

Pizza Sales data Analysis



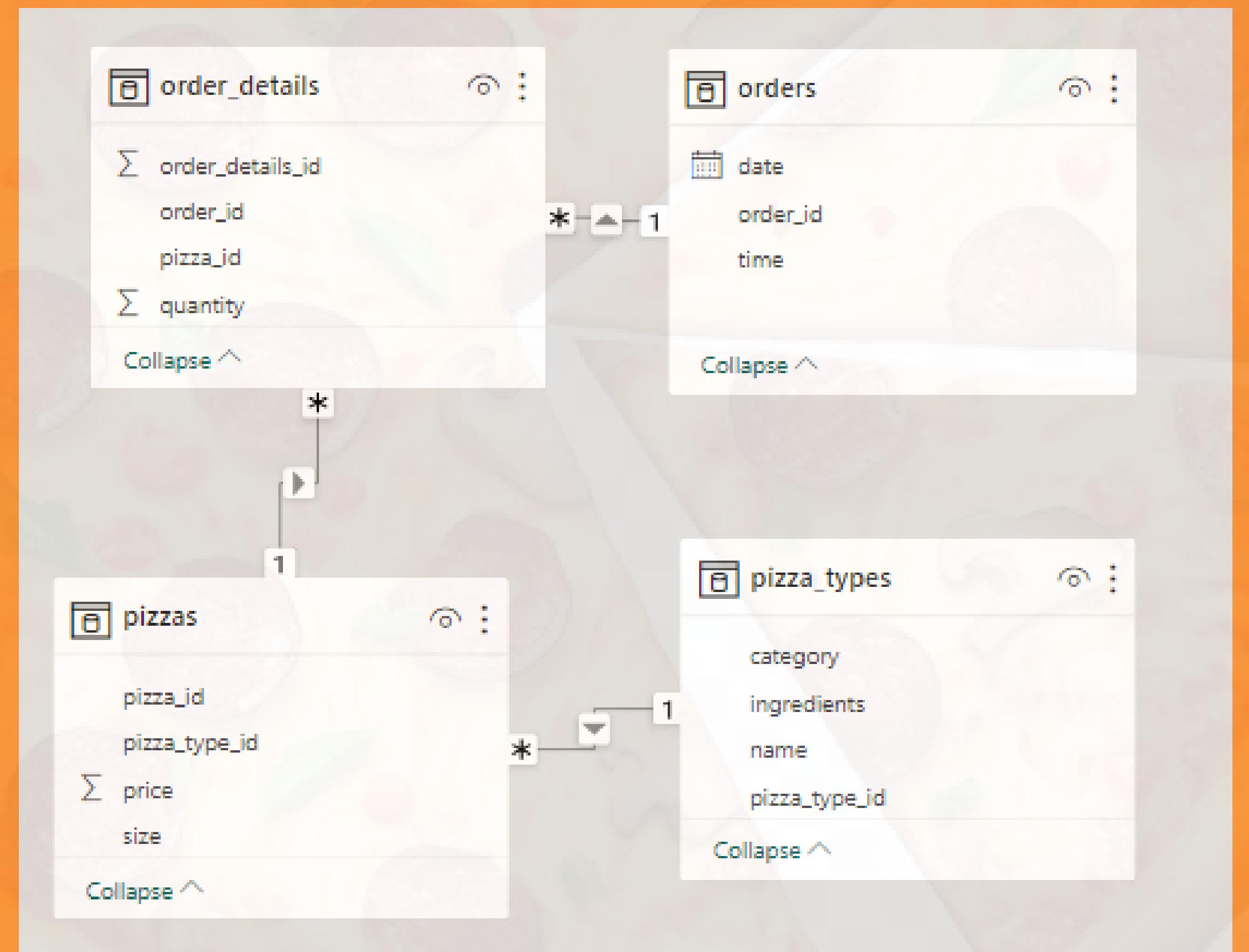
Hi ! My name is Mohd Huzaif.

**In this project I have utilize sql query to solve a
question which are asked related to Pizza_sale
Dataset.**

Tools Used : Mysql workbench

Language Used : Structured Query Language (SQL)

Data Model view



RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

```
SELECT  
    COUNT(order_id) AS total_num_of_orders_placed  
FROM  
    orders;
```

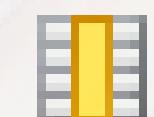
Result Grid | Filter Rows:

	total_num_of_orders_placed
▶	21350

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

```
ROUND(SUM(order_details.quantity * pizzas.price),  
      3) AS tot_rev_generated  
  
FROM  
  
    pizzashop.order_details  
  
    JOIN  
  
    pizzashop.pizzas ON order_details.pizza_id = pizzas.pizza_id;
```

Result Grid



	tot_rev_generated
▶	817860.05

Identify the highest-priced pizza.

```
SELECT
    pizza_types.name, pizzas.price as highest_price_pizza
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
ORDER BY pizzas.price DESC
```

	name	highest_price_pizza
▶	The Greek Pizza	35.95

Identify the most common pizza size ordered

```
pizzas.size,  
    COUNT(order_details.order_details_id) AS most_ordered_count  
FROM  
    pizzas  
        JOIN  
            order_details ON pizzas.pizza_id = order_details.pizza_id  
GROUP BY size  
ORDER BY most ordered count DESC;
```

Result Grid | Filter Rows:

	size	most_ordered_count
▶	L	18526
	M	15385
	S	14137
	XL	544
	XXL	28

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

```
SELECT  
    pizza_types.name,  
    SUM(order_details.quantity) AS tot_quantity  
FROM  
    pizza_types  
        JOIN  
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id  
        JOIN  
    order_details ON pizzas.pizza_id = order_details.pizza_id  
GROUP BY name  
ORDER BY tot_quantity DESC  
LIMIT 5;
```

	name	tot_quantity
▶	The Classic Deluxe Pizza	2453
	The Barbecue Chicken Pizza	2432
	The Hawaiian Pizza	2422
	The Pepperoni Pizza	2418
	The Thai Chicken Pizza	2371

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

```
SELECT  
    pizza_types.category,  
    SUM(order_details.quantity) AS quantity  
FROM  
    pizza_types  
        JOIN  
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id  
        JOIN  
    order_details ON pizzas.pizza_id = order_details.pizza_id  
GROUP BY pizza_types.category  
ORDER BY quantity DESC;
```

Result Grid | Filter Rows:

	category	quantity
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050

Determine the distribution of orders by hour of the day.

```
SELECT  
    HOUR(order_time), COUNT(order_id)  
FROM  
    orders  
GROUP BY HOUR(order_time);
```

	HOUR(order_time)	COUNT(order_id)
▶	11	1231
	12	2520
	13	2455
	14	1472
	15	1468

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

```
select category, count(name) from pizza_types  
group by category;
```

Category	Count
Chicken	6
Classic	8
Supreme	9
Veggie	9

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

```
SELECT  
    ROUND(AVG(quantity), 2) as Avg_pizza_orders_perday  
FROM  
    (SELECT  
        orders.order_date AS Date,  
        SUM(order_details.quantity) AS quantity  
    FROM  
        orders  
    JOIN order_details ON orders.order_id = order_details.order_id  
    GROUP BY Date) AS order_quantity;
```

	Avg_pizza_orders_perday
▶	138.47

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

```
SELECT  
    pizza_types.name,  
    SUM(order_details.quantity * pizzas.price) AS revenue  
FROM  
    pizza_types  
        JOIN  
    pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id  
        JOIN  
    order_details ON pizzas.pizza_id = order_details.pizza_id  
GROUP BY pizza_types.name  
ORDER BY revenue DESC  
LIMIT 3;
```

	name	revenue
▶	The Thai Chicken Pizza	43434.25
	The Barbecue Chicken Pizza	42768
	The California Chicken Pizza	41409.5

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

SELECT

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

	category	revenue
▶	Classic	26.90596025566967
	Supreme	25.45631126009862
	Chicken	23.955137556847287
	Veggie	23.682590927384577

Analyze the cumulative revenue generated over time.

```
select order_date , sum(revenue) over(order by order_date) as cum_revenue  
from  
(select orders.order_date,sum(order_details.quantity *pizzas.price ) as revenue  
from order_details join pizzas on order_details.pizza_id = pizzas.pizza_id  
join orders on orders.order_id = order_details.order_id  
group by orders.order_date) as sales;
```

	order_date	cum_revenue
▶	2015-01-01	2713.8500000000004
	2015-01-02	5445.75
	2015-01-03	8108.15
	2015-01-04	9863.6
	2015-01-05	11929.55
	2015-01-06	14358.5
	2015-01-07	16560.7
	2015-01-08	19399.05
	2015-01-09	21526.4
	2015-01-10	23990.350000000002
	2015-01-11	25862.65
	2015-01-12	27781.7
	2015-01-13	29831.300000000003
	2015-01-14	32358.700000000004

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

```
select name, revenue from
(select category,name,revenue,rank() over(partition by category order by revenue desc) as revenues
from
(select pizza_types.category ,pizza_types.name, sum(pizzas.price * (order_details.quantity)) as revenue
from pizzas join pizza_types on pizzas.pizza_type_id = pizza_types.pizza_type_id
join order_details on pizzas.pizza_id = order_details.pizza_id
group by pizza_types.category ,pizza_types.name ) as first ) as second
where revenues <= 3 ;
```

	name	revenue
▶	The Thai Chicken Pizza	43434.25
	The Barbecue Chicken Pizza	42768
	The California Chicken Pizza	41409.5
	The Classic Deluxe Pizza	38180.5
	The Hawaiian Pizza	32273.25
	The Pepperoni Pizza	30161.75

Thankyou