

Database Final Project

“E-commerce Store”

Zeyad Ahmed Samer
Saeed Eldamarawy

Date

31/12/2022

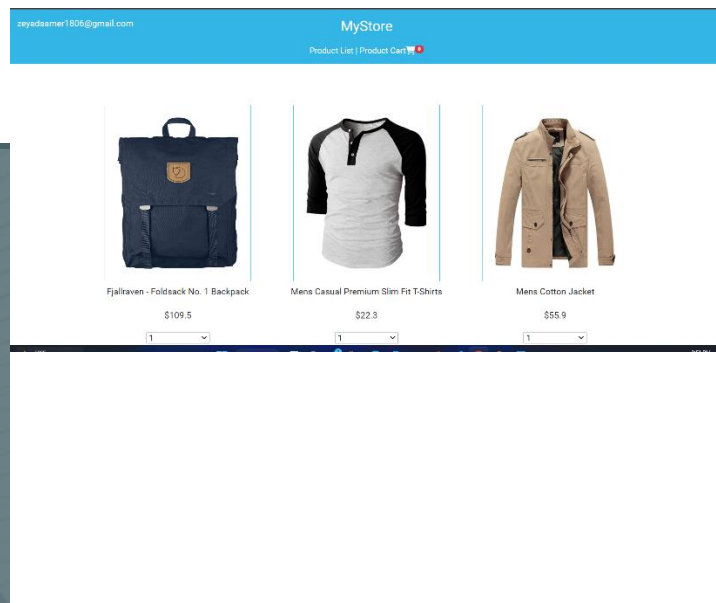
Course title

Database Systems

Dr.Salah Elewa

Project Description

This project is a full-stack E-commerce Store application. The user of this project is able to sign up and sign in, view products, add products to cart and submit orders



Application Dependencies

Technologies used in that project:

- **Frontend:** Angular framework that uses the JavaScript language
 - **Backend:** Node.js using express framework
 - **Database:** PostgreSQL database
 - **Database running environment:** The database is created and manipulated using Docker which creates a container(running environment) for PostgreSQL image (app).
 - **Migration:** db-migrate library is used in order to run all the SQL files necessary for creation of the tables in certain order in addition to dropping tables.
-

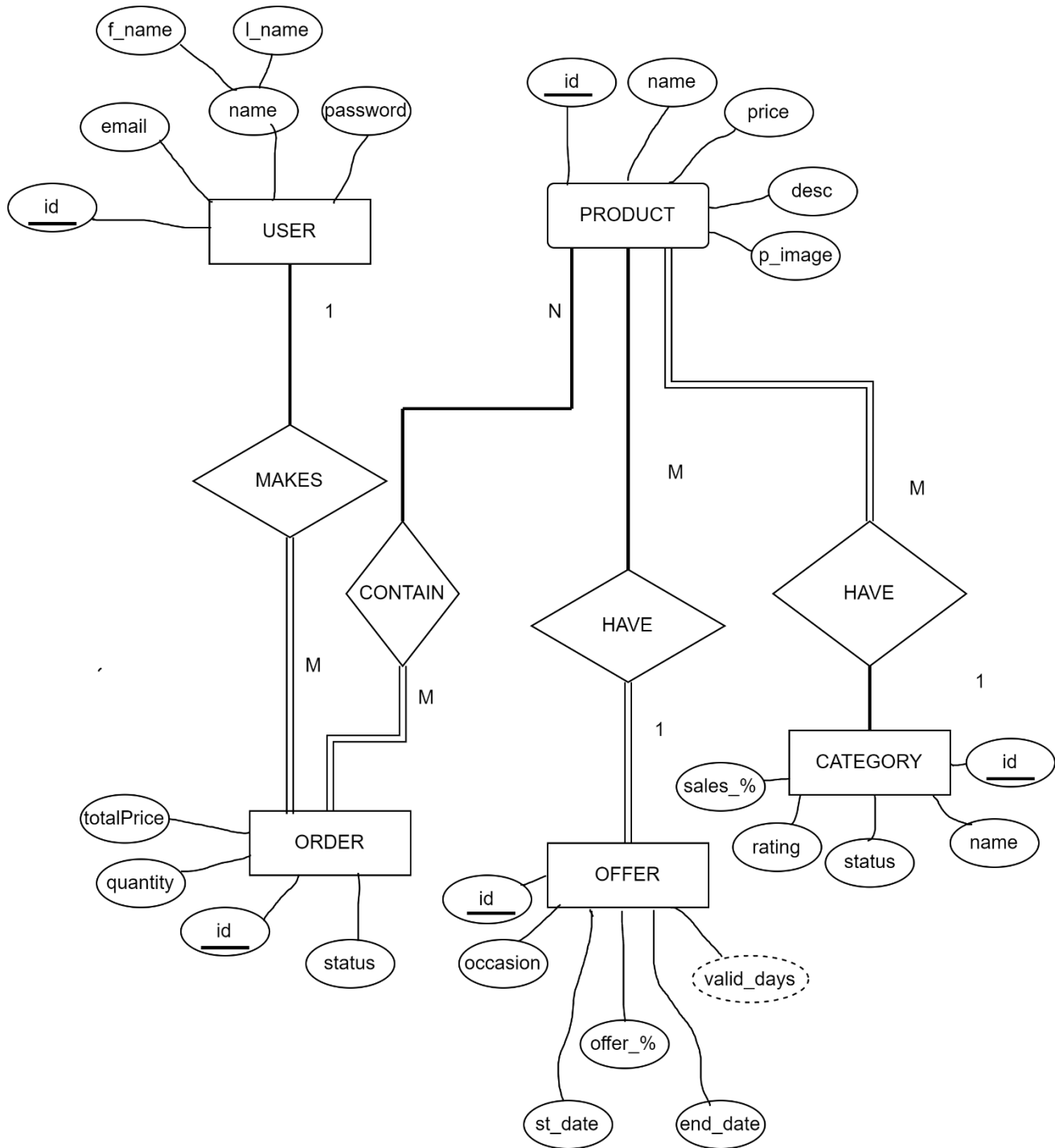
Running the Backend

1. Navigate to the storefrontapi directory using command
“cd storefrontapi”
 2. Run the docker compose file(which have set of commands and configurations necessary for creating the PostgreSQL running environment and database connections) using the command “docker compose up”
 3. Execute the postgres terminal using to interact with PostgreSQL database using the following command “docker exec -it <image-name> /bin/bash” . Note that <image-name> is storefrontapi-postgres-1. To check that the container is running run on your terminal “docker ps” to see running containers.
 4. Navigate to postgres using the following commands.
 - Su postgres
 - psql
 - Create database store
 - \c store
 - Then you can run any queries
-
- Then navigate to storefrontapi directory and run npm run watch

Running the Frontend

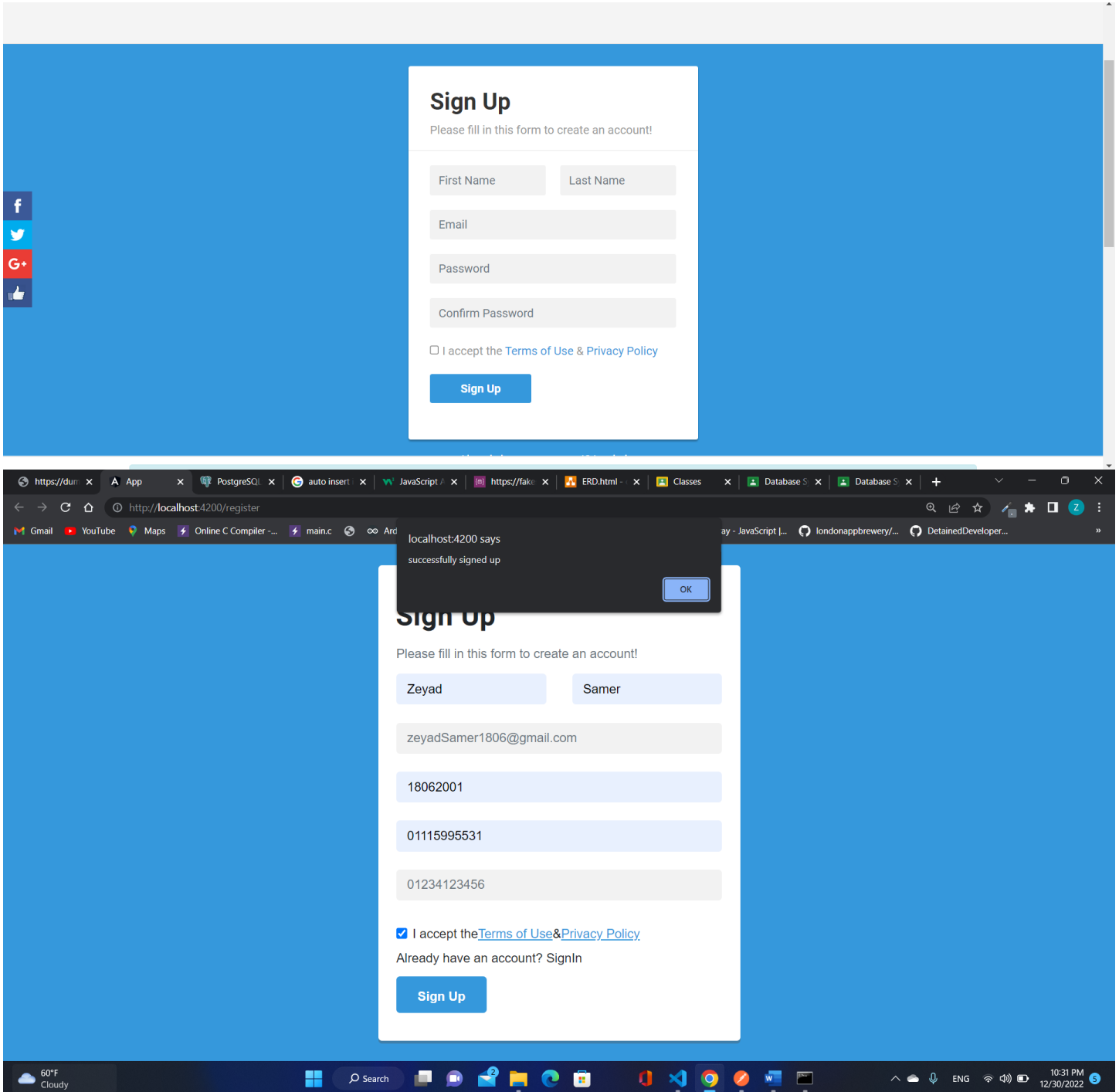
1. Navigate to the `Mystore-app/app` directory using
`“cd Mystore-app/app”`
 2. Then run `“ng serve -o”`
-

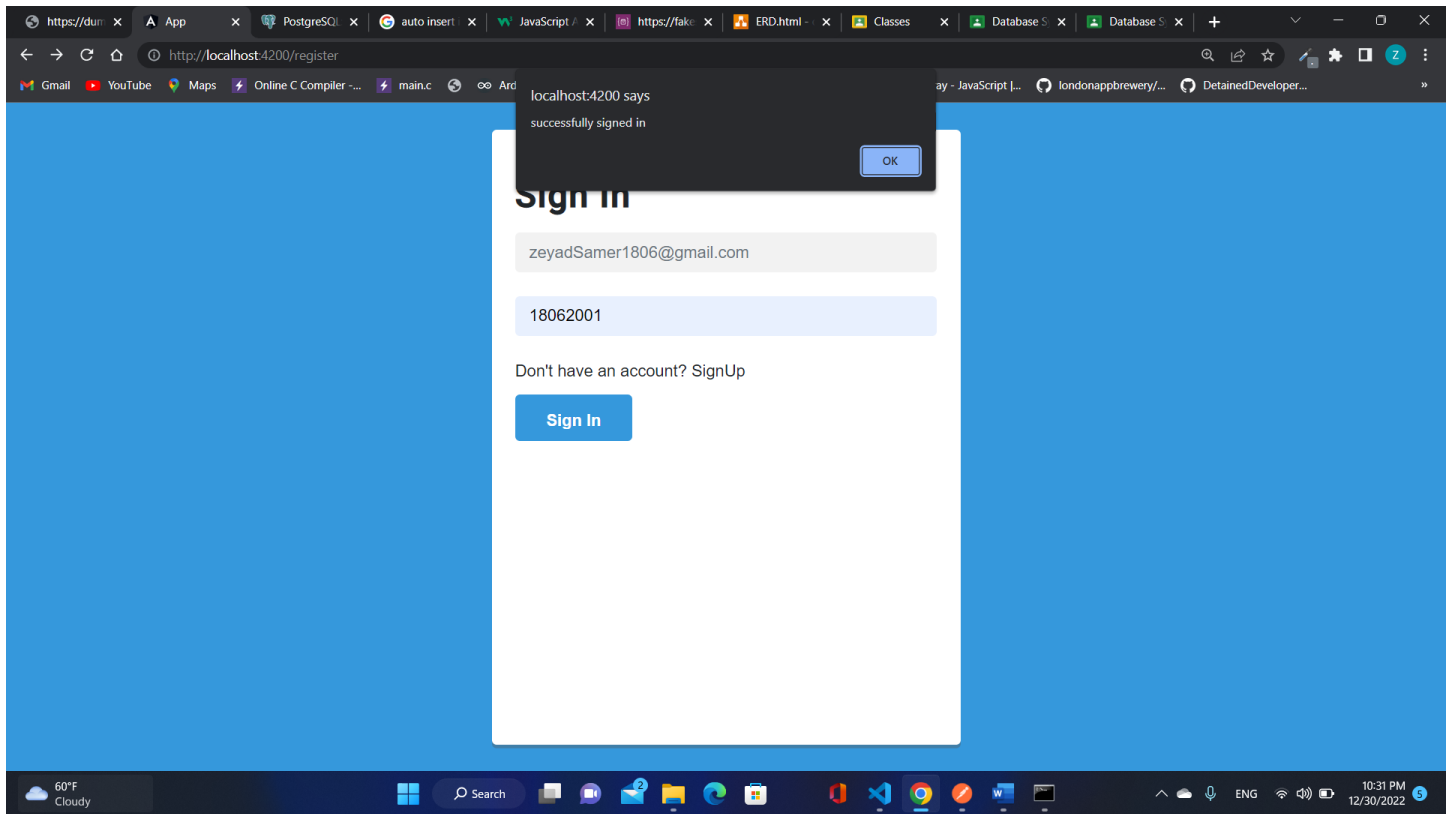
ERD Diagram



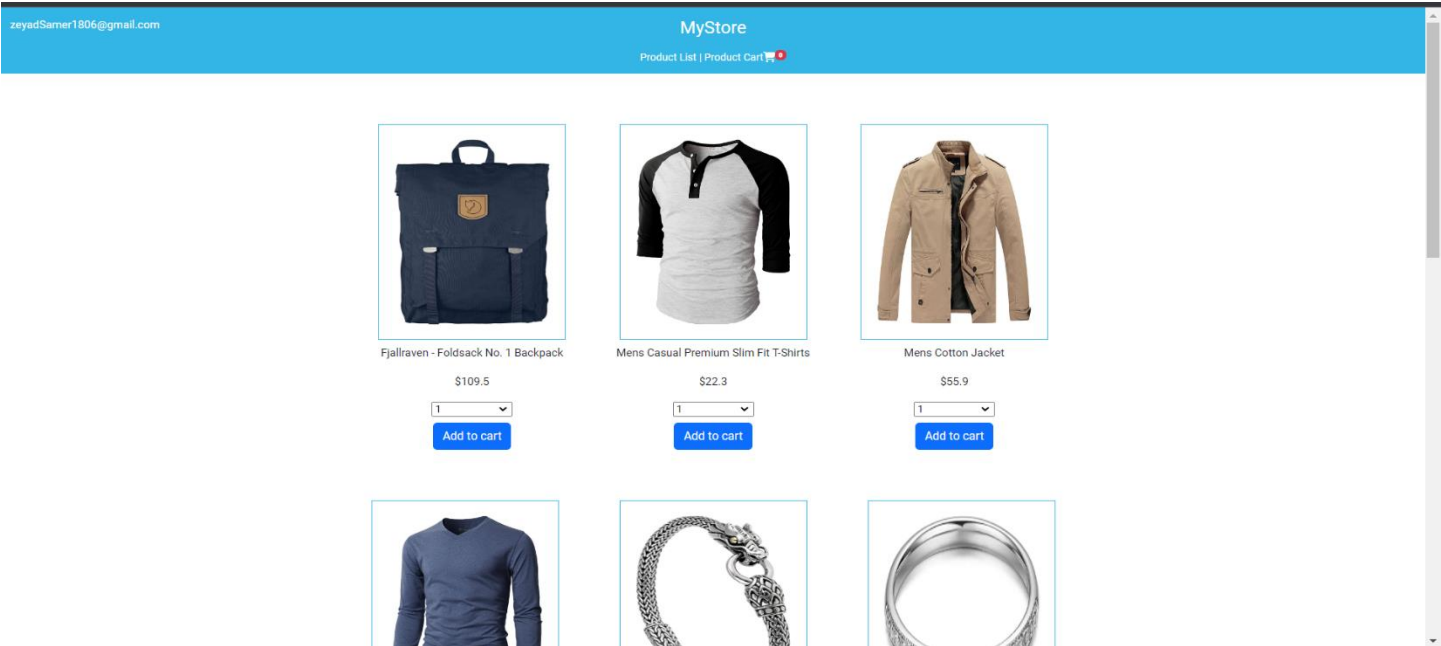
Project Flow

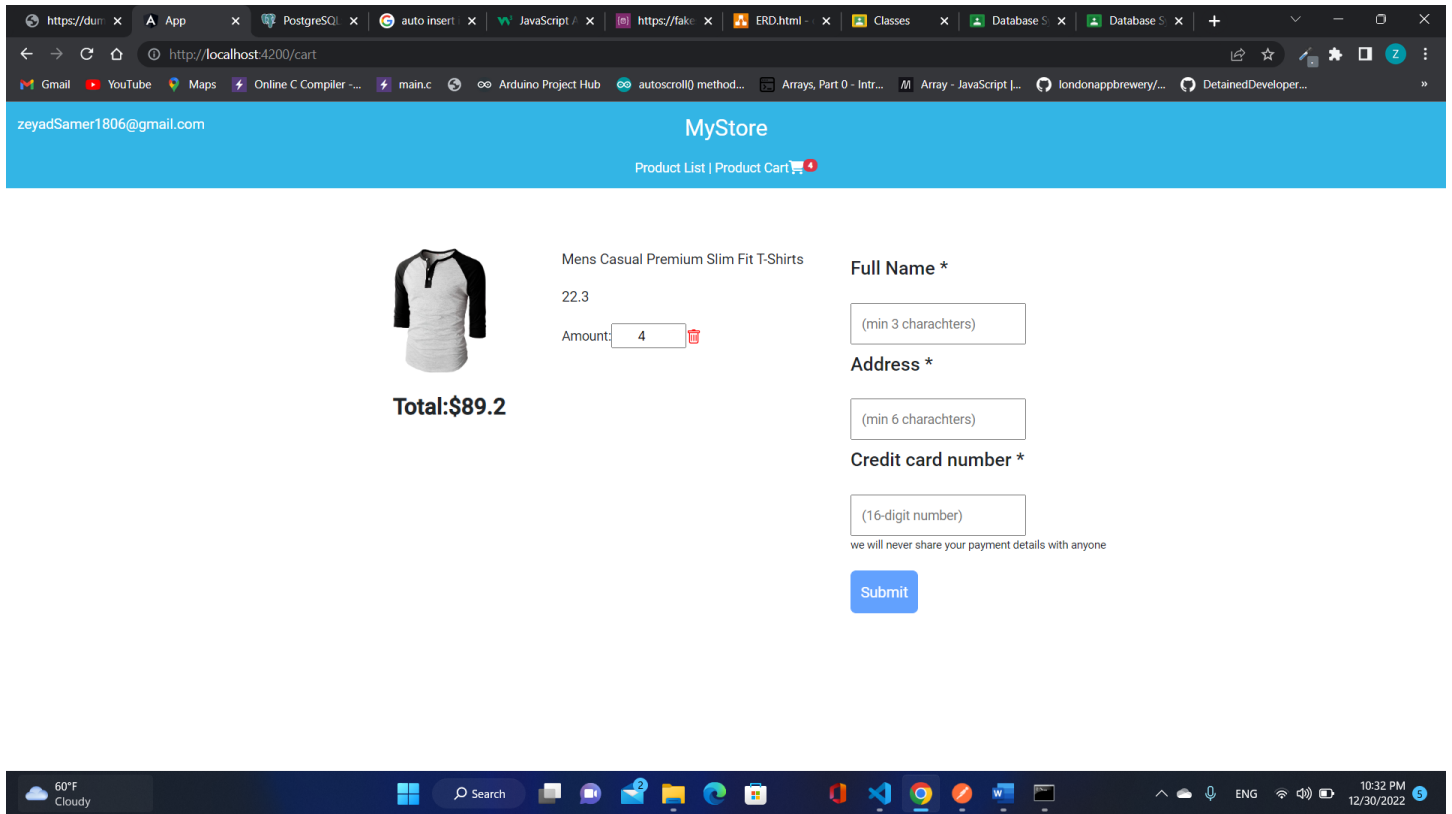
Sign up and Sign in:

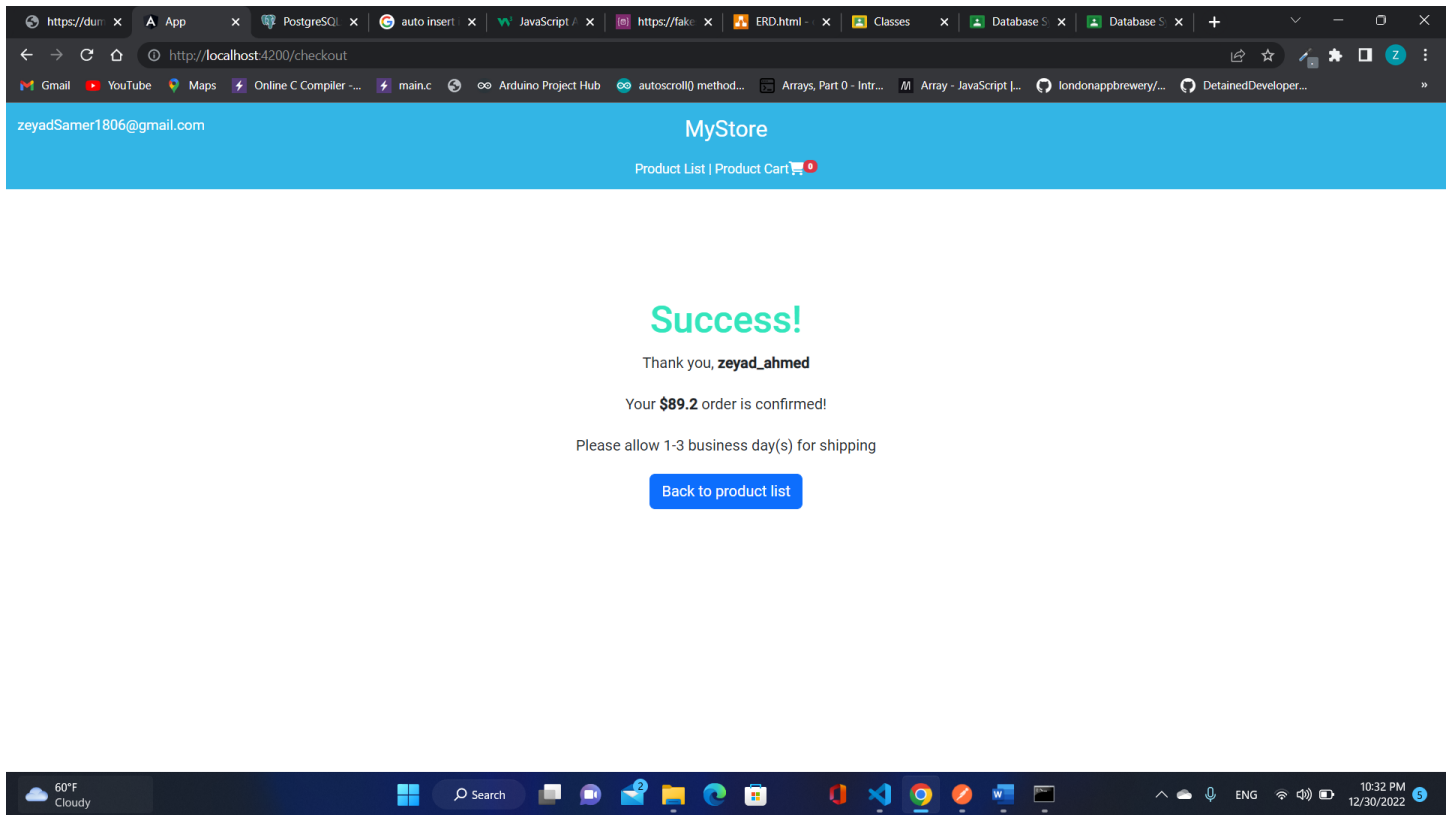




Application :







SQL Queries and Tables

store=#

| select * from users; | | | | |
|----------------------|-----------|----------|--------------------------|---|
| id | firstname | lastname | email | userpassword |
| 1 | Zeyad | Ahmed | zeyad@email.com | 123456 |
| 2 | loay | wael | loay@mail.com | 123456 |
| 3 | mohamed | Aly | mohamed@mail.com | 123456 |
| 4 | mirna | aly | mirna@mail.com | 123456 |
| 5 | gad | Aly | gad@mail.com | 123456 |
| 7 | aser | elsayed | aser@mail.com | 123456 |
| 8 | waleed | Atef | waleed@mail.com | 123456 |
| 9 | Ahmed | karam | karam@mail.com | 123456 |
| 6 | ibrahim | yosri | ibrahim@email.com | 123456 |
| 11 | Zeyad | Samer | zeyadSamer1806@gmail.com | \$2b\$10\$QobGvwdUvU/JQqC0tSx600cy2Zj0JQFyOfAtlXJidSEDPtqXcTnE2 |

(10 rows)

store=#

TERMINAL

docker

| id | product_name | price | product_descr |
|--------|--|---|------------------------|
| option | | product_image | category_id offer_id |
| 1 | Fjallraven - Foldsack No. 1 Backpack up to 15 inches) in the padded sleeve, your everyday | https://fakestoreapi.com/img/81fPKd-2AYL.AC_SL1500_.jpg | 2 1 |
| 2 | Mens Casual Premium Slim Fit T-Shirts ight weight & soft fabric for breathable and comfortable wearing. And Solid stitched shirts with round neck made for durability and a great fit for casual fashion wear and diehard baseball fans. The Henley style round neckline includes a three-button placket. | https://fakestoreapi.com/img/71li-ujtIUL.AC_UX679_.jpg | 1 2 |
| 3 | Mens Cotton Jacket such as working, hiking, camping, mountain/rock climbing, cycling, traveling or other outdoors. Good gift choice for you or your family member. A warm hearted love to Father, husband or son in this thanksgiving or Christmas Day. | https://fakestoreapi.com/img/71YXzeOuslL.AC_UY879_.jpg | 1 |
| 4 | Mens Casual Slim Fit Please note that body builds vary by person, therefore, detailed size information should be reviewed below on the product description. | https://fakestoreapi.com/img/71pWzhdJNwL.AC_UL640_QL65_ML3_.jpg | 4 |
| 5 | John Hardy Womens Legends Naga Gold & Silver Dragon Station Chain Bracelet that protects the oceans pearl. Wear facing inward to be bestowed with love and abundance, or outward for protection. | https://fakestoreapi.com/img/61sbMiUnoGL.AC_UL640_QL65_ML3_.jpg | 4 |
| 6 | Solid Gold Petite Micropave nd sold by Hafeez Center in the United States. Satisfaction Guaranteed. Return or exchange any order within 30 days. | https://fakestoreapi.com/img/71pWzhdJNwL.AC_UL640_QL65_ML3_.jpg | 4 |
| 7 | White Gold Plated Princess s to spoil your love more for Engagement, Wedding, Anniversary, Valentine Day... | https://fakestoreapi.com/img/61sbMiUnoGL.AC_UL640_QL65_ML3_.jpg | 4 |

```
store=#
store=# select * from orders;
 id | totalprice | activestatus | users_id
-----+-----+-----+-----
  1 |      210 | pending      |        1
  2 |      220 | pending      |        1
  3 |      230 | pending      |        1
  4 |      240 | shipped       |        2
  5 |      110 | shipped       |        2
  6 |      250 | shipped       |        2
  7 |      240 | cancelled    |        3
  8 |      110 | cancelled    |        4
  9 |      250 | cancelled    |        5
 10 |     2400 | pending      |        8
 11 |       89 | pending      |       11
(11 rows)

store=#
```

```
store=#
store=# select * from orders_products;
 id | quantity | orders_id | products_id
-----+-----+-----+-----
  1 |         4 |          1 |           2
  2 |         1 |          1 |           3
  3 |         5 |          1 |           4
  4 |         5 |          4 |           3
  5 |         6 |          3 |           3
  6 |         4 |          4 |           4
  7 |         2 |          2 |           2
  8 |         1 |          3 |           3
  9 |         4 |          4 |           4
 10 |         6 |          7 |           7
 11 |         4 |         11 |           2
(11 rows)

store=#
```

```
File Edit Selection View Go Run Terminal Help
PROBLEMS OUTPUT TERMINAL
> TERMINAL
store=#
store=#
store=# select * from orders_products;
 id | quantity | orders_id | products_id
-----+-----+-----+-----
  1 |         4 |          1 |           2
  2 |         1 |          1 |           3
  3 |         5 |          1 |           4
  4 |         5 |          4 |           3
  5 |         6 |          3 |           3
  6 |         4 |          4 |           4
  7 |         2 |          2 |           2
  8 |         1 |          3 |           3
  9 |         4 |          4 |           4
 10 |         6 |          7 |           7
 11 |         4 |         11 |           2
(11 rows)

store=# select * from users_phones;
 user_id | phone
-----+-----
      1 | +78024242734
      1 | +78024242444
      2 | +78024242414
      2 | +78024242424
      3 | +78024242425
      3 | +78024242426
      4 | +78024242427
      4 | +78024242428
      5 | +78024242429
      6 | +78024242420
     11 | 01115995531
     11 | 01234123456
(12 rows)

store=#
```

```
File Edit Selection View Go Run Terminal Help 20221230180710-data-
PROBLEMS OUTPUT TERMINAL
> TERMINAL
store=# select * from categories;
id | category_name | sales_percentage | rating | activestatus
-----
1 | clothes      | 0.1 | 5 | t
2 | bags         | 0.3 | 4.3 | t
3 | electronics  | 0.4 | 5 | t
4 | jewelry      | 0.3 | 5 | t
(4 rows)

store=#
```

```
File Edit Selection View Go Run Terminal Help 20221230180710-data-ext
PROBLEMS OUTPUT TERMINAL
> TERMINAL
store=#
store=#
store=#
store=#
store=# select * from orders_products;
id | quantity | orders_id | products_id
-----
1 | 4 | 1 | 2
2 | 1 | 1 | 3
3 | 5 | 1 | 4
4 | 5 | 4 | 3
5 | 6 | 3 | 3
6 | 4 | 4 | 4
7 | 2 | 2 | 2
8 | 1 | 3 | 3
9 | 4 | 4 | 4
10 | 6 | 7 | 7
11 | 4 | 11 | 2
(11 rows)

store=# select * from offers;
id | offer_percentage | occasion_name | expiration_date | starting_date
-----
1 | 0.4 | Ramadan | 2022-06-22 | 2022-05-22
2 | 0.5 | Eid Elfetr | 2022-06-26 | 2022-06-23
3 | 0.7 | Eid Eladha | 2022-08-27 | 2022-07-22
4 | 0.4 | Sham elnesem | 2022-03-30 | 2022-03-22
5 | 0.5 | New year | 2022-01-04 | 2022-12-28
6 | 0.7 | 6th october | 2022-10-07 | 2022-10-06
7 | 0.4 | Halloween | 2022-11-30 | 2022-11-22
8 | 0.5 | Black friday | 2022-01-27 | 2022-01-25
9 | 0.7 | Summer | 2022-06-12 | 2022-06-06
10 | 0.7 | New Hijreya year | 2022-10-08 | 2022-10-06
(10 rows)

store=#
```

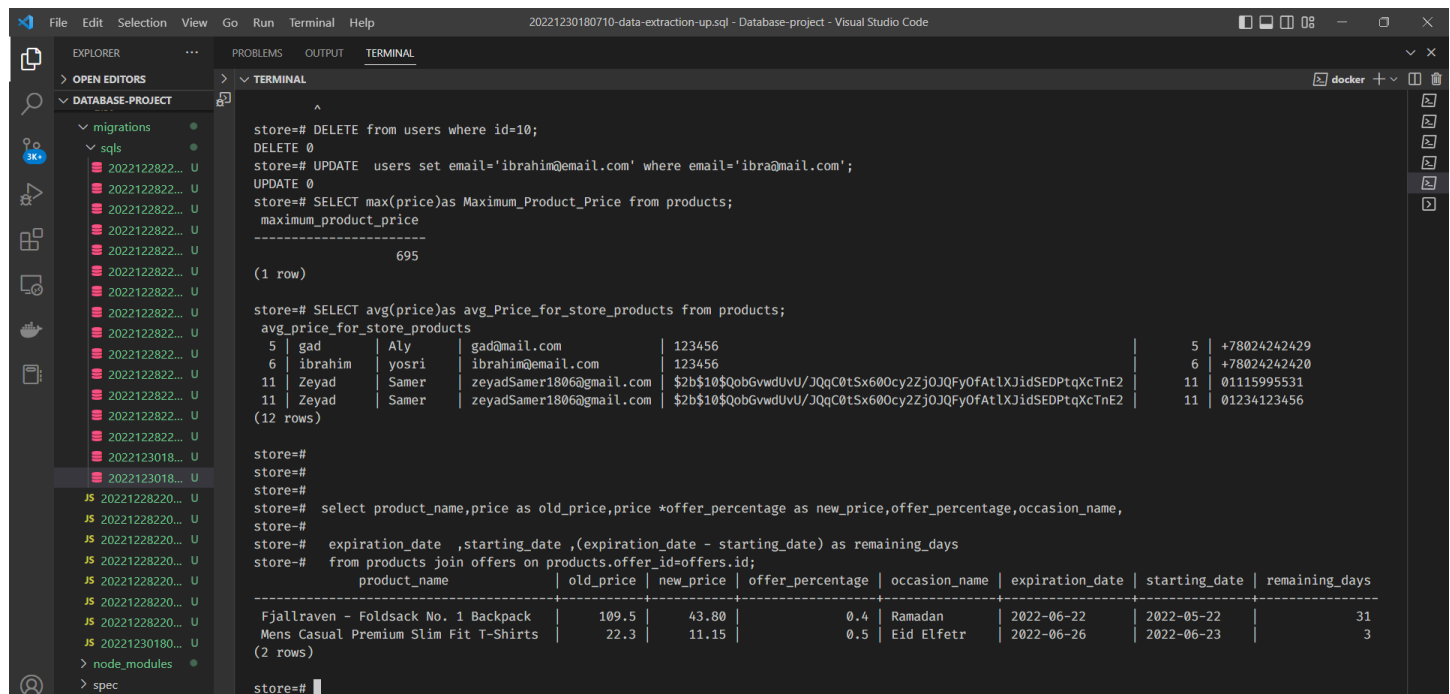
Sql Queries for data extraction and manipulation

```
SELECT * FROM USERS;
DELETE from users where id=10;
UPDATE users set email='ibrahim@email.com' where email='ibra@mail.com';
SELECT max(price)as Maximum_Product_Price from products;
SELECT avg(price)as avg_Price_for_store_products from products;

select * from users join users_phones on users.id=users_phones.user_id;

select product_name,price as old_price,price *offer_percentage as
new_price,offer_percentage,occasion_name,
expiration_date ,starting_date ,(expiration_date - starting_date) as
remaining_days
from products join offers on products.offer_id=offers.id;
```

Results:



```
store=# DELETE from users where id=10;
DELETE 0
store=# UPDATE users set email='ibrahim@email.com' where email='ibra@mail.com';
UPDATE 0
store=# SELECT max(price)as Maximum_Product_Price from products;
maximum_product_price
-----
695
(1 row)

store=# SELECT avg(price)as avg_Price_for_store_products from products;
avg_price_for_store_products
5 | gad | Aly | gad@mail.com | 123456 | 5 | +78024242429
6 | ibrahim | yosri | ibrahim@email.com | 123456 | 6 | +78024242420
11 | Zeyad | Samer | zeyadSamer1806@gmail.com | $2b$10$QobGvwdUvU/JQqC0tSx600cy2ZjOJQFyOfAtlXJidSEDptqXcTnE2 | 11 | 01115995531
11 | Zeyad | Samer | zeyadSamer1806@gmail.com | $2b$10$QobGvwdUvU/JQqC0tSx600cy2ZjOJQFyOfAtlXJidSEDptqXcTnE2 | 11 | 01234123456
(12 rows)

store=#
store=#
store=#
store=# select product_name,price as old_price,price *offer_percentage as new_price,offer_percentage,occasion_name,
store=# expiration_date ,starting_date ,(expiration_date - starting_date) as remaining_days
store=# from products join offers on products.offer_id=offers.id;
product_name | old_price | new_price | offer_percentage | occasion_name | expiration_date | starting_date | remaining_days
-----
Fjallraven - Foldsack No. 1 Backpack | 109.5 | 43.80 | 0.4 | Ramadan | 2022-06-22 | 2022-05-22 | 31
Mens Casual Premium Slim Fit T-Shirts | 22.3 | 11.15 | 0.5 | Eid Elfetr | 2022-06-26 | 2022-06-23 | 3
(2 rows)

store=#
```