SELECT
                    (SUM(pizzahut.orders_details.quantity * pizzahut.pizzas.price))
                FROM
                    pizzahut.orders_details
                        JOIN
                    pizzahut.pizzas ON pizzahut.orders_details.pizza_id = pizzahut.pizzas.pizza_id) * 100,
            2)) AS Revenue
FROM
    pizzahut.pizza_types
        JOIN
    pizzahut.pizzas ON pizzahut.pizza_types.pizza_type_id = pizzahut.pizzas.pizza_type_id
        JOIN
    pizzahut.orders_details ON pizzahut.pizzas.pizza_id = pizzahut.orders_details.pizza_id
GROUP BY pizzahut.pizza_types.category
ORDER BY Revenue DESC;
```

Result Grid | Filter Rows:

category	Revenue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

Q. Analyze the cumulative revenue generated over time ?

```
Select order_date,round(Revenue,2),round(Sum(Revenue)
over(order by order_date),2) as Cum_Revenue
From
(Select pizzahut.orders.order_date,
sum(pizzahut.orders_details.quantity*pizzahut.pizzas.price) as Revenue
from pizzahut.orders_details
join pizzahut.pizzas
on pizzahut.orders_details.pizza_id=pizzahut.pizzas.pizza_id
join pizzahut.orders
on pizzahut.orders.order_id=pizzahut.orders_details.order_id
group by pizzahut.orders.order_date) as Sales;
```

Result Grid | Filter Rows:

order_date	round(Revenue,2)	Cum_Revenue
2015-01-01	2713.85	2713.85
2015-01-02	2731.9	5445.75
2015-01-03	2662.4	8108.15
2015-01-04	1755.45	9863.6
2015-01-05	2065.95	11929.55
2015-01-06	2428.95	14358.5
2015-01-07	2202.2	16560.7
2015-01-08	2838.35	19399.05
2015-01-09	2127.35	21526.4
2015-01-10	2463.95	23990.35
2015-01-11	1872.3	25862.65
2015-01-12	1919.05	27781.7
2015-01-13	2049.6	29831.3
2015-01-14	2527.4	32358.7
2015-01-15	1984.8	34343.5
2015-01-16	2594.15	36937.65
2015-01-17	2064.1	39001.75
2015-01-18	1976.85	40978.6
2015-01-19	2387.15	43365.75
2015-01-20	2397.9	45763.65

Q. Determine the top 3 most ordered pizza types based on revenue for each pizza category ?

```sql
Select category,name,Revenue
from
(Select category,name,Revenue,
rank () over(partition by category order by Revenue desc) as rn
from
(Select pizzahut.pizza_types.category,pizzahut.pizza_types.name,
round(sum(pizzahut.orders_details.quantity*pizzahut.pizzas.price),2) as Revenue
from pizzahut.pizza_types
join pizzahut.pizzas
on pizzahut.pizza_types.pizza_type_id=pizzahut.pizzas.pizza_type_id
join pizzahut.orders_details
on pizzahut.orders_details.pizza_id=pizzahut.pizzas.pizza_id
group by pizzahut.pizza_types.category,pizzahut.pizza_types.name) as a) as b
where rn<= 3;
```

Result Grid | Filter Rows: | Export:

category	name	Revenue
Chicken	The Thai Chicken Pizza	43434.25
Chicken	The Barbecue Chicken Pizza	42768
Chicken	The California Chicken Pizza	41409.5
Classic	The Classic Deluxe Pizza	38180.5
Classic	The Hawaiian Pizza	32273.25
Classic	The Pepperoni Pizza	30161.75
Supreme	The Spicy Italian Pizza	34831.25
Supreme	The Italian Supreme Pizza	33476.75
Supreme	The Sicilian Pizza	30940.5
Veggie	The Four Cheese Pizza	32265.7
Veggie	The Mexicana Pizza	26780.75
Veggie	The Five Cheese Pizza	26066.5

THANK YOU