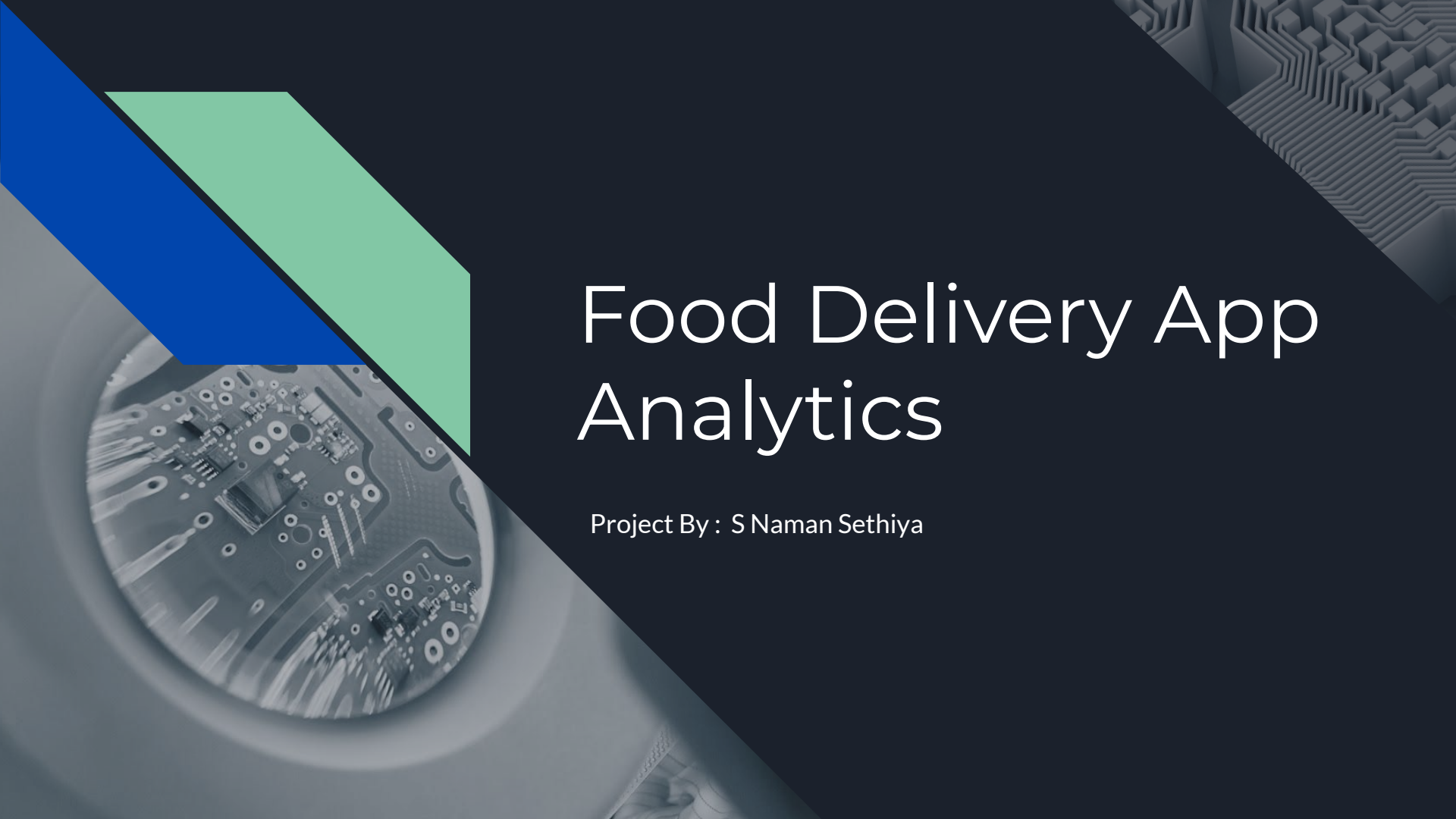

Food Delivery App Analytics

Project By : S Naman Sethiya

TABLES :

1. Delivery Partners

partner_id	partner_name
1	Suresh
2	Amit
3	Lokesh
4	Kartik
5	Gyandeep

2. Restaurants

r_id	r_name	cuisine
1	dominos	Italian
2	kfc	American
3	box8	North Indian
4	Dosa Plaza	South Indian
5	China Town	Chinese

TABLES :

3. Food

f_id	f_name	type
1	Non-veg Pizza	Non-veg
2	Veg Pizza	Veg
3	Choco Lava cake	Veg
4	Chicken Wings	Non-veg
5	Chicken Popcorn	Non-veg
6	Rice Meal	Veg
7	Roti meal	Veg
8	Masala Dosa	Veg
9	Rava Idli	Veg
10	Schezwan Noodles	Veg
11	Veg Manchurian	Veg

TABLES :

5. Orders

order_id	user_id	r_id	amount	date	partner_id	delivery_time	delivery_rating	restaurant_rating
1001	1	1	550	2022-05-10	1	25	5	3
1002	1	2	415	2022-05-26	1	19	5	2
1003	1	3	240	2022-06-15	5	29	4	
1004	1	3	240	2022-06-29	4	42	3	5
1005	1	3	220	2022-07-10	1	58	1	4
1006	2	1	950	2022-06-10	2	16	5	
1007	2	2	530	2022-06-23	3	60	1	5
1008	2	3	240	2022-07-07	5	33	4	5
1009	2	4	300	2022-07-17	4	41	1	
1010	2	5	650	2022-07-31	1	67	1	4
1011	3	1	450	2022-05-10	2	25	3	1
1012	3	4	180	2022-05-20	5	33	4	1
1013	3	2	230	2022-05-30	4	45	3	
1014	3	2	230	2022-06-11	2	55	1	2
1015	3	2	230	2022-06-22	3	21	5	
1016	4	4	300	2022-05-15	3	31	5	5
1017	4	4	300	2022-05-30	1	50	1	
1018	4	4	400	2022-06-15	2	40	3	5
1019	4	5	400	2022-06-30	1	70	2	4
1020	4	5	400	2022-07-15	3	26	5	3
1021	5	1	550	2022-07-01	5	22	2	
1022	5	1	550	2022-07-08	1	34	5	1
1023	5	2	645	2022-07-15	4	38	5	1
1024	5	2	645	2022-07-21	2	58	2	1
1025	5	2	645	2022-07-28	2	44	4	

6. Order Details

id	order_id	f_id
1	1001	1
2	1001	3
3	1002	4
4	1002	3
5	1003	6
6	1003	3
7	1004	6
8	1004	3
9	1005	7
10	1005	3
11	1006	1
12	1006	2
13	1006	3
14	1007	4
15	1007	3
16	1008	6
17	1008	3
18	1009	8
19	1009	9
20	1010	10
21	1010	11
22	1010	6
23	1011	1
24	1012	8
25	1013	4
26	1014	4
27	1015	4
28	1016	8
29	1016	9
30	1017	8
31	1017	9
32	1018	10
33	1018	11
34	1019	10
35	1019	11
36	1020	10
37	1020	11
38	1021	1
39	1021	3
40	1022	1
41	1022	3
42	1023	3
43	1023	4
44	1023	5
45	1024	3
46	1024	4
47	1024	5
48	1025	3
49	1025	4
50	1025	5

TABLES :

7. Menu

menu_id	r_id	f_id	price
1	1	1	450
2	1	2	400
3	1	3	100
4	2	3	115
5	2	4	230
6	2	5	300
7	3	3	80
8	3	6	160
9	3	7	140
10	4	6	230
11	4	8	180
12	4	9	120
13	5	6	250
14	5	10	220
15	5	11	180

8. Users

user_id	name	email	password
1	Nitish	nitish@gmail.com	p252h
2	Khushboo	khushboo@gmail.com	hxn9b
3	Vartika	vartika@gmail.com	9hu7j
4	Ankit	ankit@gmail.com	1kko3
5	Neha	neha@gmail.com	3i7qm
6	Anupama	anupama@gmail.com	46rdw2
7	Rishabh	rishabh@gmail.com	4sw123

1. Customers who have never ordered

Question : Write a query listing the names of customers who have never ordered food.

Query :

```
SELECT name FROM
users
WHERE user_id NOT IN (SELECT user_id FROM orders);
```

Output :

```
+---------+
| name    |
+---------+
| Anupama |
| Rishabh |
+---------+
```

2. Average Price Per Dish

Question : Write a query listing the food item and its corresponding average price for all the food items.

Query :

```
SELECT f.f_name AS 'Item', AVG(price) AS 'Average Price'
FROM menu m
JOIN food f
ON m.f_id = f.f_id
GROUP BY m.f_id;
```

Output :

Item	Average Price
Non-veg Pizza	450
Veg Pizza	400
Choco Lava cake	98.33333333333333
Chicken Wings	230
Chicken Popcorn	300
Rice Meal	213.33333333333334
Roti meal	140
Masala Dosa	180
Rava Idli	120
Schezwan Noodles	220
Veg Manchurian	180

3. Find the Top Restaurant in Terms of the Number of Orders for a Given Month

Question : Write a query to identify the restaurant with the highest number of orders for a specific month, including its name.

Query :

```
SELECT r.r_name AS 'Restaurant', COUNT(*) AS 'Total Orders'
FROM orders o
JOIN restaurants r
ON o.r_id=r.r_id
WHERE MONTHNAME(date) LIKE 'May'
GROUP BY o.r_id
ORDER BY COUNT(*) DESC LIMIT 1;
```

Output :

Restaurant	Total Orders
Dosa Plaza	3

4. Restaurants with Monthly Sales Greater Than X

Question : Write a query to list the names of restaurants with monthly sales exceeding a specified amount.

Query :

```
SELECT r.r_name AS 'Restaurant', SUM(amount) AS 'revenue'
FROM orders o
JOIN restaurants r
ON o.r_id = r.r_id
WHERE MONTHNAME(date) LIKE 'June'
GROUP BY o.r_id
HAVING revenue>500;
```

Output :

```
+------------+---------+
| Restaurant | revenue |
+------------+---------+
| dominos    |     950 |
| kfc        |     990 |
+------------+---------+
```

5. All Orders for a Particular Customer in a Particular Date Range

Question : Write a query to show the details of all orders placed by a specific customer within a given date range, including order dates and dish details

Query :

```
SELECT o.order_id AS 'ORDER ID',r.r_name AS 'Restaurant',f.f_name AS 'Food'
FROM orders o
JOIN restaurants r
ON r.r_id = o.r_id
JOIN order_details od
ON o.order_id = od.order_id
JOIN food f
ON f.f_id = od.f_id
WHERE user_id = (SELECT user_id FROM users WHERE name LIKE 'Ankit') AND (date > '2022-06-10' AND date < '2022-07-10') ORDER BY Restaurant;
```

Output :

ORDER ID	Restaurant	Food
1019	China Town	Schezwan Noodles
1019	China Town	Veg Manchurian
1018	Dosa Plaza	Schezwan Noodles
1018	Dosa Plaza	Veg Manchurian

6. Find Restaurants with the Maximum Number of Repeated Customers

Question : Write a query to find the restaurants that have the most repeated customers, including their names.

Query :

```
 SELECT r.r_name AS 'Restaurant', COUNT(*) AS 'Loyal_Customers'
FROM (
    SELECT r_id,user_id,COUNT(*) AS 'visits'
    FROM orders
    GROUP BY r_id,user_id
    HAVING visits > 1
) t
JOIN restaurants r
ON r.r_id = t.r_id
GROUP BY t.r_id
ORDER BY Loyal_Customers DESC LIMIT 1;
```

Output :

Restaurant	Loyal_Customers
kfc	2

7. Month-over-Month Revenue Growth of the App

Question : Write a query to provide the month-over-month revenue growth for the food delivery app, including the percentage change in revenue

Query :

```
SELECT month, ((revenue - prev)/prev)*100 AS 'Growth Percentage' FROM (
         WITH sales AS
         (
                  SELECT MONTHNAME(date) AS 'Month', SUM(amount) AS 'Revenue'
                  FROM orders
                  GROUP BY month
                  ORDER BY MONTH(date)
         )
SELECT month,revenue,LAG(revenue,1) OVER(ORDER BY revenue) AS prev FROM sales) t;
```

Output :

month	Growth Percentage
May	NULL
June	32.78350515463917
July	50.465838509316775

8. Customer - Favorite Food

Question : Write a query to determine each customer's favorite food based on their most frequently ordered dish.

Query :

```
WITH temp AS
(
     SELECT o.user_id,od.f_id,COUNT(*) AS 'Frequency'
     FROM orders o
     JOIN order_details od
     ON o.order_id = od.order_id
     GROUP BY o.user_id,od.f_id
)
SELECT u.name AS 'Name',f.f_name AS 'Favourite Item' FROM
temp t1
JOIN users u
ON u.user_id = t1.user_id
JOIN food f
ON f.f_id = t1.f_id
WHERE t1.frequency = (
     SELECT MAX(frequency)
     FROM temp t2
     WHERE t2.user_id=t1.user_id
);
```

Output :

Name	Favourite Item
Nitish	Choco Lava cake
Khushboo	Choco Lava cake
Vartika	Chicken Wings
Ankit	Schezwan Noodles
Ankit	Veg Manchurian
Neha	Choco Lava cake