COMPREHENSIVE DATA ANALYSIS OF:

Dominos Pizza

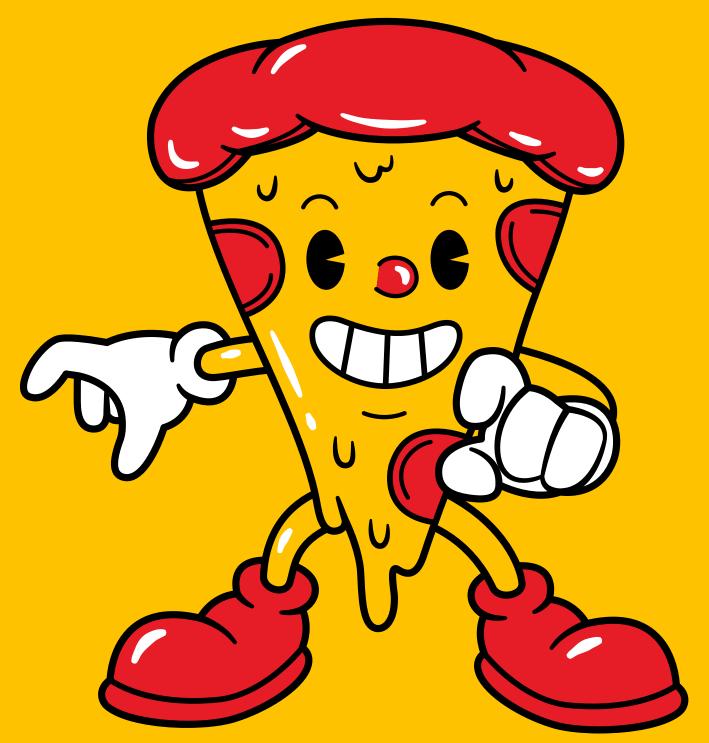


Using MySQL





PROJECT INTRODUCTION

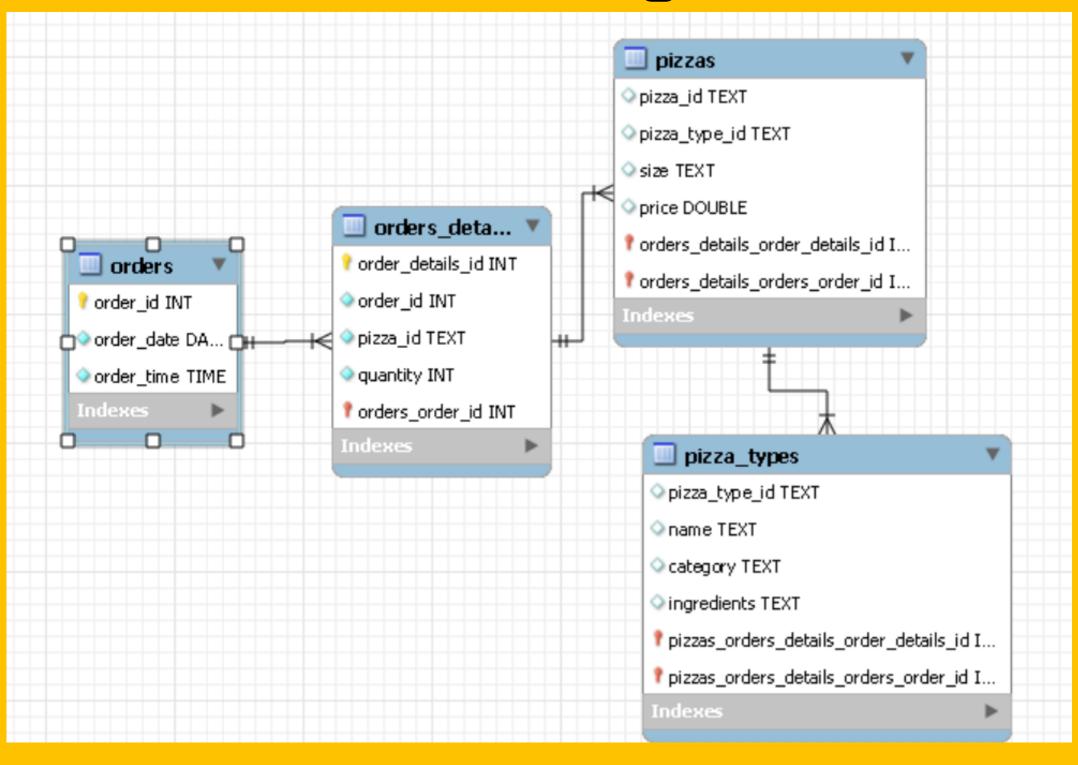


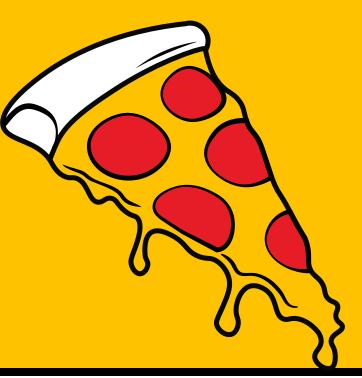
This project focuses on analyzing pizza sales data using SQL to derive valuable business insights. By querying and aggregating data from a structured database, the goal is to uncover key trends such as best-selling pizzas, revenue patterns, and customer preferences.

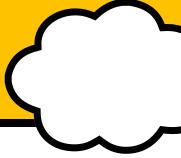
The analysis helps identify performance metrics that can support data-driven decision-making for inventory management, marketing strategies, and operational improvements.

Sheelu Singh

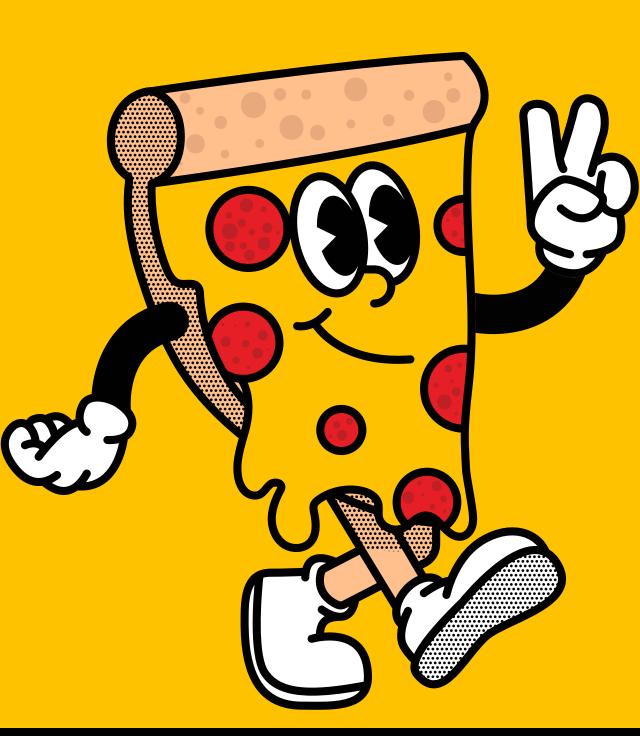
DATABASE SETUP [ER DIAGRAM]





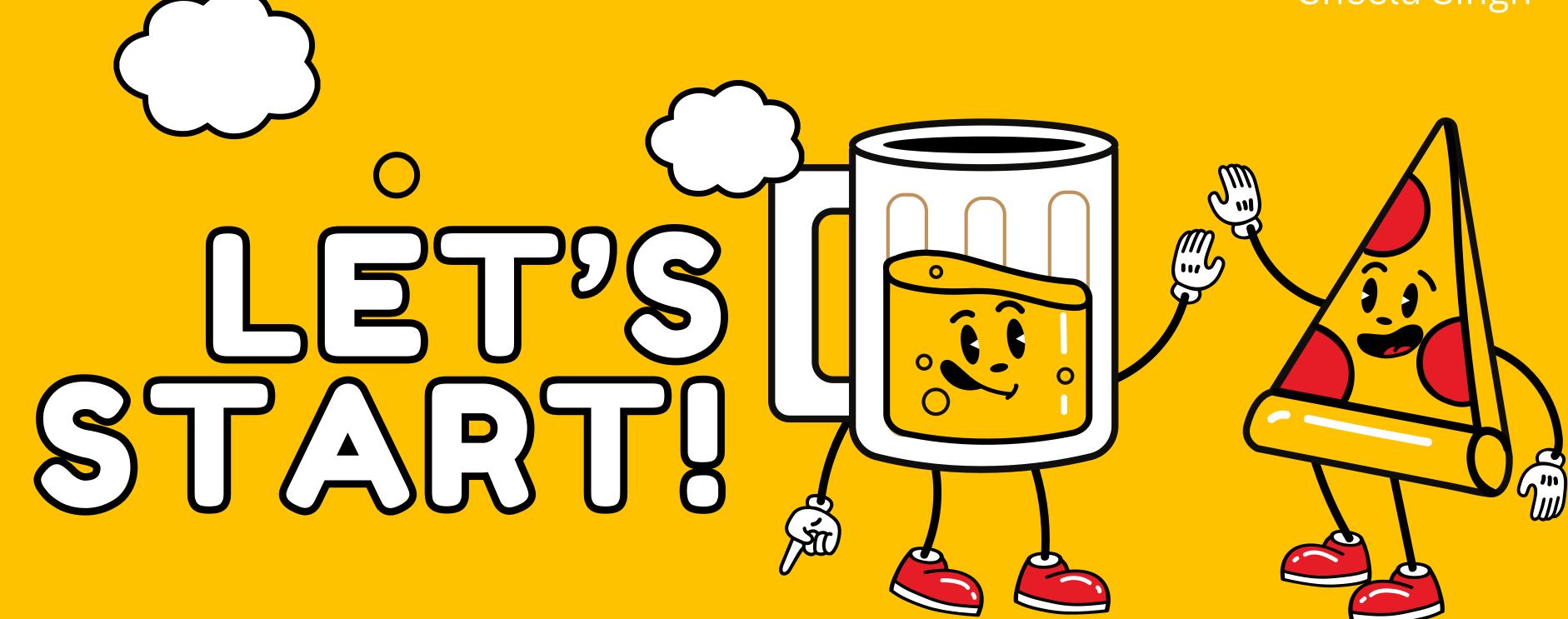


TOPICS COVERED IN THIS PROJECT:

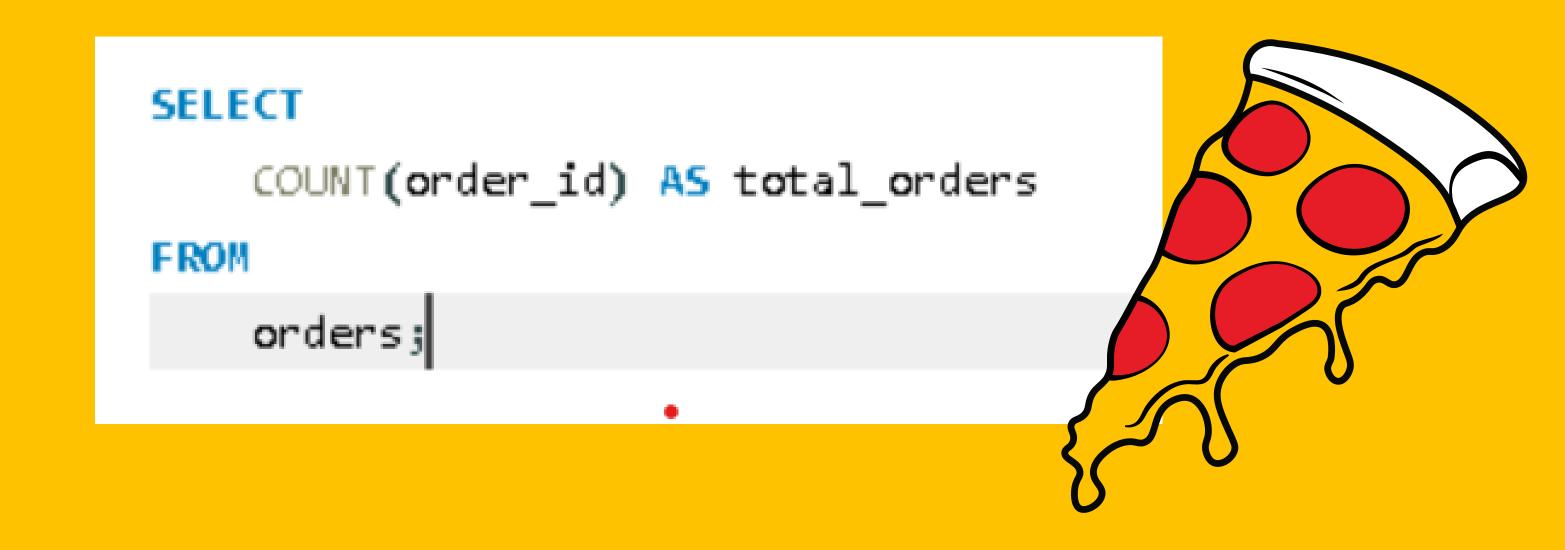


- Database Creation and Table Design
- Data Retrieval and Filtering (Basics SQL)
- Aggregations and Grouping
- Joining Tables
- Window Functions
- Date and Time Functions
- Conditional Logic
- Subqueries
- Ranking and Ordering
- Data Segmentation (CASE STATEMENT)

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RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.



CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

```
SELECT

ROUND(SUM(p.price * o.quantity), 2) AS total_revenue

FROM

orders_details AS o

JOIN

pizzas AS p ON o.pizza_id = p.pizza_id;
```

IDENTIFY THE HIGHEST-PRICED PIZZA.

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

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

```
SELECT

ROUND(SUM(p.price * o.quantity), 2) AS total_revenue

FROM

orders_details AS o

JOIN

pizzas AS p ON o.pizza_id = p.pizza_id;
```

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED

```
SELECT
    p.size, COUNT(o.order_details_id) AS total_orders
FROM
    orders_details AS o
        JOIN
    pizzas AS p ON o.pizza_id = p.pizza_id
GROUP BY p.size
ORDER BY total_orders DESC;
```

LIST THE TOP 5 MOST ORDERED PIZZA TYPES ALONG WITH THEIR QUANTITIES.

```
SELECT
    pp.name, SUM(o.quantity) A5 quantities
FROM
    pizza_types A5 pp
        JOIN
    pizzas AS p ON pp.pizza_type_id = p.pizza_type_id
        JOIN
    orders_details A5 o ON o.pizza_id = p.pizza_id
GROUP BY pp.name
ORDER BY quantities DESC
LIMIT 5;
```

JOIN THE NECESSARY TABLES TO FIND THE TOTAL QUANTITY OF EACH PIZZA CATEGORY ORDERED.

```
SELECT
    p.category, SUM(o.quantity) A5 total_quantity
FROM
    pizza_types A5 p
        JOIN
    pizzas AS a ON p.pizza_type_id = a.pizza_type_id
        JOIN
    orders_details AS o ON o.pizza_id = a.pizza_id ,
GROUP BY p.category
ORDER BY total_quantity DESC;
```

GROUP THE ORDERS BY DATE AND CALCULATE THE AVERAGE NUMBER OF PIZZAS ORDERED PER DAY.

```
SELECT
    ROUND(AVG(total_quantity))
FROM
    (SELECT
        o.order_date, SUM(d.quantity) A5 total_quantity
    FROM
        orders AS o
    JOIN orders_details A5 d ON o.order_id = d.order_id
    GROUP BY o.order_date) AS avg_number
```

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE.

```
SELECT
    t.name, SUM(o.quantity * p.price) A5 total_price
FROM
    pizzas AS p
        JOIN
    orders_details A5 o ON p.pizza_id = o.pizza_id
        JOIN
    pizza_types AS t ON p.pizza_type_id = t.pizza_type_id
GROUP BY t.name
ORDER BY total_price desc
limit 3;
```

CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE.

```
SELECT
   t.category,
    ROUND(SUM(o.quantity * p.price) / (SELECT
                    ROUND(SUM(o.quantity * p.price), 2) AS total_sales
                FROM
                    pizzas AS p
                        JOIN
                    orders_details AS o ON p.pizza_id = o.pizza_id) * 100,
            2) AS revenue
FROM
    orders_details AS o
        JOIN
    pizzas AS p ON o.pizza_id = p.pizza_id
        JOIN
    pizza_types AS t ON p.pizza_type_id = t.pizza_type_id
GROUP BY t.category
ORDER BY revenue DESC;
```

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, sum(d.quantity * p.price) as revenue
from orders as o join orders_details as d on o.order_id = d.order_id
join pizzas as p on p.pizza_id = d.pizza_id
group by o.order_date) as sales;
```

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE FOR EACH PIZZA CATEGORY.

```
select name, category, Round(revenue, 2)
from
(select name, category, revenue,
rank() over(partition by category order by revenue) as rn
from
(select p.name, p.category, sum(o.quantity * pp.price) as revenue
from pizza_types as p join pizzas as pp
on p.pizza_type_id = pp.pizza_type_id
join orders_details as o
on o.pizza_id = pp.pizza_id
group by p.name, p.category) as a) as b
where rn <= 3;
```

CONCLUSION

This project highlights my ability to handle complex SQL queries and provides solutions to real-world business problems in the context of a food service like Dominos. The approach taken here demonstrates a structured problemsolving methodology, data manipulation skills, and the ability to derive actionable insights from data.

