

Project presentation

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Summary

In this Project, I have utilized SQL Queries to solve the questions related to Pizza Sales using MySQL DBMS



DATASET SCHEMA

order_details_id	order_id	pizza_id	quantity
1	1	hawaiian_m	1
2	2	classic_dlx_m	1

01. Order Details

order_id	date	time
1	01-01-2015	11:38:36
2	01-01-2015	11:57:40

02. Orders

pizza_type_id	name	category	ingredients
bbq_ckn	The BB Chicken Pizza	Chicken	Green Peppers, Tomatoes
cali_ckn	The California Chicken Pizza	Chicken	Artichoke, Spinach

03. pizza_types

pizza_id	pizza_type_id	size	price
bbq_ckn_s	bbq_ckn	S	12.75
bbq_ckn_m	bbq_ckn	M	16.75

04. pizzas

Retrieve the total number of orders placed

```
-- Retrieve the total number of orders placed.  
  
select count(*) as Total_orders  
from orders
```

Result Grid	
	Total_orders
▶	21350

Calculate the total revenue generated from pizza sales

```
select round(sum(od.quantity*pi.price),2) as Total_revenue  
from pizzas pi join order_details od  
on pi.pizza_id = od.pizza_id
```

Result Grid	
	Total_revenue
▶	817860.05

Identify the highest-priced pizza

```
select pt.name, pi.price  
from pizza_types pt join pizzas pi  
on pt.pizza_type_id = pi.pizza_type_id  
order by pi.price desc limit 1;
```

Result Grid | Filter Rows:

	name	price
▶	The Greek Pizza	35.95

Identify the most common pizza size ordered

```
select pi.size, count(od.order_details_id) as count  
from pizzas pi join order_details od  
on pi.pizza_id = od.pizza_id  
group by pi.size;
```

	size	count
▶	M	15385
	L	18526
	S	14137
	XL	544
	XXL	28

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

```
SELECT pt.name AS pizza_name, SUM(od.quantity) AS quantity
FROM pizza_types AS pt
JOIN pizzas AS pi ON pt.pizza_type_id = pi.pizza_type_id
JOIN order_details AS od ON od.pizza_id = pi.pizza_id
GROUP BY pt.name
ORDER BY quantity DESC
LIMIT 5;
```

	pizza_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

Find the total quantity of each pizza category ordered

```
select pt.category as category, sum(od.quantity) as Total_Quantity  
from order_details od join pizzas pi  
on od.pizza_id = pi.pizza_id  
join pizza_types pt on pt.pizza_type_id = pi.pizza_type_id  
group by category  
order by Total_Quantity desc;
```

Result Grid		Filter Rows
	category	Total_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 count  
from orders  
group by hour;
```

Result Grid		
	hour	count
▶	11	1231
	12	2520
	13	2455
	14	1472
	15	1468
	16	1920
	17	2336

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

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

```
select round(avg(quantity),0) as Avg_Quantity  
from (select o.order_date as order_date , sum(od.quantity) as quantity  
      from orders o join order_details od  
     on o.order_id = od.order_id  
   group by order_date) as order_quantity
```

Result Grid	
	Avg_Quantity
▶	138

Determine the top 3 most ordered pizza types based on revenue

```
select pt.name as name, sum(od.quantity*pi.price) as Revenue  
from pizza_types pt join pizzas pi  
on pt.pizza_type_id = pi.pizza_type_id  
join order_details od  
on od.pizza_id = pi.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 percentage contribution of each pizza type to total revenue

```
with revenue as (SELECT
                    ROUND(SUM(od.quantity * pi.price), 2) rev
                 FROM pizzas pi JOIN order_details od
                   ON pi.pizza_id = od.pizza_id)

SELECT pt.category AS category,
       ROUND((SUM(od.quantity * pi.price)) * 100 / (select rev from revenue) ,2) AS Total_Revenue
  FROM pizza_types pt JOIN pizzas pi
    ON pt.pizza_type_id = pi.pizza_type_id
   JOIN order_details od
     ON od.pizza_id = pi.pizza_id
  GROUP BY category
 ORDER BY Total_Revenue DESC;
```

	category	Total_Revenue
▶	Classic	26.91
	Supreme	25.46
	Chicken	23.96
	Veggie	23.68

Analyze the cumulative revenue generated over time

```
select Order_Date, round(sum(revenue) over(order by Order_Date),2) as CUM_Revenue  
from (select o.order_date as Order_Date , sum(od.quantity*pi.price) as revenue  
      from order_details od join pizzas pi  
      on od.pizza_id = pi.pizza_id  
      join orders o  
      on o.order_id = od.order_id  
      group by Order_Date) as sales
```

Result Grid | Filter Rows:

	Order_Date	CUM_Revenue
▶	2015-01-01	2713.85
	2015-01-02	5445.75
	2015-01-03	8108.15
	2015-01-04	9863.6
	2015-01-05	11929.55
	2015-01-06	14080.5
...		

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

```
select category, name, revenue
from (select *, rank() over (partition by category order by revenue ) as rn
      from (select pt.category as category, pt.name as name, sum(od.quantity*pi.price) as revenue
            from pizza_types pt join pizzas pi
            on pt.pizza_type_id = pi.pizza_type_id
            join order_details od
            on od.pizza_id = pi.pizza_id
            group by category, name) as a) as b
where rn<=3;
```

Result Grid | Filter Rows: Export:

	category	name	revenue
▶	Chicken	The Chicken Pesto Pizza	16701.75
	Chicken	The Chicken Alfredo Pizza	16900.25
	Chicken	The Southwest Chicken Pizza	34705.75
	Classic	The Pepperoni, Mushroom, and Peppers Pizza	18834.5
	Classic	The Big Meat Pizza	22968
	

**Thank you
very much!**