

# PIZZA SALES USING SQL



# Introduction

## Seraj Alam

### Data Analyst

Hello my name is Seraj alam preparing\_for Data Analyst.

"Dive into the flavorful realm of pizza analytics with MySQL. From understanding customer preferences to tracking ingredient popularity, this presentation unveils how SQL queries unlock insights for pizzerias. Discover the data-driven approach behind optimizing menus, enhancing customer experiences, and driving business growth in the competitive pizza industry."



# SCHEMAS



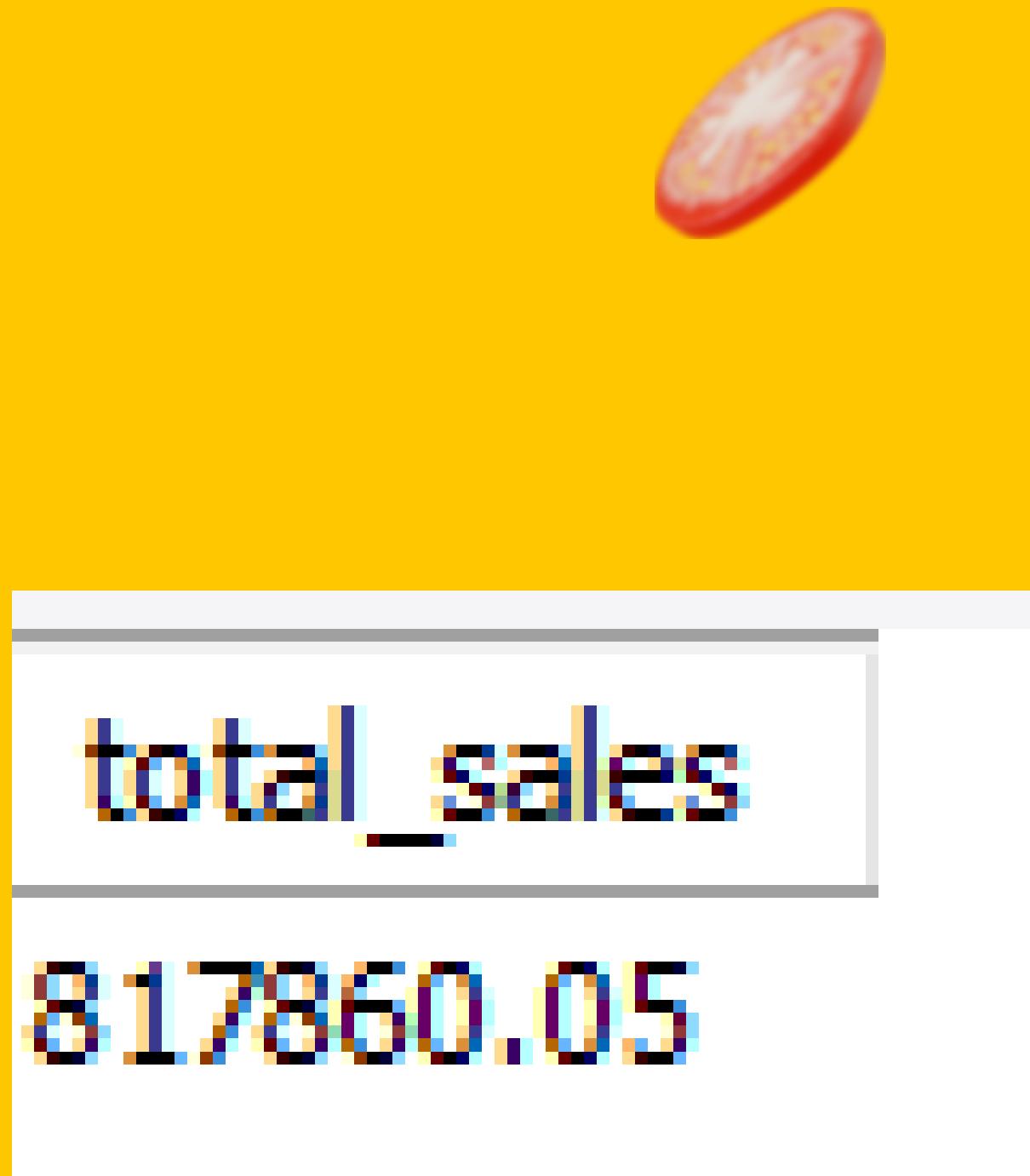
# Retrieve the total number of orders placed.

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

	total_orders
▶	21350

# 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;
```



# 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;
```

	name	price
▶	The Greek Pizza	35.95

# identify the most common pizza sized 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;
```

	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

```
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;
```

	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.

```
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;
```

	category	quantity
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050

# 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);
```

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

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

```
select category, count(name) from pizza_types  
group by category;
```

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

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



```
select round(avg(quantity),0) as avg_ordered_pizzas_per_day
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 order_quantity;
```

	avg_ordered_pizzas_per_day
	138



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;
```

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

```
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;
```

category	revenue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

# 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;
```

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
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.

```
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;
```

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



# Summary

The pizza sales SQL project encompasses the creation of a robust relational database to efficiently manage sales data, customer profiles, and product inventory. Through SQL queries and data analysis, the project identifies trends like popular toppings, peak sales hours, and customer preferences. These insights inform strategic decisions regarding inventory optimization, pricing strategies, and targeted marketing efforts, ultimately enhancing operational efficiency and customer satisfaction in the competitive pizza industry.



## CONTACT US

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# THANK YOU

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