

Pizza Place sales

SQL PROJECT

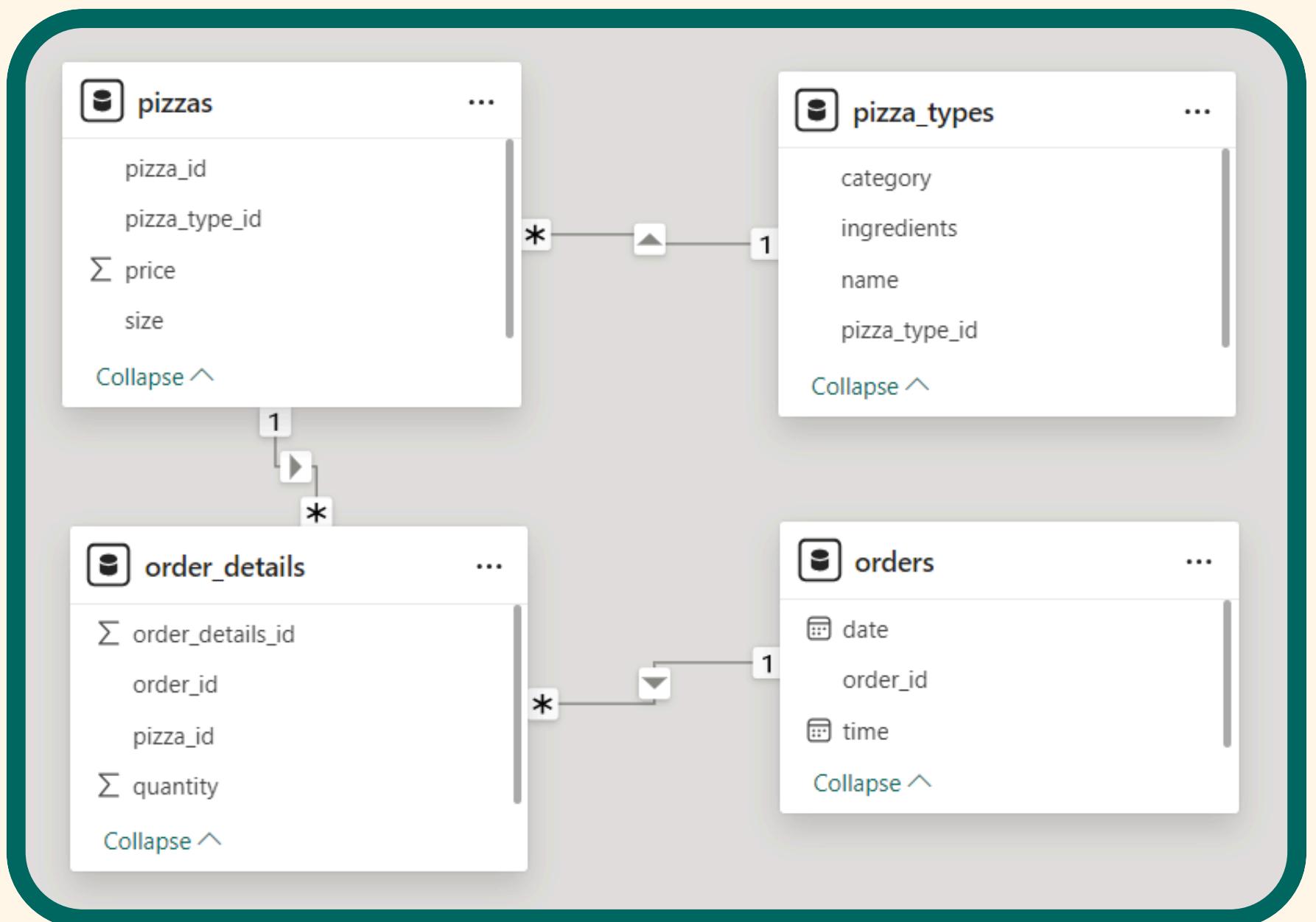
by Vishnu Pratap Singh

Introduction



Hi , My name is Vishnu Pratap Singh
Welcome to my SQL Project. In this project
I have utilized SQL queries to solve
questions related to Pizza Place Sales . I am
excited to share with you the insights and
findings from my journey as an aspiring
Data Analyst. This project showcases my
ability to harness the power of SQL to
analyze and interpret data, providing
valuable insights that can drive business
decisions

Schema



A year's worth of sales from a fictitious pizza place, including the date and time of each order and the pizzas served, with additional details on the type, size, quantity, price, and ingredients.

This schema consists of 4 tables -

- Orders
- Order details
- Pizzas
- Pizza types

Questions :-

-- Basic:

- Retrieve the total number of orders placed.
- Calculate the total revenue generated from pizza sales.
- Identify the highest-priced pizza.
- Identify the most common pizza size ordered.
- List the top 5 most ordered pizza types along with their quantities.

-- Intermediate:

- Join the necessary tables to find the total quantity of each pizza category ordered.
- Find the total quantity of each pizza size ordered with respect of each pizza.
- Determine the distribution of orders by hour of the day.
- Join relevant tables to find the category-wise distribution of pizzas.
- Group the orders by date and calculate the average number of pizzas ordered per day.
- Determine the top 3 most ordered pizza types based on revenue.



Questions :-

-- Advance:

- Calculate the percentage contribution of each pizza type to total revenue.
- Analyze the cumulative revenue generated over time.
- Determine the top 3 most ordered pizza types based on revenue for each pizza category.



Retrieve the total number of orders placed.

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

	total_orders
▶	21350

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Calculate the total revenue generated from pizza sales

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

	pizza_revenue
▶	817860.05

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Identify the highest-priced pizza.

```
SELECT pt.name, p.price  
FROM pizza_types AS pt  
JOIN pizzas AS p ON pt.pizza_type_id = p.pizza_type_id  
ORDER BY p.price DESC  
LIMIT 1;
```

	name	price
▶	The Greek Pizza	35.95

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Identify the most common pizza size ordered.

```
SELECT  
    p.size, SUM(od.quantity) AS order_count  
FROM  
    orders_details AS od  
    JOIN  
    pizzas AS p ON od.pizza_id = p.pizza_id  
GROUP BY p.size  
ORDER BY order_count DESC;
```

	size	order_count
▶	L	18956
	M	15635
	S	14403
	XL	552
	XXL	28

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

```
SELECT  
    pt.name, SUM(od.quantity) AS order_quantity  
FROM  
    orders_details AS od  
        JOIN  
    pizzas AS p ON od.pizza_id = p.pizza_id  
        JOIN  
    pizza_types AS pt ON p.pizza_type_id = pt.pizza_type_id  
GROUP BY pt.name  
ORDER BY order_quantity DESC LIMIT 5;
```

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

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

```
SELECT pt.category, SUM(od.quantity) AS quan_ordered  
FROM pizza_types AS pt  
JOIN pizzas AS p ON pt.pizza_type_id = p.pizza_type_id  
JOIN orders_details AS od ON p.pizza_id = od.pizza_id  
GROUP BY pt.category  
ORDER BY quan_ordered DESC;
```

category	quan_ordered
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

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find the total quantity of each pizza size ordered with respect of each pizza

```
SELECT  
    pt.name, p.size AS cat, SUM(od.quantity) AS quan  
FROM  
    pizza_types AS pt  
        JOIN  
    pizzas AS p ON pt.pizza_type_id = p.pizza_type_id  
        JOIN  
    orders_details AS od ON p.pizza_id = od.pizza_id  
GROUP BY pt.name  
ORDER BY quan DESC;
```

name	cat	quan
The Classic Deluxe Pizza	M	2453
The Barbecue Chicken Pizza	S	2432
The Hawaiian Pizza	M	2422
The Pepperoni Pizza	L	2418
The Thai Chicken Pizza	L	2371
The California Chicken Pizza	L	2370

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Determine the distribution of orders by hour of the day

SELECT

CONCAT(LEFT(order_time, 2), ' ', 'hour') AS hour_

COUNT(order_id) AS or_count

FROM

orders

GROUP BY hour_

ORDER BY hour_j

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

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

```
SELECT  
    category, COUNT(name) AS num_pizza  
FROM  
    pizza_types  
GROUP BY category;
```

category	num_pizza
Chicken	6
Classic	8
Supreme	9
Veggie	9

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

```
With cte as
  (select
    o.order_date,
    sum(od.quantity) as order_per_day
   from orders as o
   join orders_details as od
   on o.order_id=od.order_id
   group by o.order_date)
  select
    round(avg(order_per_day),2) as average_order_per_day
  from
    cte;
```

average_order_per_day
138.47

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Determine the top 3 most ordered pizza types based on revenue

```
SELECT  
    pt.name,  
    pt.category,  
    ROUND(SUM(p.price * od.quantity), 2) AS revenue  
  
FROM  
    pizza_types AS pt  
        JOIN  
    pizzas AS p ON pt.pizza_type_id = p.pizza_type_id  
        JOIN  
    orders_details AS od ON p.pizza_id = od.pizza_id  
GROUP BY pt.name , pt.category  
ORDER BY revenue DESC LIMIT 3;
```

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

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Calculate the percentage contribution of each pizza type to total revenue

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

category	revenue_percentage
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

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Analyze the cumulative revenue generated over time

```
select month_ , round(sum(sales) OVER(order by month_),2) as cumulative_rev  
from  
(select month(o.order_date) as month_ ,  
SUM(p.price * od.quantity) as sales  
from orders as o join orders_details as od  
on o.order_id= od.order_id  
join pizzas as p on od.pizza_id= p.pizza_id  
group by month_  
order by month_) as rev;
```

month_	cumulative_rev
1	69793.3
2	134952.9
3	205350
4	274086.8
5	345489.55
6	413719.75
7	486277.65
8	554555.9
9	618735.95
10	682763.55
11	753158.9
12	817860.05

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

```
select
    name, category, round(revenue,2) as revenue, rank_
from
    (select
        name, category, revenue,
        rank() over (partition by category order by revenue desc) as rank_
    from
        (select pt.name, pt.category, sum(p.price*od.quantity) as revenue
        from pizza_types as pt
        join pizzas as p
        on p.pizza_type_id=pt.pizza_type_id
        join orders_details as od
        on od.pizza_id=p.pizza_id
        group by pt.name) as a) as b
where rank_ <=3;
```

name	category	revenue	rank_
The Thai Chicken Pizza	Chicken	43434.25	1
The Barbecue Chicken Pizza	Chicken	42768	2
The California Chicken Pizza	Chicken	41409.5	3
The Classic Deluxe Pizza	Classic	38180.5	1
The Hawaiian Pizza	Classic	32273.25	2
The Pepperoni Pizza	Classic	30161.75	3
The Spicy Italian Pizza	Supreme	34831.25	1
The Italian Supreme Pizza	Supreme	33476.75	2
The Sicilian Pizza	Supreme	30940.5	3
The Four Cheese Pizza	Veggie	32265.7	1
The Mexicana Pizza	Veggie	26780.75	2
The Five Cheese Pizza	Veggie	26066.5	3

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Thank you

Dataset - <https://app.mavenanalytics.io/datasets>

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