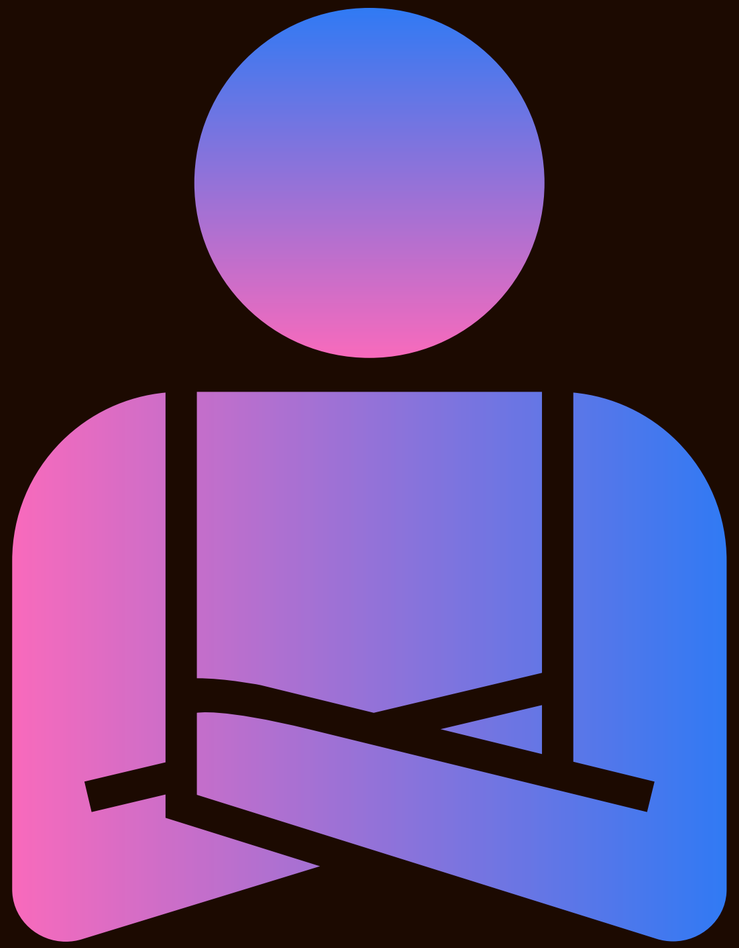
PIZZA SALES

M Y S Q L P R O J E C T

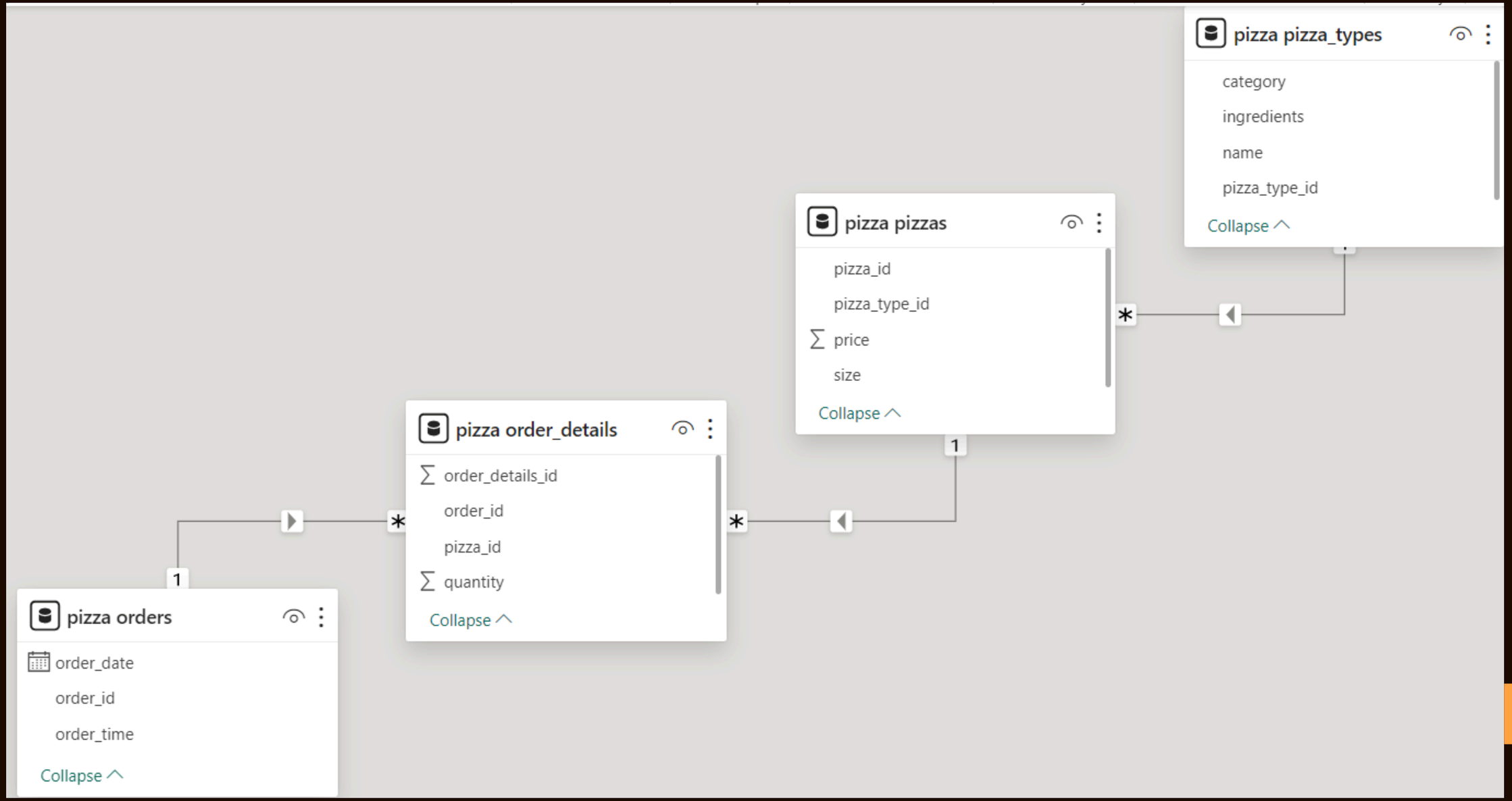
By Shubham paswan



ABOUT PROJECT

- Conducted comprehensive analysis of pizza sales data using MySQL.
- Developed and executed SQL queries to identify and solve key business problems.
- Extracted actionable insights to inform strategic decisions and optimize sales performance.

DATABASE TABLES



BASIC QUERY

1.Retrieve the total number of orders placed.

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

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

	total_orders
▶	21350

BASIC QUERY

2.Calculate the total revenue generated from pizza sales.

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

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

	total_sales
▶	817860.05

BASIC QUERY

3.Identify the highest-priced pizza.

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

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

name	price
The Greek Pizza	35.95

BASIC QUERY

4.Identify the most common pizza size ordered.

```
    SELECT
    pizzas.size,
    COUNT(order_details.order_details_id) AS order_count
FROM
    pizzas
        JOIN
    order_details ON pizzas.pizza_id = order_details.pizza_id
GROUP BY pizzas.size
ORDER BY order_count DESC;
```

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

size	order_count
L	18526
M	15385
S	14137
XL	544
XXL	28

BASIC QUERY

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

```
    SELECT
    pizza_types.name, 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 order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY quantity DESC
LIMIT 5;
```

Result Grid | Filter Rows:

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

INTERMEDIATE

6.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 order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category
ORDER BY quantity DESC;
```

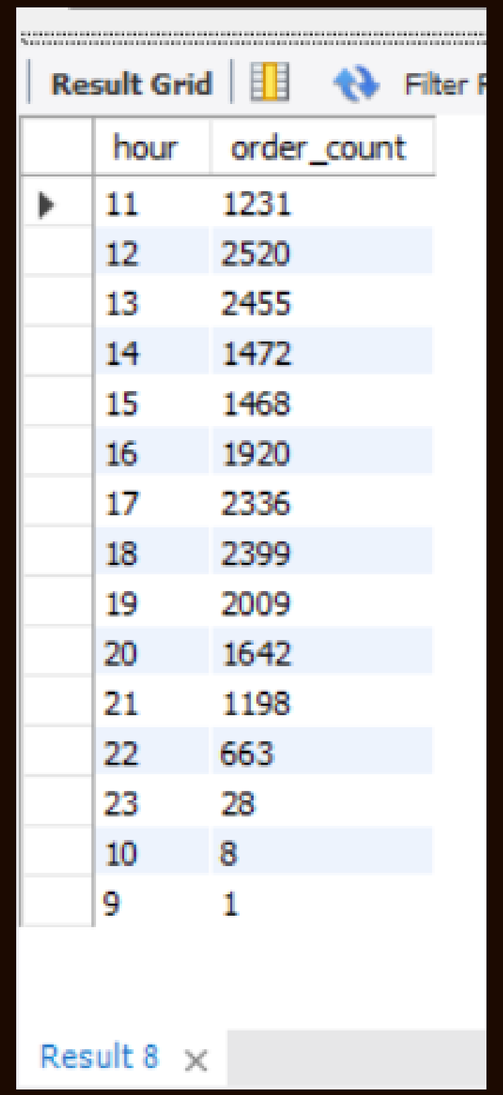
Result Grid | Filter Rows:

category	quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

INTERMEDIATE

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

```
    SELECT
    HOUR(order_time) AS hour, COUNT(order_id) AS order_count
FROM
    orders
GROUP BY HOUR(order_time);
    -- Q8.
    select category, count(name) from pizza_types group by category;
```



Result Grid | Filter R

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

Result 8 ×

INTERMEDIATE

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

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

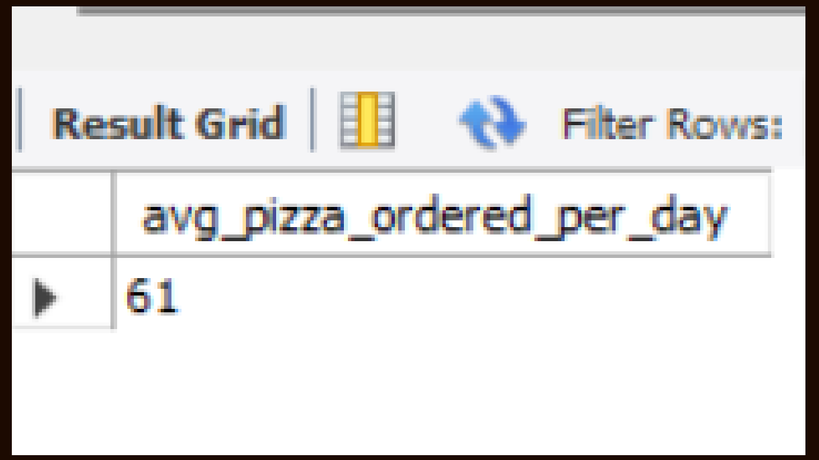
Result Grid | Filter Rows:

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

INTERMEDIATE

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

```
    SELECT
     ROUND(AVG(quantity), 0) AS avg_pizza_ordered_per_day
FROM
    (SELECT
        orders.order_date, SUM(order_details.quantity) AS quantity
    FROM
        orders
    JOIN order_details ON orders.order_id = order_details_id
    GROUP BY orders.order_date) AS order_quantity;
```



INTERMEDIATE

10.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 order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY revenue DESC
LIMIT 3;
```

Result Grid | Filter Rows:

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

ADVANCED

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

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

Result Grid | Filter Rows:

category	revenue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

ADVANCED

12.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;
```

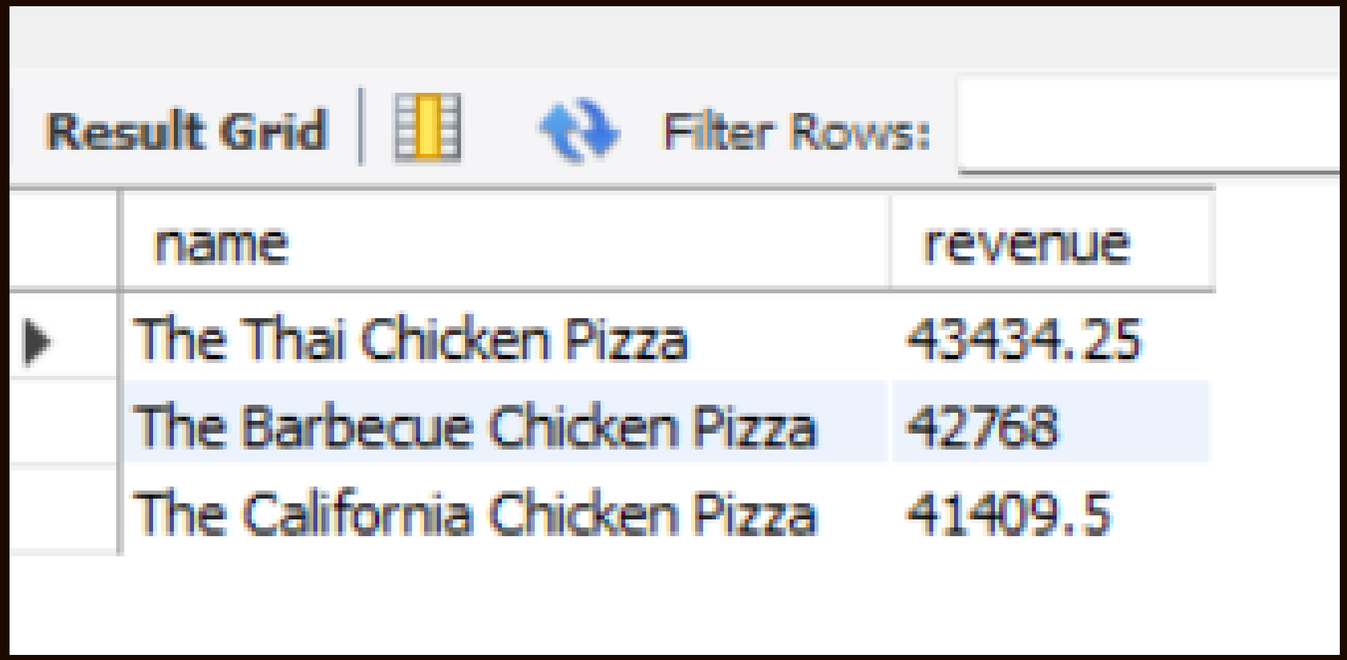
Result Grid | Filter Rows:

order_date	cum_revenue
2015-01-01	2713.850000000004
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

ADVANCED

13.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 rn from
     ( select pizza_types.category,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
     order_details.pizza_id=pizzas.pizza_id group by pizza_types.category,pizza_types.name)as a) as b where rn<=3 limit 3;
```



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

EXPERIENCES

- **Database Design and Implementation**
- **Data Extraction and Transformation**
- **Sales Analysis and Reporting**
- **Optimization and Performance Tuning**

CHALLENGES FACED

- **Data Quality Issues:**
- **Complex Query Requirements**
- **Scalability and Performance:**
- **Integration with Visualization Tools**

THANK YOU