# SQL Project on Pizza_Sales

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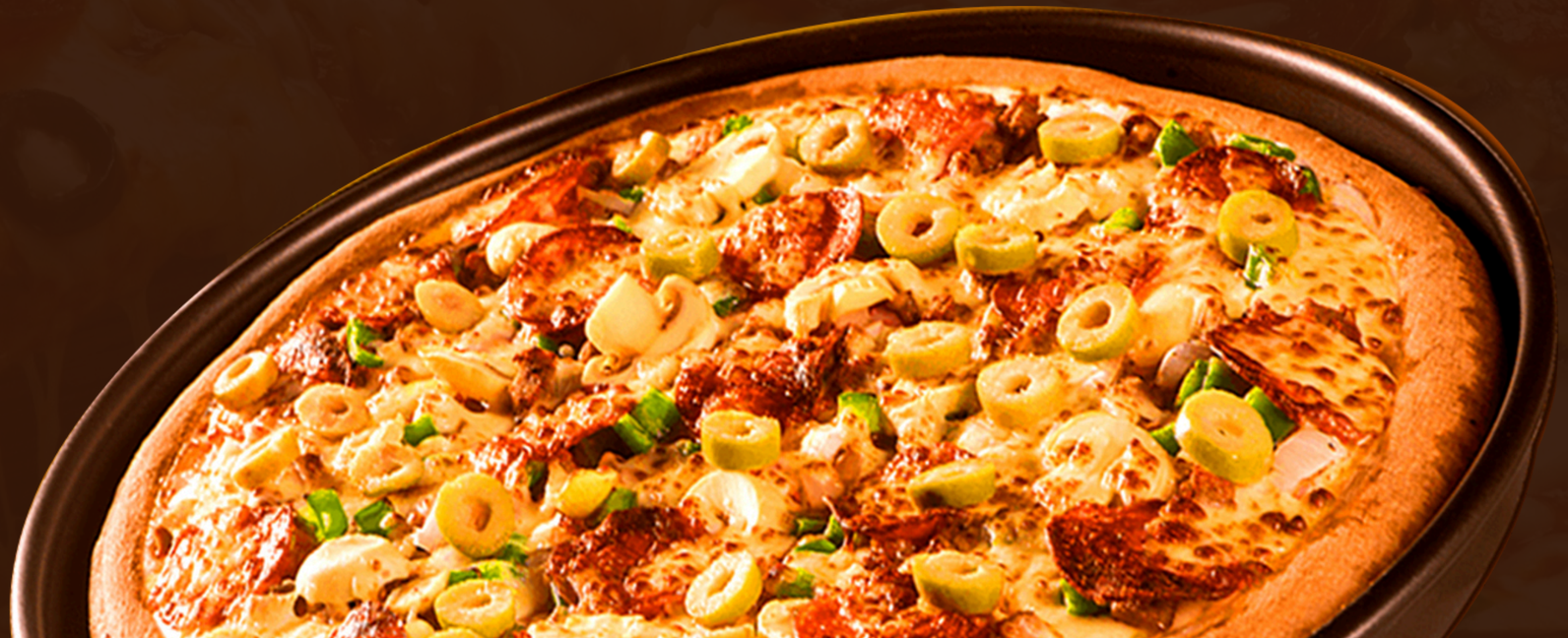

# ABOUT THIS PROJECT

This projects analyzes pizza sales data using SQL to uncover insights . Queries include aggregations, subqueries and ranking functions for deep analysis.

```sql
create database pizzahut;
use pizzahut;

select * FROM pizzas;

create table orders(
order_id int not null primary key,
order_date date not null,
order_time time not null
);

select * FROM orders;
```

| order_id | order_date | order_time |
|---|---|---|
| 1 | 2015-01-01 | 11:38:36 |
| 2 | 2015-01-01 | 11:57:40 |
| 3 | 2015-01-01 | 12:12:28 |
| 4 | 2015-01-01 | 12:16:31 |
| 5 | 2015-01-01 | 12:21:30 |

# Identify the highest_price pizza

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

| | name | price |
|---|---|---|
| ▶ | The Greek Pizza | 35.95 |

# find the total qty of each pizza category ordered

```sql
SELECT
    category, (SUM(qty)) AS qty_ordered
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    order_detail ON pizzas.pizza_id = order_detail.pizza_id
GROUP BY category
ORDER BY qty_ordered DESC
;
```

| category | qty_ordered |
|---|---|
| Classic | 14888 |
| Supreme | 11987 |
| Veggie | 11649 |
| Chicken | 11050 |

# Group the orders by date and calc the avg number of pizzas per day

```
SELECT
    ROUND(AVG(qty_ordered), 0) AS avg_pizza_odr_per_day
FROM
    (SELECT
        order_date AS date, SUM(qty) AS qty_ordered
    FROM
        orders
    JOIN order_detail ON orders.order_id = order_detail.order_id
    GROUP BY date) AS data
;
```

| avg_pizza_odr_per_day |
| --- |
| 138 |

# Top 3 most ordered pizza types based on revenue

```sql
SELECT
    name, SUM(qty * price) AS revenue
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    order_detail ON pizzas.pizza_id = order_detail.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 |

# Calculate the % contribution of each pizza type to total revenue

```
SELECT
    category,
    ROUND(100 * (SUM(price * qty) / (SELECT
                    SUM(qty * price) AS total_sales
                FROM
                    order_detail
                        JOIN
                    pizzas ON order_detail.pizza_id = pizzas.pizza_id)),
            2) AS perc_contribution
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    order_detail ON pizzas.pizza_id = order_detail.pizza_id
GROUP BY category
;
```

| | category | perc_contribution |
|---|---|---|
| ▶ | Classic | 26.91 |
| | Veggie | 23.68 |
| | Supreme | 25.46 |
| | Chicken | 23.96 |

# ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME

```
select order_date,sum(revenue) over(order by order_date)from(
select order_date  ,sum(qty*price) as revenue
from orders
join order_detail
on orders.order_id=order_detail.order_id
join pizzas
on order_detail.pizza_id = pizzas.pizza_id
group by order_date
order by order_date)as cum_revenue
;
```

| order_date | sum(revenue) over(ord order_date) |
|---|---|
| 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

```sql
select name,rn from
(select category,name,revenue,( rank() over(partition by category order by revenue desc )) as rn from(
select category,name ,sum(qty*price) as revenue
from pizza_types
join pizzas
on pizza_types.pizza_type_id=pizzas.pizza_type_id
join order_detail
on pizzas.pizza_id =order_detail.pizza_id
group by category,name) as a)as b
where rn<=3
;
```

| name | rn |
|---|---|
| The Thai Chicken Pizza | 1 |
| The Barbecue Chicken Pizza | 2 |
| The California Chicken Pizza | 3 |
| The Classic Deluxe Pizza | 1 |
| The Hawaiian Pizza | 2 |
| The Pepperoni Pizza | 3 |
| The Spicy Italian Pizza | 1 |
| The Italian Supreme Pizza | 2 |
| The Sicilian Pizza | 3 |
| The Four Cheese Pizza | 1 |
| The Mexicana Pizza | 2 |