

PIZZA STORE ANALYSIS

USING MYSQL WORKBENCH

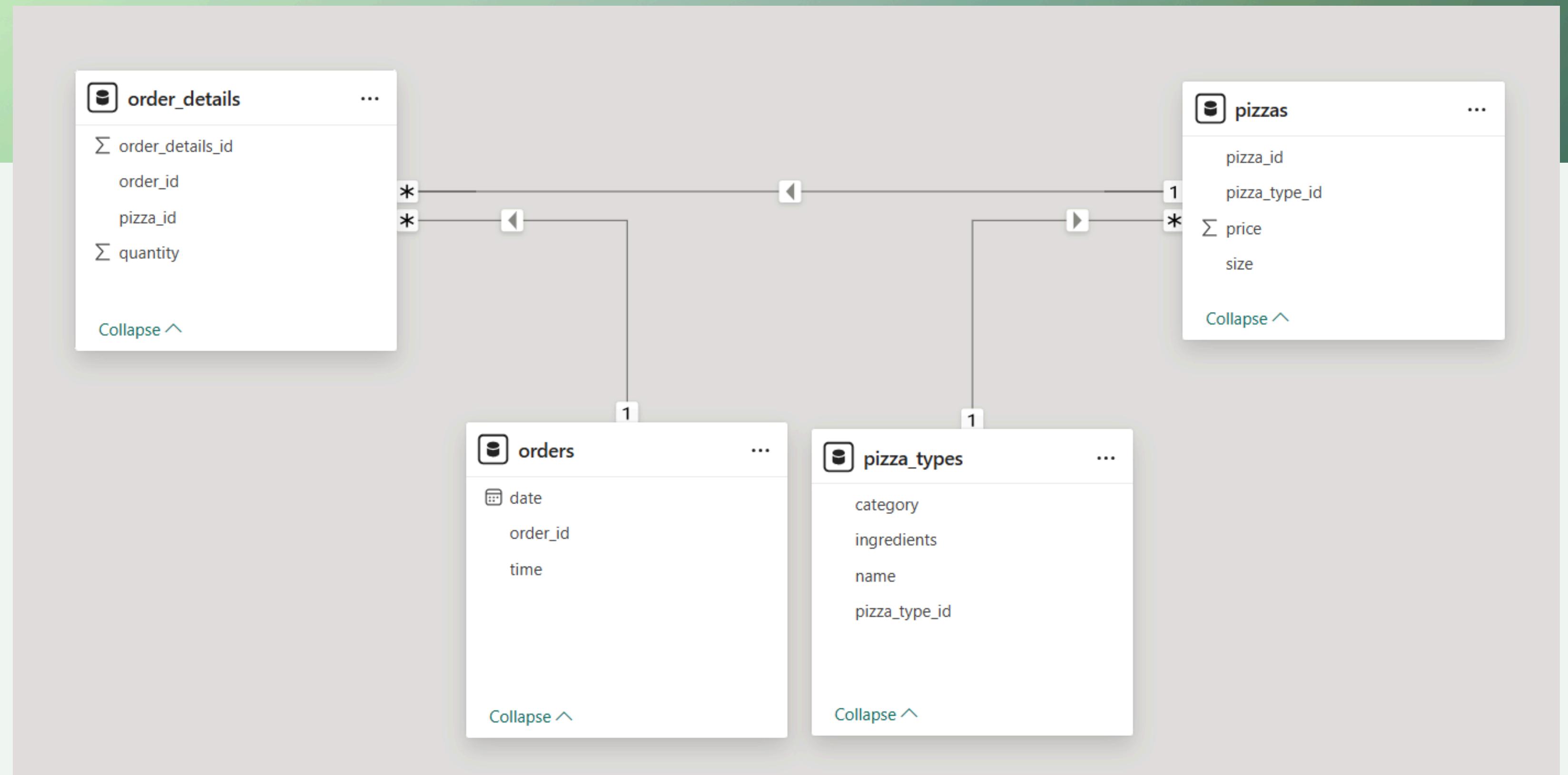


ABOUT PROJECT

In this project, SQL is used to analyze pizza sales data and track business performance.

The analysis focuses on total sales, popular pizza types, and ordering trends.

Results highlight actionable insights to improve overall sales efficiency



Retrieve the total number of orders placed.

```
1 -- Retrieve the total number of orders placed :  
2  
3 • SELECT  
4     COUNT(order_id) AS total_orders  
5 FROM  
6     orders;  
7
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	total_orders			
▶	21350			

Calculate the total revenue generated from pizza sales.

```
1 -- Calculate the total revenue generated from pizza sales.  
2  
3 • SELECT  
4     ROUND(SUM(order_details.quantity * pizzas.price),  
5             2) AS total_revenue  
6 FROM  
7     order_details  
8     JOIN  
9     pizzas ON pizzas.pizza_id = order_details.pizza_id  
10
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
total_revenue		▶	817860.05	

Identify the highest-priced pizza.

```
1 -- Identify the highest-priced pizza :  
2  
3 • SELECT  
4     pizza_types.name, pizzas.price  
5 FROM  
6     pizza_types  
7     JOIN  
8     pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id  
9 ORDER BY pizzas.price DESC  
10 LIMIT 1;  
11
```

The screenshot shows a database query results window with the following interface elements:

- Toolbar buttons: Result Grid, Filter Rows, Export, Wrap Cell Content, Fetch rows.
- Table header: name | price
- Data row: ▶ The Greek Pizza | 35.95

	name	price
▶	The Greek Pizza	35.95

Identify the most common pizza size ordered.

```
1 -- Identify the most common pizza size ordered :  
2  
3 • SELECT  
4     pizzas.size,  
5         COUNT(order_details.order_details_id) AS order_count  
6 FROM  
7     pizzas  
8         JOIN  
9             order_details ON pizzas.pizza_id = order_details.pizza_id  
10 GROUP BY pizzas.size  
11 ORDER BY order_count DESC;  
12
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	size	order_count		
▶	L	18526		
	M	15385		
	S	14137		
	XL	544		
	XXL	28		

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

```
1 -- List the top 5 most ordered pizza types along with their quantities :
2
3 • SELECT
4     pizza_types.name, SUM(order_details.quantity) AS quantity
5 FROM
6     pizza_types
7     JOIN
8     pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
9     JOIN
10    order_details ON order_details.pizza_id = pizzas.pizza_id
11 GROUP BY pizza_types.name
12 ORDER BY quantity DESC
13 LIMIT 5;
14
```

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

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

```
1 -- Join the necessary tables to find the total quantity of each pizza category ordered :
2
3 • SELECT
4     pizza_types.category,
5     SUM(order_details.quantity) AS quantity
6 FROM
7     pizza_types
8     JOIN
9     pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
10    JOIN
11    order_details ON order_details.pizza_id = pizzas.pizza_id
12 GROUP BY pizza_types.category
13 ORDER BY quantity DESC;
14
```

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

	category	quantity
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050

Determine the distribution of orders by hour of the day.

```
1 -- Determine the distribution of orders by hour of the day :  
2  
3 • SELECT  
4     HOUR(order_time), COUNT(order_id)  
5 FROM  
6     orders  
7 GROUP BY HOUR(order_time);  
8
```

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

HOUR(order_time)	COUNT(order_id)
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

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

```
1 -- Join relevant tables to find the category-wise distribution of pizzas :  
2  
3 • SELECT  
4     category, COUNT(name)  
5 FROM  
6     pizza_types  
7 GROUP BY category;  
8
```

	Category	COUNT(name)
▶	Chicken	6
	Classic	8
	Supreme	9
	Veggie	9

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

```
1 -- Group the orders by date and calculate the average number of pizzas ordered per day :
2
3 • SELECT
4     ROUND(AVG(quantity), 0) as avg_pizzas_ordered_per_day
5 FROM
6     (SELECT
7         orders.order_date, SUM(order_details.quantity) AS quantity
8     FROM
9         orders
10    JOIN order_details ON orders.order_id = order_details.order_id
11    GROUP BY orders.order_date) AS order_quantity;
12
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	avg_pizzas_ordered_per_day			
▶	138			

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

```
1 -- Determine the top 3 most ordered pizza types based on revenue :
2
3 • SELECT
4     pizza_types.name,
5         SUM(order_details.quantity * pizzas.price) AS revenue
6 FROM
7     pizza_types
8         JOIN
9     pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
10        JOIN
11    order_details ON order_details.pizza_id = pizzas.pizza_id
12 GROUP BY pizza_types.name
13 ORDER BY revenue DESC
14 LIMIT 3;
15
```

Result Grid		
	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.

```
1 -- Calculate the percentage contribution of each pizza type to total revenue :
2
3 • SELECT
4     pizza_types.category,
5     ROUND(SUM(order_details.quantity * pizzas.price) / (SELECT
6             ROUND(SUM(order_details.quantity * pizzas.price),
7                 2) AS total_revenue
8
9         FROM
10        order_details
11        JOIN
12        pizzas ON pizzas.pizza_id = order_details.pizza_id) * 100,
13        2) AS revenue
14
15     FROM
16     pizza_types
17     JOIN
18     pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
19     JOIN
20     order_details ON order_details.pizza_id = pizzas.pizza_id
21     GROUP BY pizza_types.category
22     ORDER BY revenue DESC;
```

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

Analyze the cumulative revenue generated over time.

```
1 -- Analyze the cumulative revenue generated over time :
2
3 • SELECT order_date, sum(revenue) OVER(ORDER BY order_date) AS cum_revenue
4 FROM(
5     SELECT orders.order_date, sum(order_details.quantity * pizzas.price) AS revenue
6     FROM order_details
7         JOIN
8             pizzas
9             ON order_details.pizza_id = pizzas.pizza_id
10            JOIN
11                orders
12                ON orders.order_id = order_details.order_id
13                GROUP BY orders.order_date
14 ) AS sales;
15
```

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

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

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

```
1 -- Determine the top 3 most ordered pizza types based on revenue for each pizza category :
2
3 • SELECT name, revenue
4   FROM(
5     SELECT category, name, revenue, RANK() OVER(PARTITION BY category ORDER BY revenue DESC) AS rn
6   FROM(
7     SELECT pizza_types.category, pizza_types.name,
8       SUM(order_details.quantity * pizzas.price) AS revenue
9     FROM pizza_types
10    JOIN
11      pizzas
12    ON pizza_types.pizza_type_id = pizzas.pizza_type_id
13    JOIN
14      order_details
15    ON order_details.pizza_id = pizzas.pizza_id
16    GROUP BY pizza_types.category, pizza_types.name
17  ) AS a
18 ) AS b
19 WHERE rn <= 3;
```

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

	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
	The Spicy Italian Pizza	34831.25
	The Italian Supreme Pizza	33476.75
	The Sicilian Pizza	30940.5
	The Four Cheese Pizza	32265.70000000065
	The Mexicana Pizza	26780.75
	The Five Cheese Pizza	26066.5