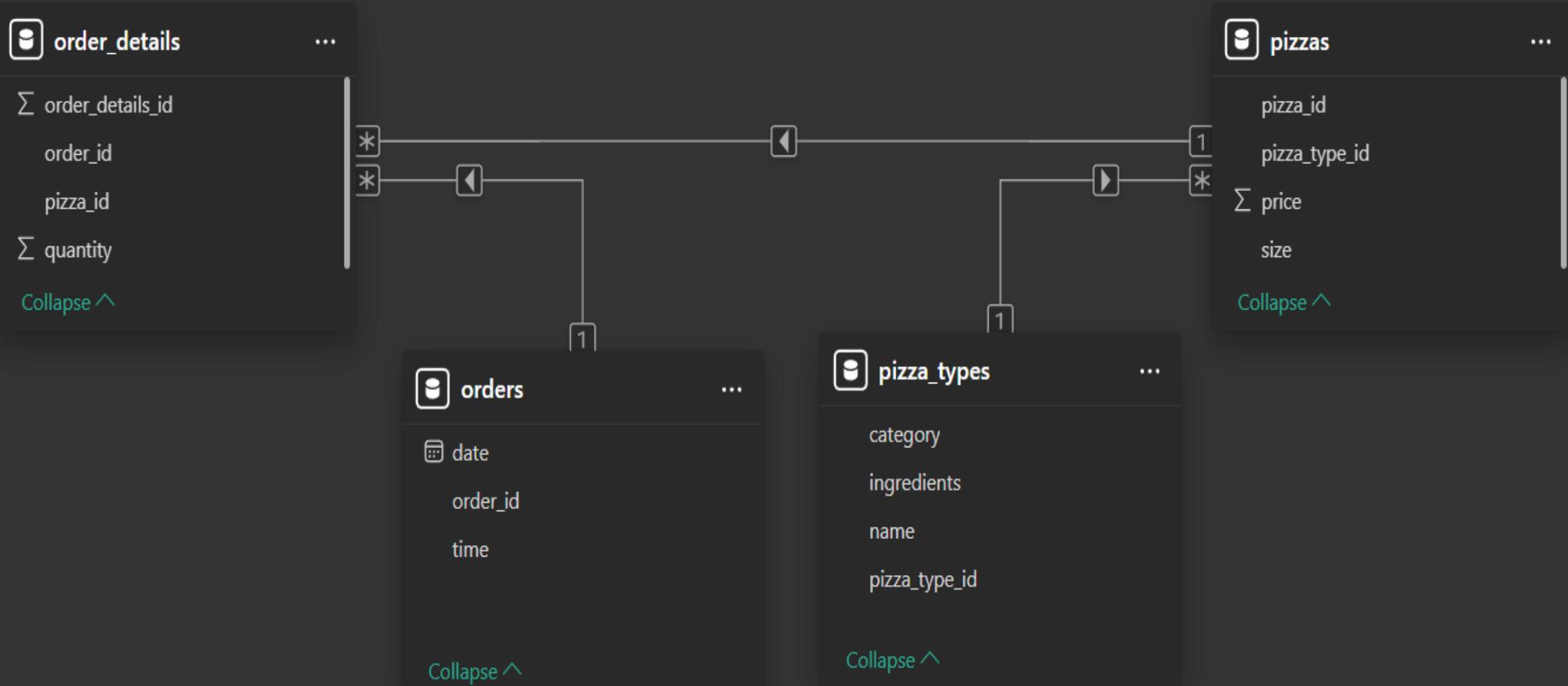


Presenting

A Project with MySQL DBMS

Pizza Sales Analysis

Shema



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

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

Result Grid		Filter Rows:
	category	Total_Quantity
▶	Classic	14888
	Veggie	11649
	Supreme	11987
	Chicken	11050

2. Determine the distribution of orders by hour of the day

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

	HOUR(order_time)	orders
▶	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

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

```
SELECT
    category, COUNT(pizza_type_id)
FROM
    pizza_types
GROUP BY category;
```

	category	COUNT(pizza_type_id)
▶	Chicken	6
	Classic	8
	Supreme	9
	Veggie	9

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

```
SELECT
    round(avg(quantity),0)
FROM
    (SELECT
        orders.order_date, SUM(order_details.quantity) AS quantity
    FROM
        orders
    JOIN order_details ON orders.order_id = order_details.order_id
    GROUP BY orders.order_date) AS Avg_quantity;
```

Result Grid	
	round(avg(quantity),0)
▶	138

5. 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 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 revenue DESC
LIMIT 3;
```

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

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

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

Result Grid		
	category	percentage
▶	Classic	26.91
	Supreme	25.46
	Chicken	23.96
	Veggie	23.68

7. Analyze the cumulative revenue generated over time.

```
SELECT
```

```
    order_date,  
    SUM(revenue) OVER (ORDER BY order_date) AS cumulative_revenue  
FROM  
(  
    SELECT  
        orders.order_date,  
        ROUND(SUM(order_details.quantity * pizzas.price), 2) AS revenue  
    FROM  
        orders  
    JOIN  
        order_details ON orders.order_id = order_details.order_id  
    JOIN  
        pizzas ON pizzas.pizza_id = order_details.pizza_id  
    GROUP BY  
        orders.order_date  
) AS sales  
GROUP BY  
    order_date;
```

order_date	cumulative_revenue
2015-01-01	2713.85
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	21526.399999999998
2015-01-10	23990.35
2015-01-11	25862.649999999998
2015-01-12	27781.699999999997
2015-01-13	29831.299999999996
2015-01-14	32358.699999999997

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

```
SELECT
    category, name, revenue
FROM
(
    SELECT
        category, name, revenue,
        RANK() OVER (PARTITION BY category ORDER BY revenue DESC) AS rk
    FROM
    (
        SELECT
            pizza_types.category, pizza_types.name,
            ROUND(SUM(order_details.quantity * pizzas.price), 2) AS revenue
        FROM
            order_details
        JOIN
            pizzas ON order_details.pizza_id = pizzas.pizza_id
        JOIN
            pizza_types ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        GROUP BY
            pizza_types.category,
            pizza_types.name
    ) AS a
) AS b
WHERE
    rk <= 3;
```

Result Grid			
	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