Zomato Analytics

Project description:

Zomato is one of the most useful apps for foodies who want to taste the best cuisines of ever. It is a major food delivery aggregator with a markdown cap of 1 Trillion INR. In this project, lets perform some data exploration on dummy Zomato dataset to find some real business metrics

Approach:

Performed some DDL queries on MySQL workbench to create tables and to insert values. Created tables like sales, users, product, gold user signup. After loading the sample dataset using DDL commands in workbench, I started to perform Basic and some Advanced SQL queries to retrieve the data as per business requirements.

Tech stacks used:

MySQL workbench 8.0 CE, Tableau

Task 1:

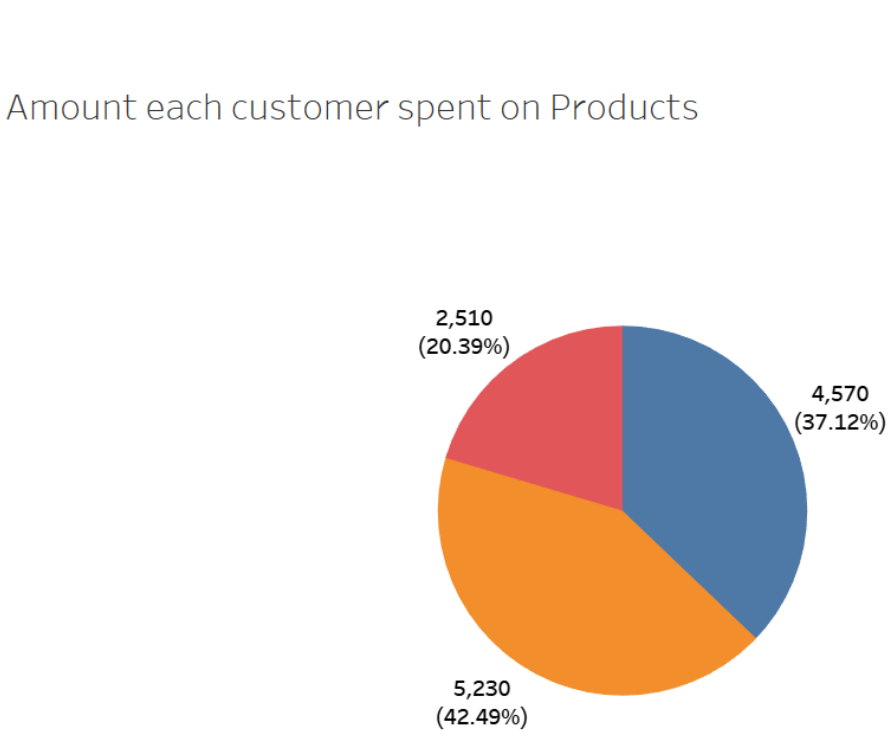
To find the amount each customer spent on Zomato

Query:

```
USE zomato;

SELECT n.userid,m.product_id,SUM(m.price) AS total_amount

FROM sales n

JOIN product m ON m.product_id=n.product_id

GROUP BY n.userid

ORDER BY SUM(m.price) desc;
```

Result:

	userid	product_id	total_amount
▶	1	2	5230
	3	1	4570
	2	3	2510



Customers spent most no of money for product_2

Task 2:

How many days each customer has visited Zomato?

Query:

```
USE zomato;

SELECT userid,COUNT(DISTINCT created_date) AS total_days

FROM sales

GROUP BY userid;
```

Results:

userid	total_days
1	7
2	4
3	5

Task 3:

What was the first product purchased by each customer?

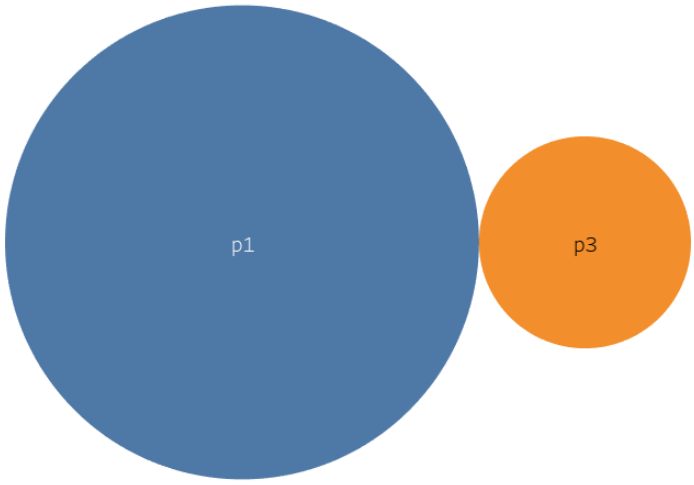
Query:

```
USE zomato;

SELECT * FROM (SELECT m.* ,n.product_name,ROW_NUMBER() OVER(PARTITION BY
m.userid ORDER BY m.created_date) AS rnk

FROM sales m

JOIN product n ON m.product_id=n.product_id) AS r

WHERE rnk=1;
```

Results:

	userid	created_date	product_id	product_name	rnk
▶	1	2016-05-20	3	p3	1
	2	2017-09-24	1	p1	1
	3	2016-11-10	1	p1	1

First product purchased



Task 4:

What is the most purchased item and how many times it was purchased by all the customers?

Query:

```
SELECT userid,product_id,COUNT(product_id) AS  count
FROM sales
GROUP BY product_id
ORDER BY count desc
LIMIT 1;
SELECT userid,COUNT(product_id) AS cnt
FROM sales
WHERE product_id = 2
GROUP BY userid;
```

Results:

userid	product_id	count
1	2	7

userid	cnt
1	3
3	3
2	1

Task 5:

Which is the favourite product of each customer?

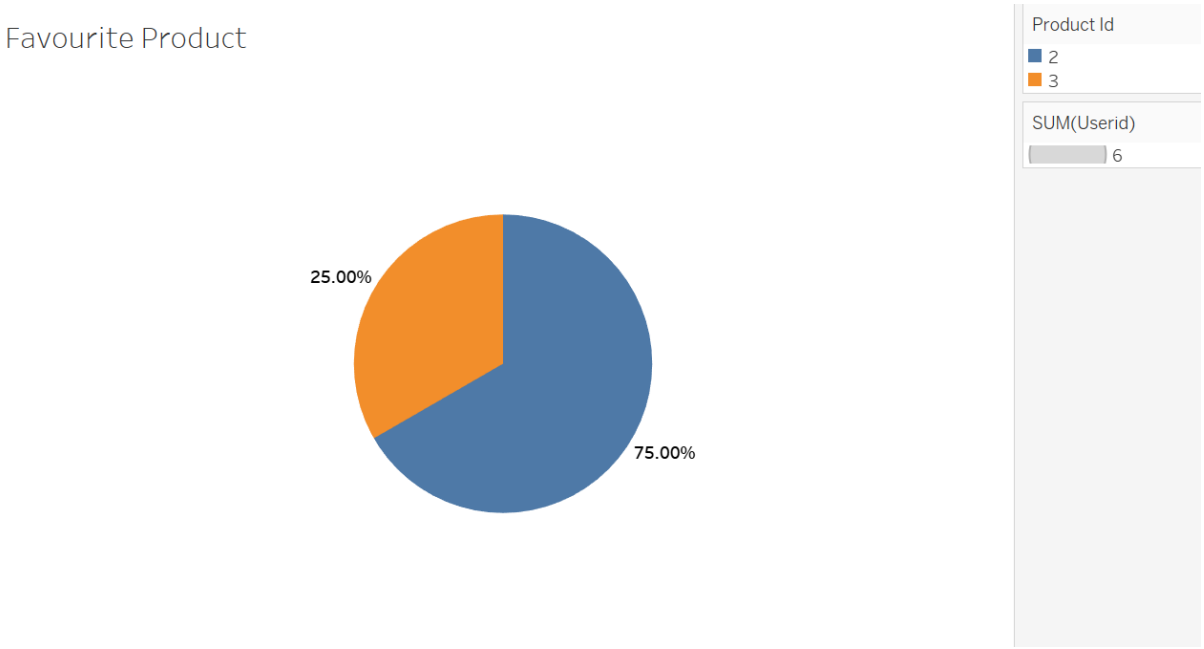
Query:

```
USE zomato;
SELECT * FROM (SELECT *,ROW_NUMBER() OVER(PARTITION BY userid ORDER BY cnt DESC)
AS rnk
FROM
(SELECT userid,product_id,Count(product_id)AS cnt
FROM sales
GROUP BY userid,product_id
ORDER BY userid) AS R) AS c
```

WHERE rnk=1;

Results:

	userid	product_id	cnt	rnk
▶	1	2	3	1
	2	3	2	1
	3	2	3	1



Task 6:

Which item was first purchased by the customer after they became a member?

Query:

```
USE zomato;

SELECT * FROM (SELECT *,ROW_NUMBER() OVER(PARTITION BY m.userid ORDER BY
n.created_date) AS rnk

FROM

(SELECT m.userid,m.gold_signup_date,n.created_date,n.product_id

FROM goldusers_signup m

JOIN sales n ON m.userid=n.userid

WHERE n.created_date>m.gold_signup_date) AS r) AS c

WHERE rnk=1;
```

Results:

	userid	gold_signup_date	created_date	product_id	rnk
▶	1	2017-09-22	2018-03-19	3	1
	3	2017-04-21	2017-12-07	2	1

Task 7:

Which item was purchased by the customer just before he became a member?

Query:

```
USE zomato;

SELECT * FROM (SELECT *,ROW_NUMBER() OVER(PARTITION BY m.userid ORDER BY
n.created_date desc) AS rnk

FROM

(SELECT m.userid,m.gold_signup_date,n.created_date,n.product_id

FROM goldusers_signup m

JOIN sales n ON m.userid=n.userid

WHERE n.created_date<=m.gold_signup_date) AS r) AS c

WHERE rnk=1;
```

Results:

	userid	gold_signup_date	created_date	product_id	rnk
▶	1	2017-09-22	2017-04-19	2	1
	3	2017-04-21	2016-12-20	2	1

Task 8:

What is the total orders and the amount spent before they become a member?

Query:

```
USE zomato;

SELECT userid,SUM(price) AS total_price

FROM

(SELECT c.*,d.price

FROM

(SELECT m.userid,m.gold_signup_date,n.created_date,n.product_id

FROM goldusers_signup m
```

```
JOIN sales n ON m.userid=n.userid
WHERE n.created_date<=m.gold_signup_date)AS c
JOIN product d ON c.product_id=d.product_id) AS h
GROUP BY userid
ORDER BY total_price DESC;
```

Results:

userid	total_price
1	4030
3	2720