

PIZZA

Sales Findings

An SQL project

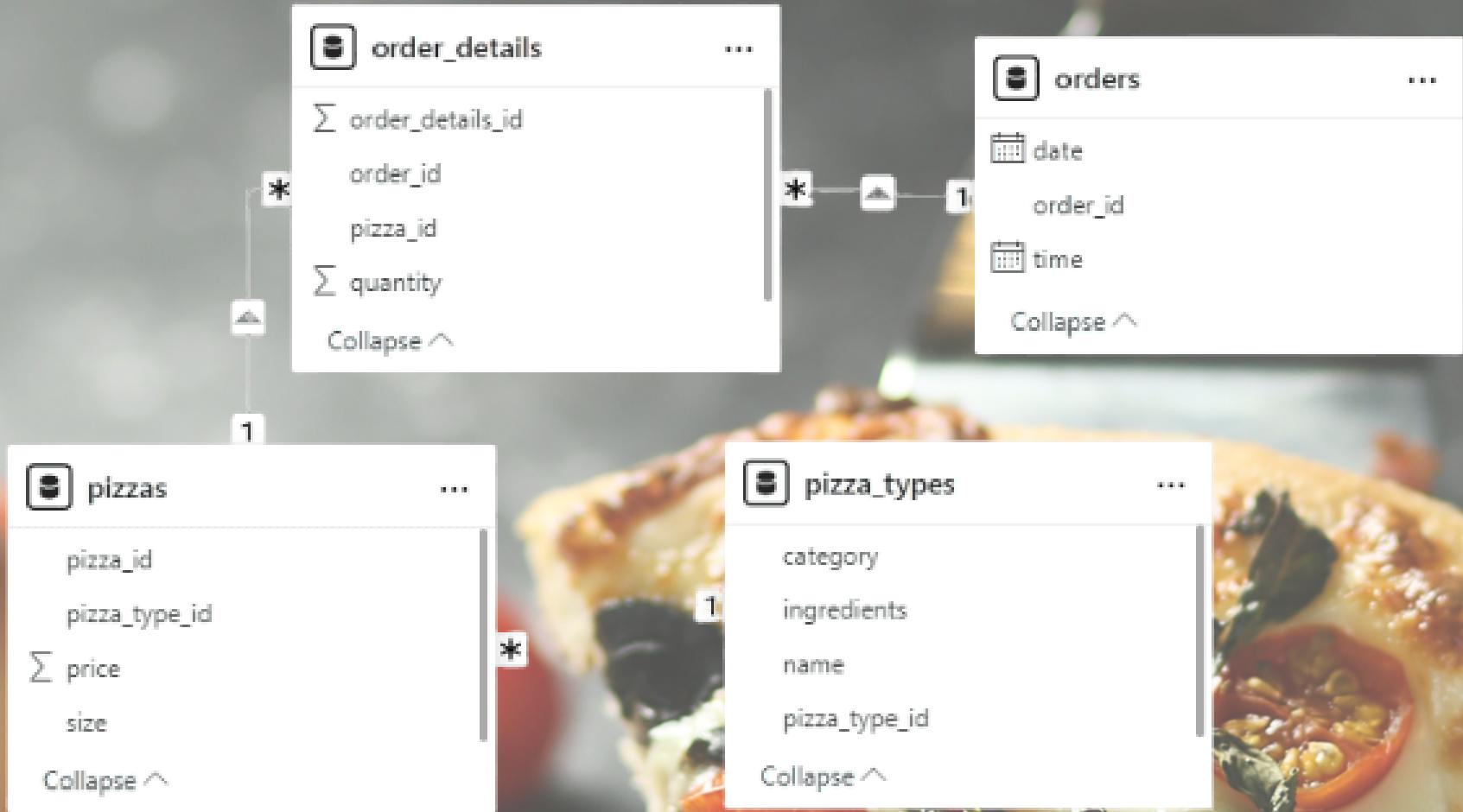


About project

This SQL project delves into the world of pizza sales, leveraging a comprehensive dataset to uncover valuable insights and trends over a year. This project aims to analyze sales data from various pizza establishments, encompassing factors such as pizza types, pricing and sales volumes



SCHEMAS



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

```
select * from
(select pt.category, pt.name, sum(od.quantity*p.price) sum,
(dense_rank() over(partition by pt.category order by sum(od.quantity*p.price) desc)) as ranks
from order_details od join pizzas p on od.pizza_id=p.pizza_id
join pizza_types pt on p.pizza_type_id=pt.pizza_type_id
group by 1,2
order by 1,4 ) as master
where ranks<=3
```

	category	name	sum	ranks
▶	Chicken	The Thai Chicken Pizza	43434.25	1
	Chicken	The Barbecue Chicken Pizza	42768	2
	Chicken	The California Chicken Pizza	41409.5	3
	Classic	The Classic Deluxe Pizza	38180.5	1
	Classic	The Hawaiian Pizza	32273.25	2
	Classic	The Pepperoni Pizza	30161.75	3
	Supreme	The Spicy Italian Pizza	34831.25	1
	Supreme	The Italian Supreme Pizza	33476.75	2
	Supreme	The Sicilian Pizza	30940.5	3
	Veggie	The Four Cheese Pizza	32265.70000000065	1
	Veggie	The Mexicana Pizza	26780.75	2
	Veggie	The Five Cheese Pizza	26066.5	3

Analyze the cumulative revenue generated over time.

```
with data as (select o.order_date,round(sum(od.quantity*p.price),2) as total_revenue  
from orders o join order_details od on o.order_id=od.order_id  
join pizzas p on od.pizza_id=p.pizza_id  
group by 1 order by 1)  
select *, sum(total_revenue) over(order by order_date) as cumulative_revenue from data  
group by 1
```

	order_date	total_revenue	cumulative_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	21526.399999999998
	2015-01-10	2463.95	23990.35
	2015-01-11	1872.3	25862.649999999998
	2015-01-12	1919.05	27781.699999999997
	2015-01-13	2049.6	29831.299999999996
	2015-01-14	2527.4	32358.699999999997
	2015-01-15	1984.8	34343.5

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

```
select pt.category,  
       round(sum(od.quantity*p.price)/  
             (select round(sum(od.quantity*p.price),2) from order_details od join pizzas p on od.pizza_id=p.pizza_id) *100 ,2) as revenue  
  from order_details od join pizzas p on od.pizza_id=p.pizza_id  
 join pizza_types pt on p.pizza_type_id=pt.pizza_type_id  
 group by 1  
 order by 2 desc
```

	category	revenue
▶	Classic	26.91
	Supreme	25.46
	Chicken	23.96
	Veggie	23.68

Determine the top 3 most ordered pizza types based on revenue

```
select pt.name, round(sum(od.quantity*p.price),2) as revenue  
from order_details od join pizzas p on od.pizza_id=p.pizza_id  
join pizza_types pt on p.pizza_type_id=pt.pizza_type_id  
group by 1  
order by 2 desc  
limit 3
```

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



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

```
select round(avg(orders),0) average_orders from (
select o.order_date, sum(od.quantity) orders
from orders o join order_details od on o.order_id=od.order_id
group by o.order_date) as data
```

	average_orders
▶	138



Determine the distribution of orders by hour of the day

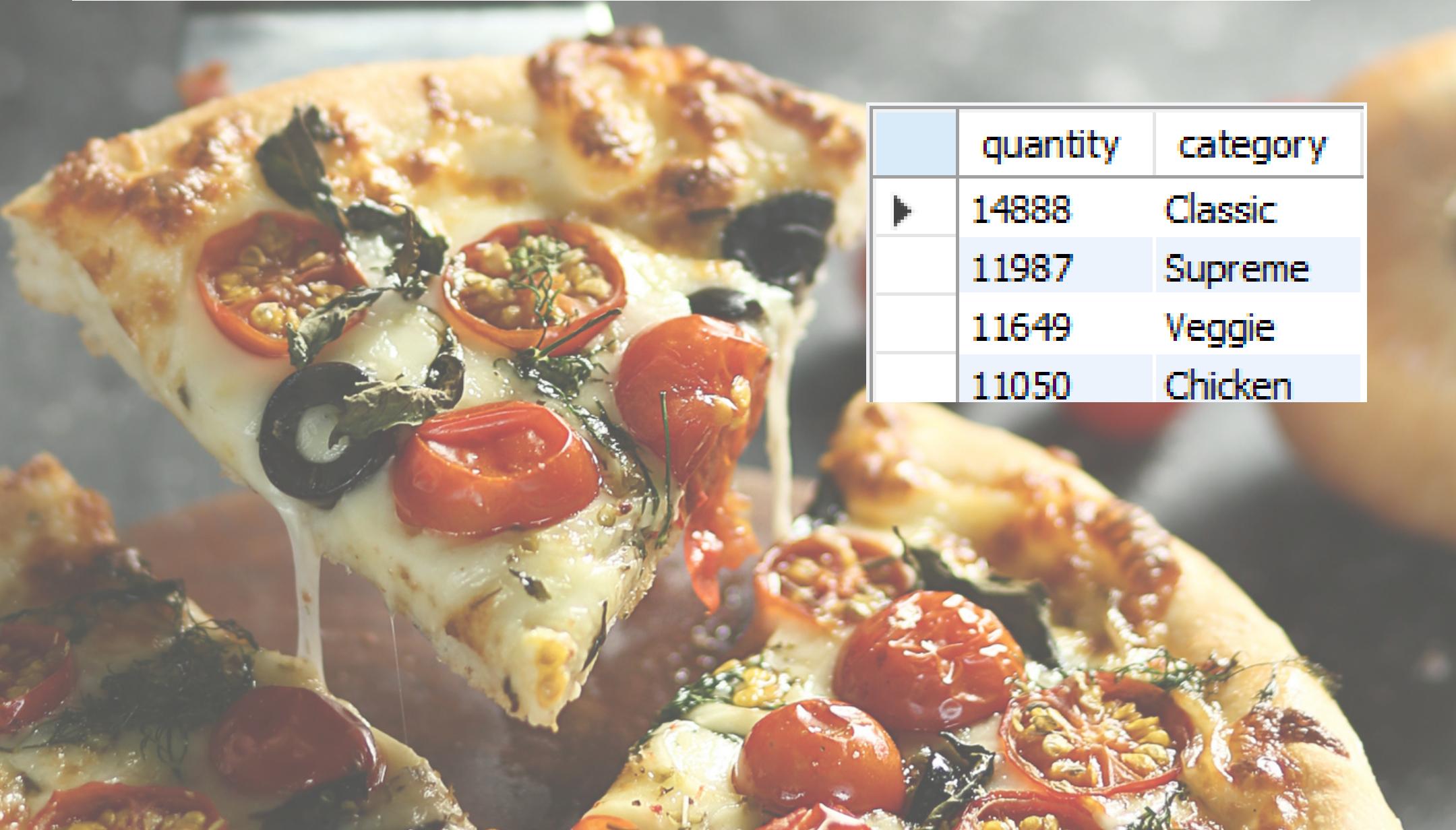
```
select count(order_id) orders ,hour(order_time) hours  
from orders  
group by 2 order by 1 desc
```

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

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

```
select sum(od.quantity)quantity, pt.category  
from pizza_types pt join pizzas p on pt.pizza_type_id=p.pizza_type_id  
join order_details od on p.pizza_id=od.pizza_id  
group by 2  
order by 1 desc
```

	quantity	category
▶	14888	Classic
	11987	Supreme
	11649	Veggie
	11050	Chicken



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

```
select sum(od.quantity) quantity,pt.name  
from order_details od join pizzas p on od.pizza_id=p.pizza_id  
join pizza_types pt on p.pizza_type_id=pt.pizza_type_id  
group by 2  
order by 1 desc  
limit 5
```

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

Identify the most common pizza size ordered.

```
SELECT
```

```
    p.size, COUNT(od.order_details_id) order_count
```

```
FROM
```

```
    order_details od
```

```
        JOIN
```

```
    pizzas p ON od.pizza_id = p.pizza_id
```

```
GROUP BY 1
```

```
ORDER BY 2 DESC
```

```
LIMIT 1
```

	size	order_count
▶	L	18526



Calculate the total revenue generated from pizza sales.

```
SELECT
```

```
    ROUND(SUM(od.quantity * p.price), 2) AS total_revenue
```

```
FROM
```

```
    order_details od
```

```
        JOIN
```

```
    pizzas p ON od.pizza_id = p.pizza_id
```

	total_revenue
▶	817860.05

