PROJECT – ZOMATA

PROJECT OVERVIEW

Streamlit application designed to simplify data management for orders, customers, restaurants, and deliveries. The application will provide valuable insights into order management, customer analytics, delivery optimization, and restaurant performance.

APPROACH

1. Database creation
2. Create tables with required columns and constraints
3. Using faker library to update the data in database for analysis
4. Develop the streamlit app for data updation, addition, deletion
5. Develop the methods to perform query operations
6. Plot the charts in streamlit app for data insights

DATABASE SCHEMA

1.Customer table

Column	Type	Default Value	Nullable	Character Set	Collation	Privileges	Extra
average_rating	decimal(3,1)	0.0	YES			select,insert,update,references	
customer_id	bigint		NO			select,insert,update,references	auto_increment
email	varchar(50)		YES	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
is_premium	tinyint(1)	0	YES			select,insert,update,references	
location	varchar(50)		NO	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
name	varchar(50)		NO	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
phone	varchar(15)		NO	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
preferred_cuisine	varchar(50)		YES	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
signup_date	date		NO			select,insert,update,references	
total_orders	int	0	YES			select,insert,update,references	

2. Restaurant Table

Column	Type	Default Value	Nullable	Character Set	Collation	Privileges	Extra
average_delivery_tim...	int		NO			select,insert,update,references	
contact_number	varchar(15)		NO	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
cuisine_type	varchar(50)		NO	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
is_active	tinyint(1)	1	YES			select,insert,update,references	
location	varchar(50)		NO	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
name	varchar(50)		NO	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
owner_name	varchar(50)		YES	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
rating	decimal(3,1)	0.0	YES			select,insert,update,references	
restaurant_id	bigint		NO			select,insert,update,references	auto_increment
total_orders	int	0	YES			select,insert,update,references	

3. Delivery Person Table

Column	Type	Default Value	Nullable	Character Set	Collation	Privileges	Extra
average_rating	decimal(3,1)	0.0	YES			select,insert,update,references	
contact_number	varchar(15)		NO	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
delivery_person_id	bigint		NO			select,insert,update,references	auto_increment
location	varchar(50)		YES	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
name	varchar(50)		NO	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
total_deliveries	int	0	YES			select,insert,update,references	

4. Orders Table

Column	Type	Default Value	Nullable	Character Set	Collation	Privileges	Extra
customer_id	bigint		NO			select,insert,update,references	
delivery_time	datetime		YES			select,insert,update,references	
discount_applied	decimal(10,2)	0.00	YES			select,insert,update,references	
feedback_rating	decimal(3,1)	0.0	YES			select,insert,update,references	
order_date	datetime		NO			select,insert,update,references	
order_id	bigint		NO			select,insert,update,references	auto_increment
payment_mode	varchar(20)		NO	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
restaurant_id	bigint		NO			select,insert,update,references	
status	varchar(15)		NO	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
total_amount	decimal(10,2)		NO			select,insert,update,references	

5. Delivery Table

Column	Type	Default Value	Nullable	Character Set	Collation	Privileges	Extra
average_delivery_tim...	int		NO			select,insert,update,references	
contact_number	varchar(15)		NO	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
cuisine_type	varchar(50)		NO	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
is_active	tinyint(1)	1	YES			select,insert,update,references	
location	varchar(50)		NO	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
name	varchar(50)		NO	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
owner_name	varchar(50)		YES	utf8mb4	utf8mb4_0900_...	select,insert,update,references	
rating	decimal(3,1)	0.0	YES			select,insert,update,references	
restaurant_id	bigint		NO			select,insert,update,references	auto_increment
total_orders	int	0	YES			select,insert,update,references	

INSTRUCTIONS TO RUN THE PROJECT

1. **CREATE DATABASE**

- Execute the “zomata.sql” file in the mysql. It will create the database and columns

2. **Create the fake data in database**

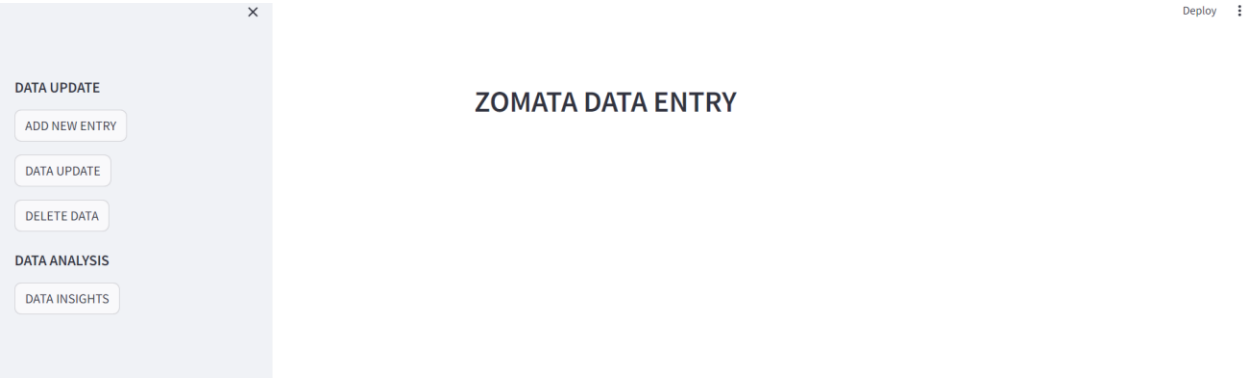
- Execute the “Faker Dataset Generation.ipynb” file to generate the fake data in database.

3. **STREAMLIT APP**

- Open the command prompt on project downloaded folder path and execute this command “streamlit run <file_path>/data_management_and_visualisation.py”
- It will open the streamlit app in browser.

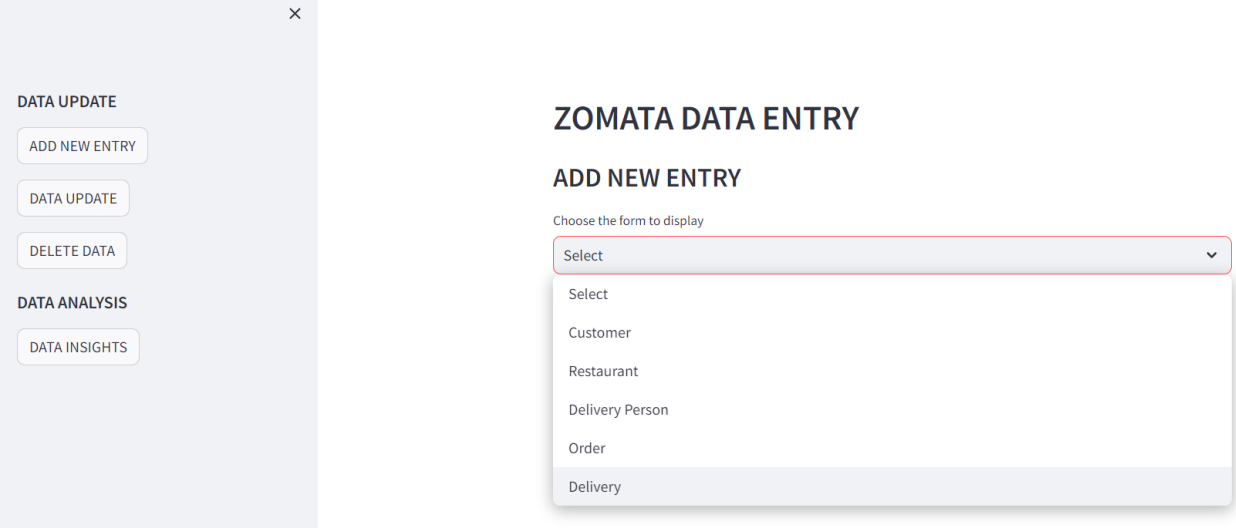
PROJECT DESCRIPTION

1. **FIRST PAGE OF STREAMLIT APP**

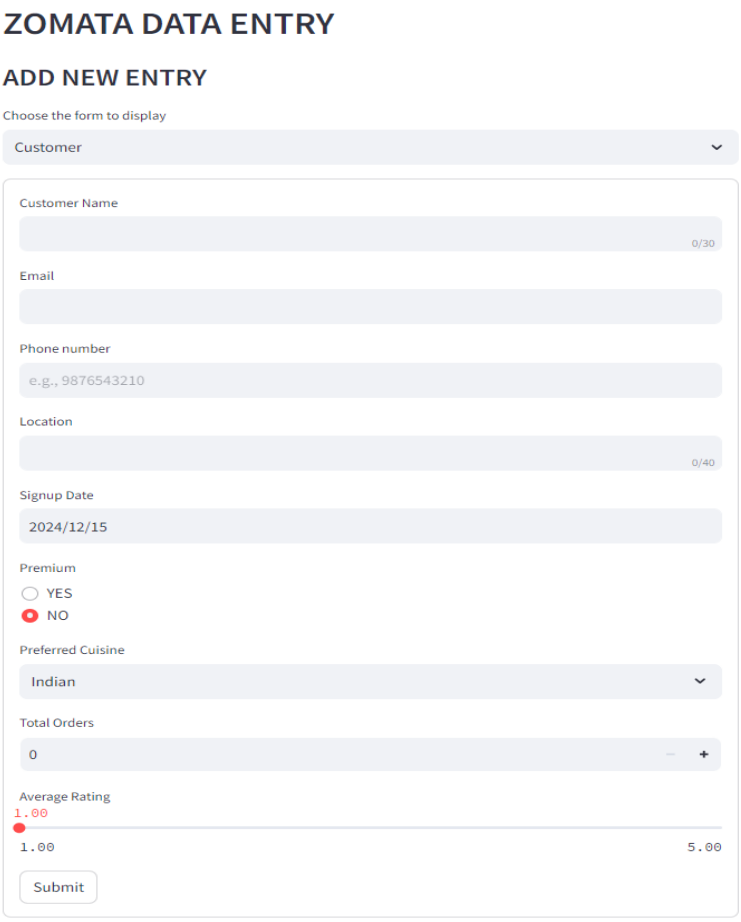


2. ADD NEW ENTRY

2.1. We can select the attribute name to add new data

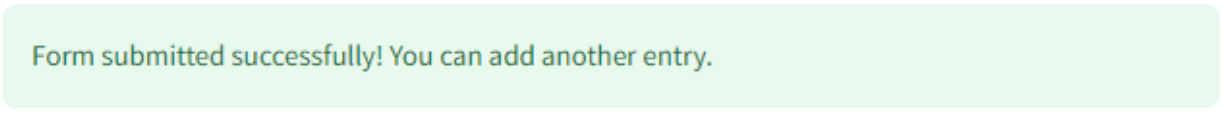


2.2. If we click customer, then below form will be render



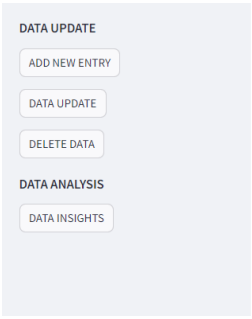
2.3. If we click submit without entering the customer name, then below error will appear.

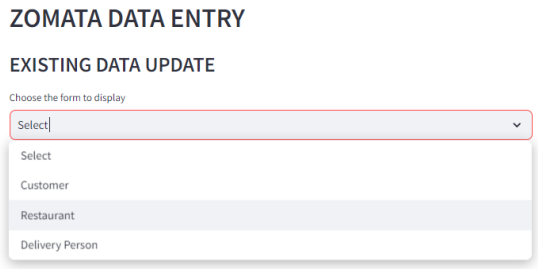
2.4. If the data is successfully updated in DB, the below message will appear.



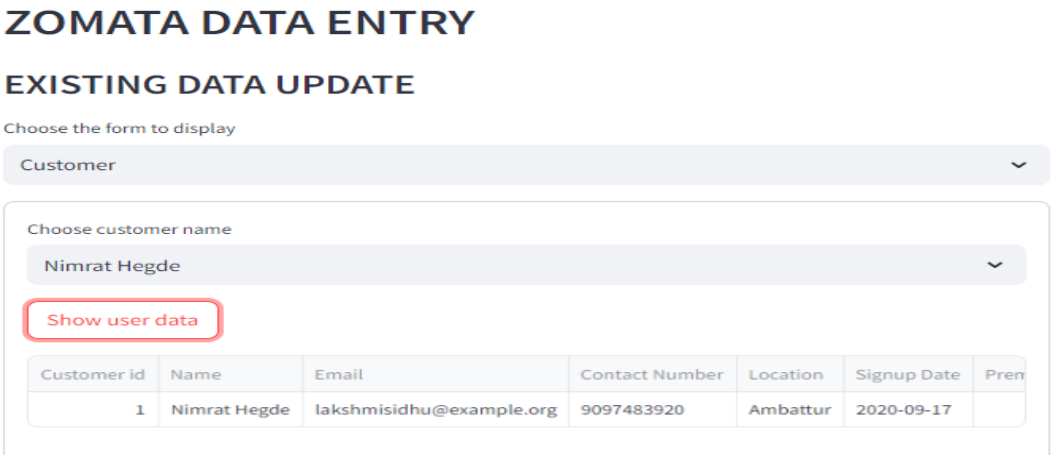
3. UPDATE DATABASE DATA

3.1. We can select the attribute name of database data updation

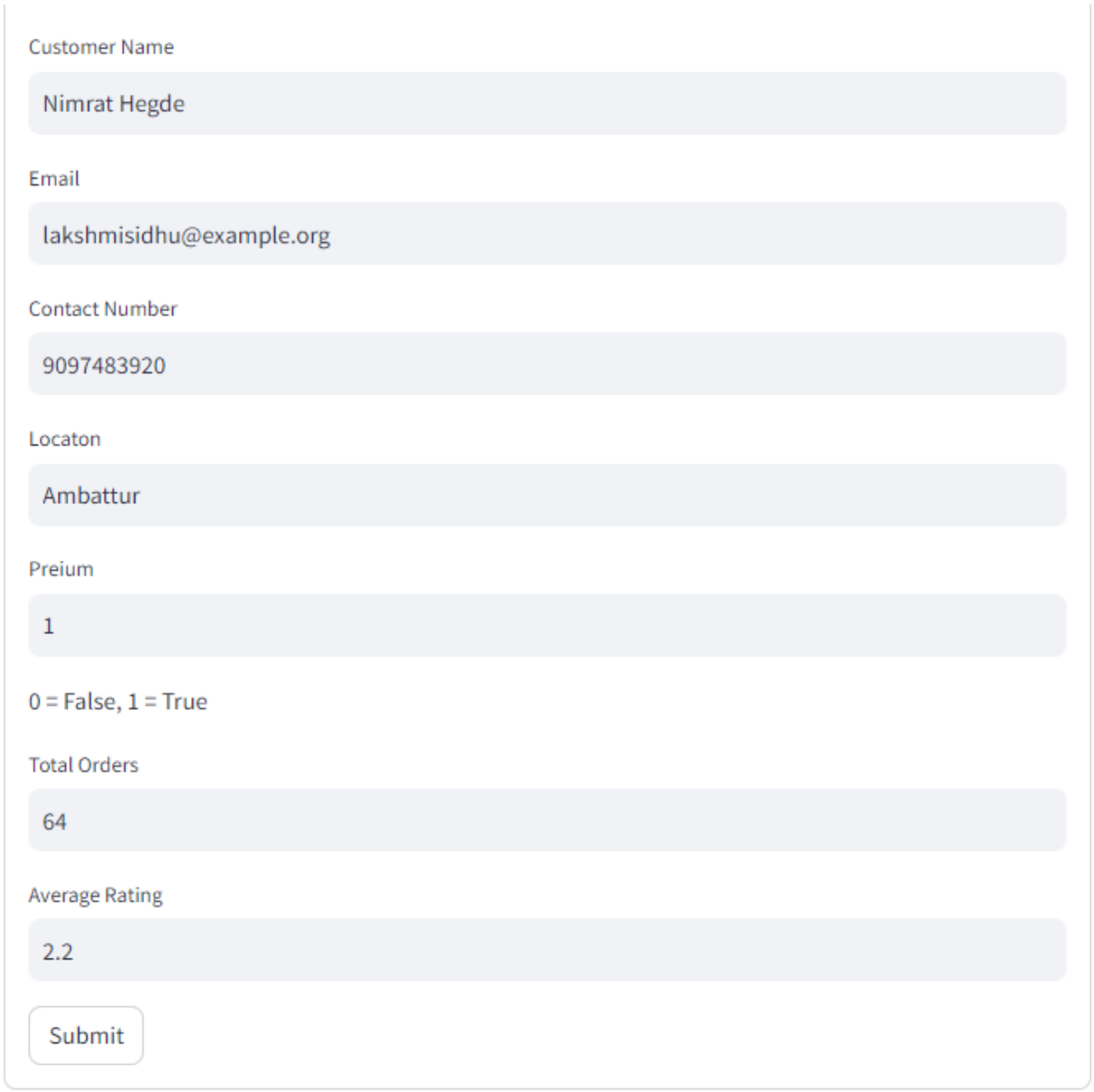




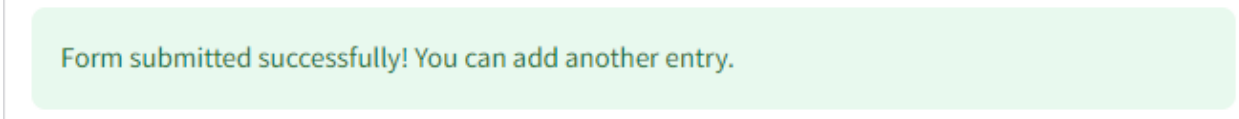
3.2. When selecting the table, the below form will be open, and we can select the customer's name. Show user data button will shows the respective user details



3.3. And the below form will be open to edit the existing data.

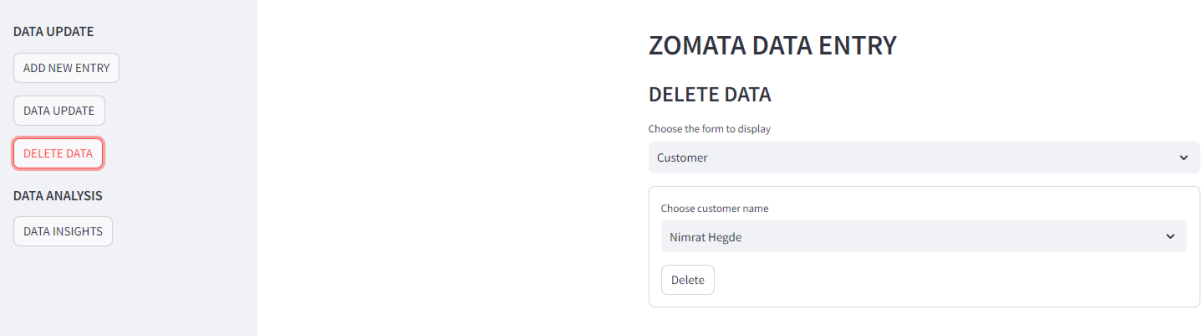


3.4. If the data is updated in database successfully, then below message will appear.



4.DELETE DATA

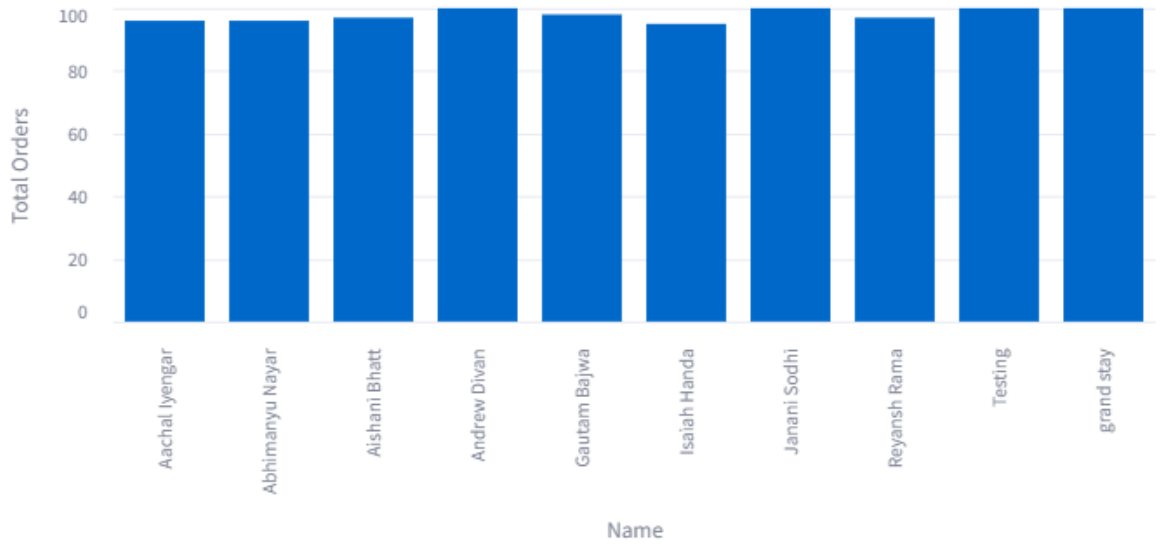
4.1. We can select the required table name and respective data to deletion. Clicking the submit button, will remove the entry from the database.



4.2. If the entry removed successfully, below message will be appeared

DATA INSIGHTS

Chart of Top 10 customers based on order frequency

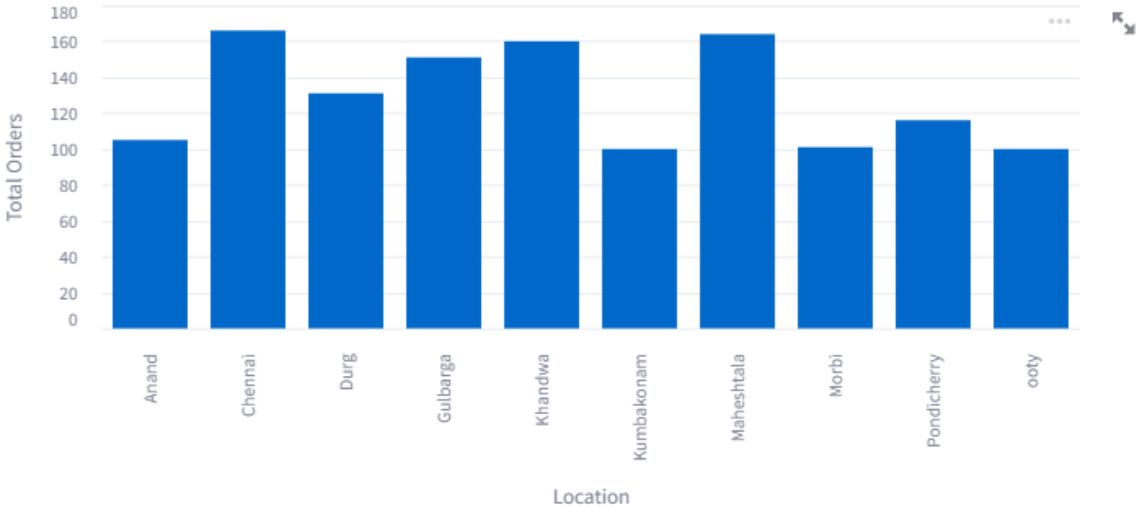


Customer Rank by order value

Customer Name	Order Value	Rank
Xalak Naidu	87,693.73	1
Liam Kibe	85,969.64	2
Tanmayi Kuruvilla	83,833	3
Lavanya Garde	82,308.8	4
Champak Pandya	80,511.19	5
Daniel Pillay	75,979.71	6
Nidhi Kata	75,563.5	7
Mahika Bedi	73,052.16	8
Zehaan Munshi	70,864.51	9
Amrita Chacko	69,944.65	10

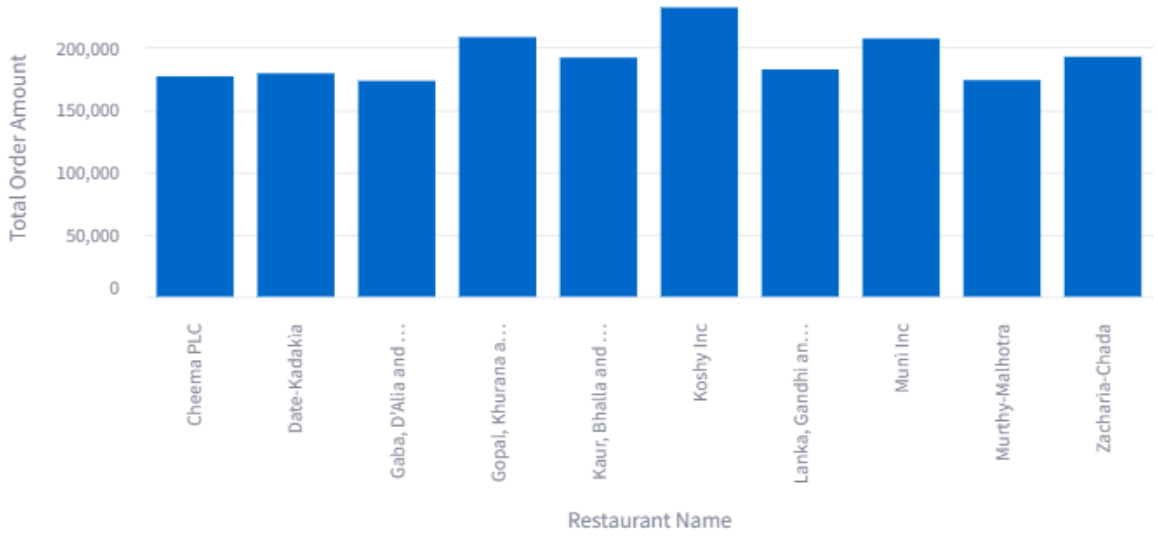
Top 10 delivery person by number of deliveries

Top 10 orders by location

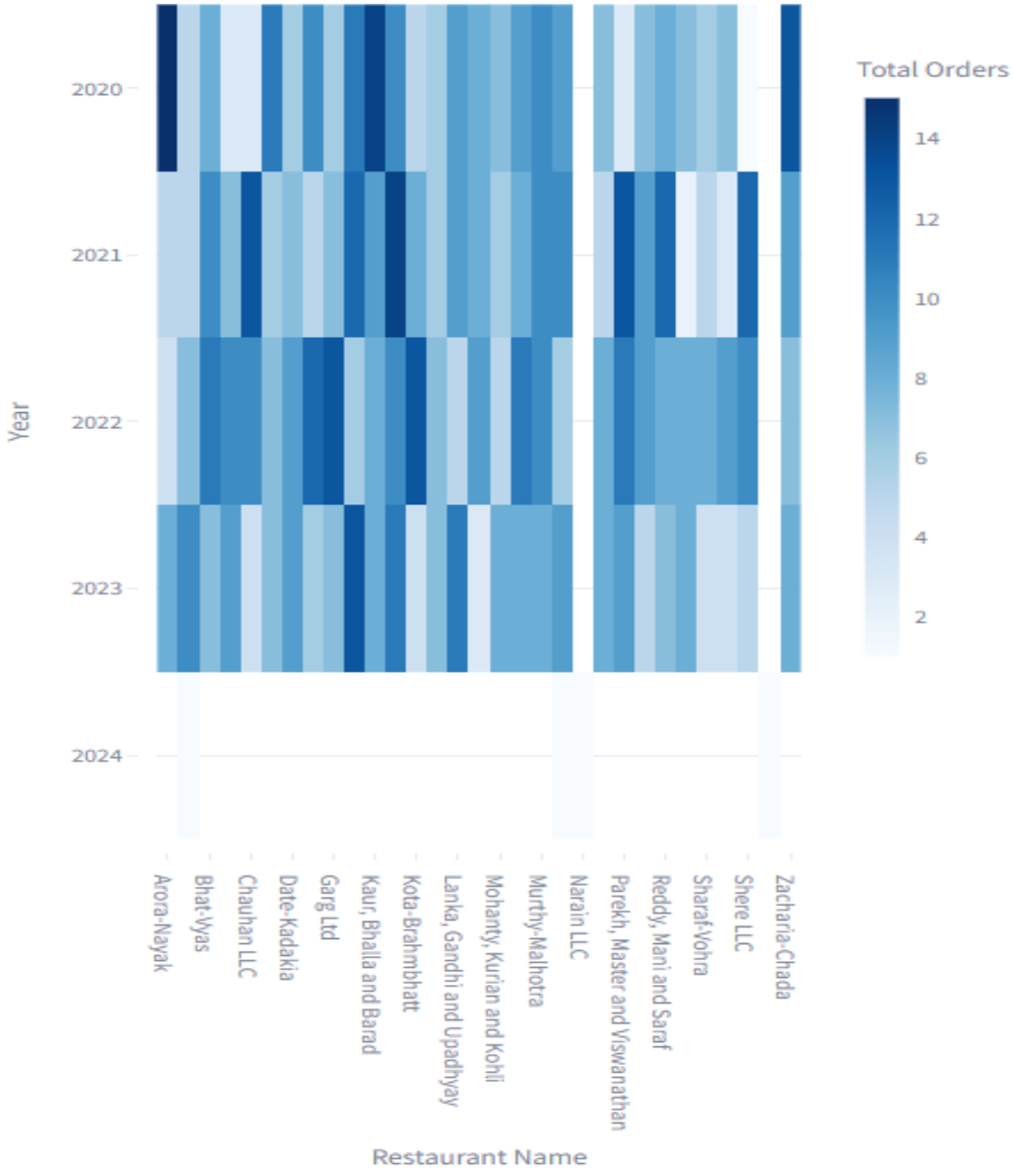


Top 10 Restaurant by orders

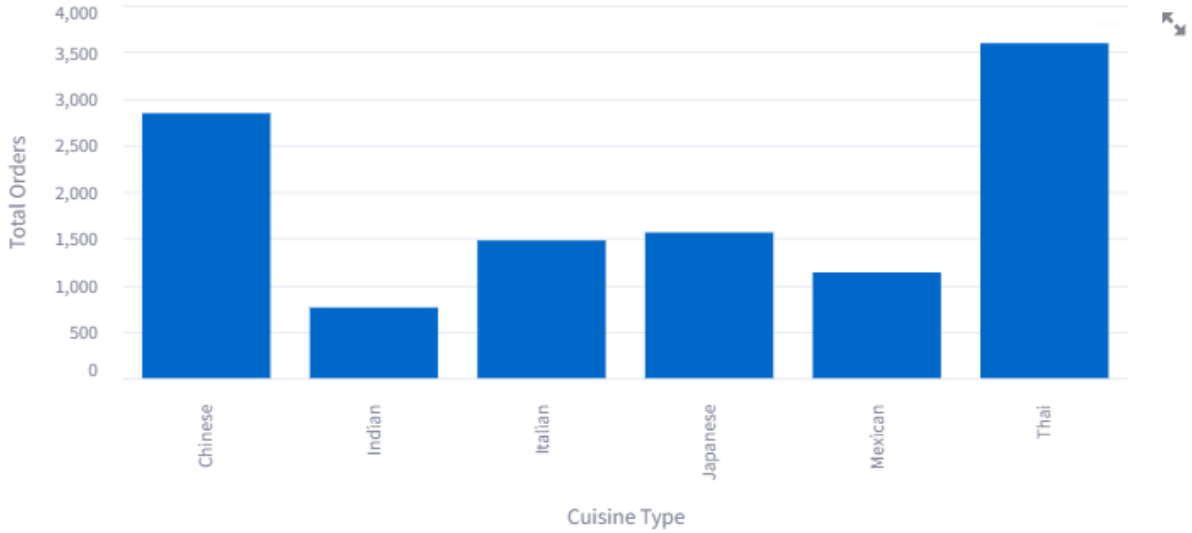
Top 10 Restaurant By revenue



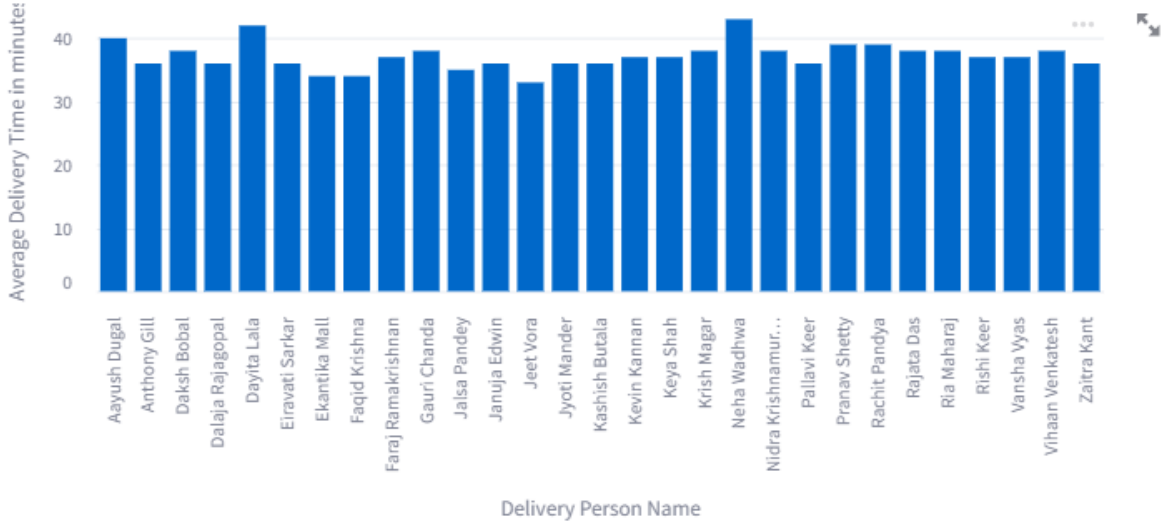
Reataurant total orders per year



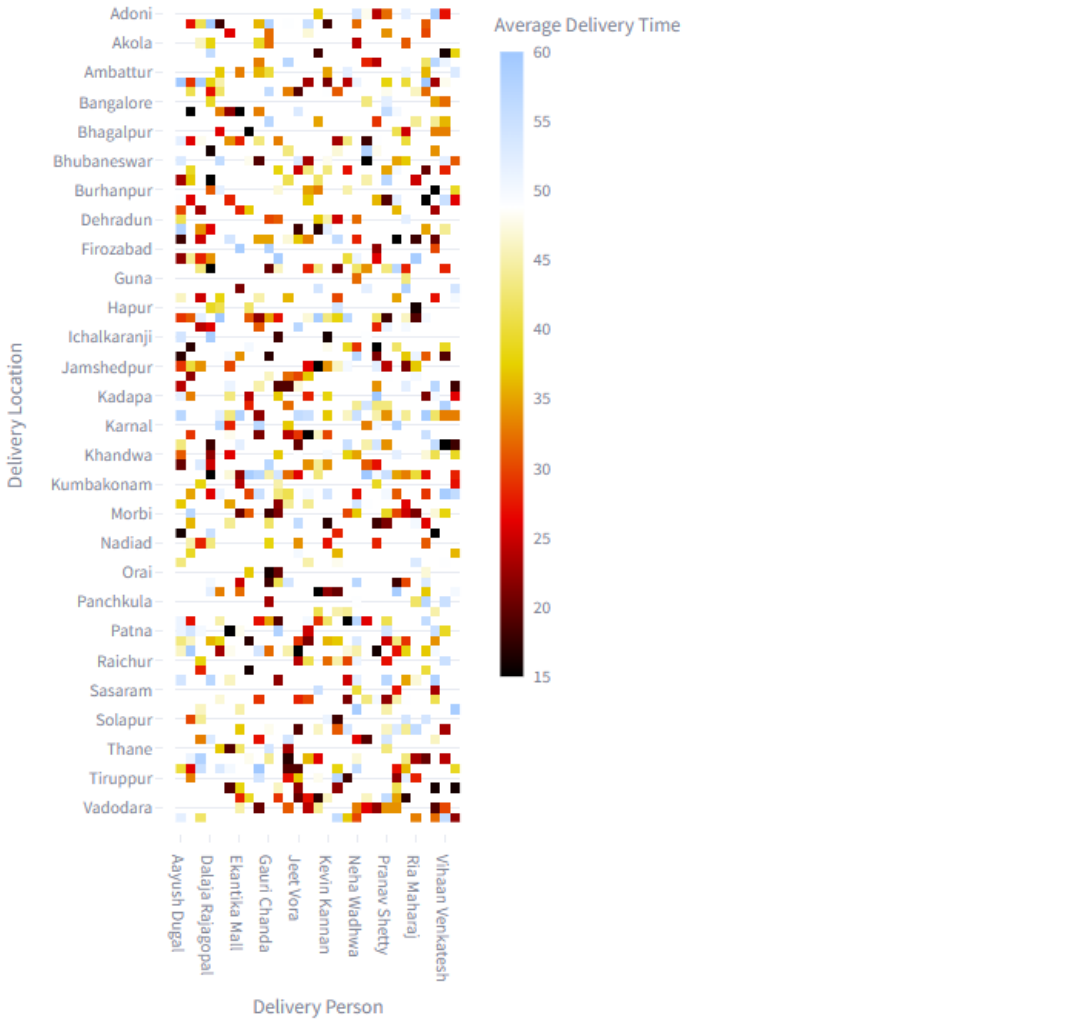
Cuisine type wise Total orders



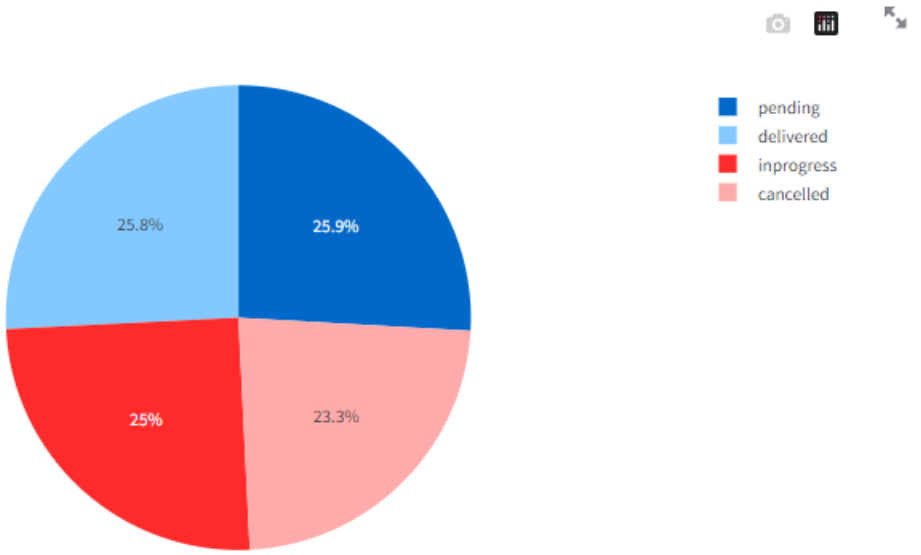
Delivery persons average delivery time



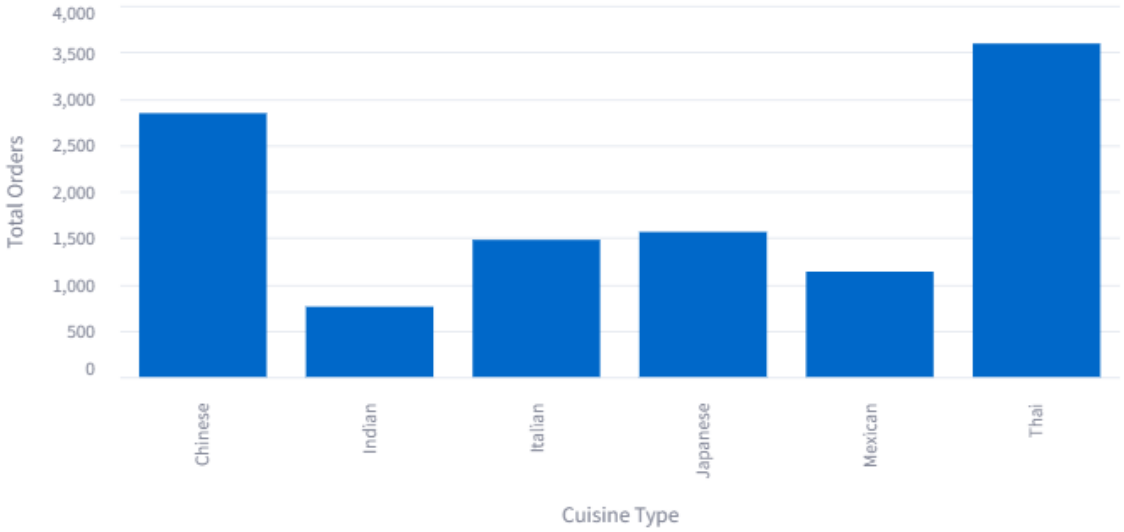
Average Delivery Time by Delivery Person and Location



Delivery status



Cuisine type wise Total orders



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