SQL Project:Analyzing pizza Hut data sales

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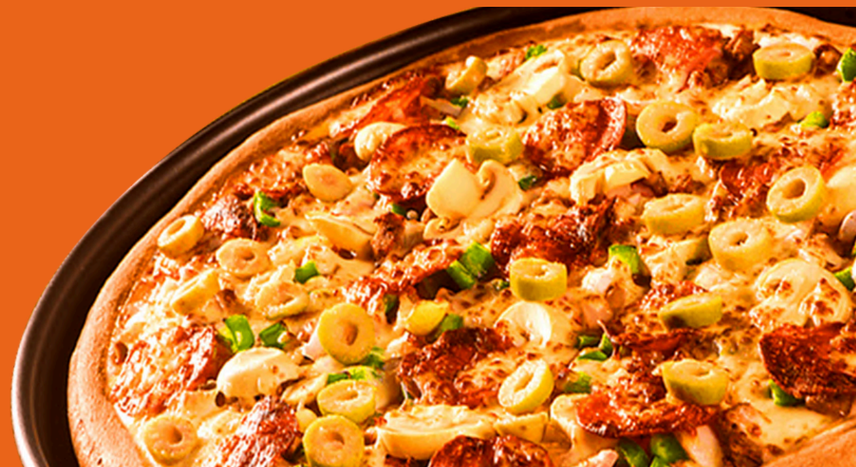

SQL Project:Analyzing Pizza Hut data sales

Objective: Demonstrate SQL skills by analyzing simulated Pizza Hut sales data, focusing on trends, popular categories, and revenue contributions

Data Source

- A simulated dataset, designed to reflect real-world sales scenarios, including tables like Orders, Pizzas, and Customers.

Scope:

The project features 13 key SQL queries that explore different aspects of Pizza Hut’s sales performance

Company name:

"Pizza Hut" is used to add a realistic context to the analysis

Basic:

Retrieve the total number of orders placed.

```
-- Retrieve the total number of orders placed.

select count(order_id) as total_orders from orders;
```

Result Grid

	total_orders
▶	21350

Calculate the total revenue generated from pizza sales.

```
select
round(sum(order_details.quanity * pizzas.price),2) as total_revenue
from order_details
natural join pizzas
```

Result Grid

total_revenue
817860.05

Identify the highest-priced pizza.

```sql
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 R

	name	price
▶	The Greek Pizza	35.95

Identify the most common pizza size ordered.

```
select pizzas.size,sum(order_details.order_details_id) as order_count
from pizzas
natural join order_details
group by pizzas.size
order by order_count desc
```

Result Grid

size	order_count
L	449383379
M	374739224
S	344360774
XL	12852430
XXL	640703

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

```sql
select pizza_types.name,sum(order_details.quanity) 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

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

```
select pizza_types.category,
sum(order_details.quanity) as quantity
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 pizza_types.category
order by quantity desc
```

Result Grid

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)
```

Result Grid

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

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

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

Result Grid | Filter Ro

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.

```sql
select round(avg(quantity),0) as avg_pizza_ordered_per_day
from
(select orders.order_date,sum(order_details.quanity) as quantity
from orders natural join order_details
group by orders.order_date) as order_quanity;
```

Result Grid | Filter Rows:

	avg_pizza_ordered_per_day
▶	138

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

```sql
select pizza_types.name,
sum(order_details.quanity * 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

Advance:

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

```
    WITH TotalSalesCTE AS (
    SELECT
        ROUND(SUM(order_details.quanity * pizzas.price), 2) AS total_sales
    FROM
        order_details
        JOIN pizzas ON pizzas.pizza_id = order_details.pizza_id
)
SELECT
    pizza_types.category,
    ROUND(SUM(order_details.quanity * pizzas.price) / (SELECT total_sales FROM TotalSalesCTE) * 100, 2) AS revenue
FROM
    pizza_types
    JOIN pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    NATURAL JOIN order_details
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

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.quanity*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	2713.8500000000004
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

more 120 rows

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

```sql
select name,category,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.quanity*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
```

Result Grid | Filter Rows: | Export:

name	category	revenue
The Barbecue Chicken Pizza	Chicken	42768
The California Chicken Pizza	Chicken	41409.5
The Classic Deluxe Pizza	Classic	38180.5
The Five Cheese Pizza	Veggie	26066.5
The Four Cheese Pizza	Veggie	32265.70000000065
The Hawaiian Pizza	Classic	32273.25
The Italian Supreme Pizza	Supreme	33476.75
The Mexicana Pizza	Veggie	26780.75
The Pepperoni Pizza	Classic	30161.75
The Sicilian Pizza	Supreme	30940.5
The Spicy Italian Pizza	Supreme	34831.25
The Thai Chicken Pizza	Chicken	43434.25