

UberEats Clone LAB 2 Report

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YouTube Link: <https://youtu.be/yYFi2TmFZ5o>

Goal: The goal of this project is to build new features on top of the already developed prototype of UberEats application. This prototype is developed using React, Node, Redux, Kafka and MongoDB.

Purpose: The purpose of the project is to get hands-on experience on the latest technologies such as React, Node, and Redux. Learn how to establish connections to database. Learn how a client and server architecture is built. How to pass data to client browsers through middleware and populate the data on a single page application.

System Design:

Client Side: I have designed the web application's user interface using React and React Bootstrap for styling and customization. Npm package axios is used to make calls to the backend. Additionally, supporting library, Redux is used in order to maintain a global store.

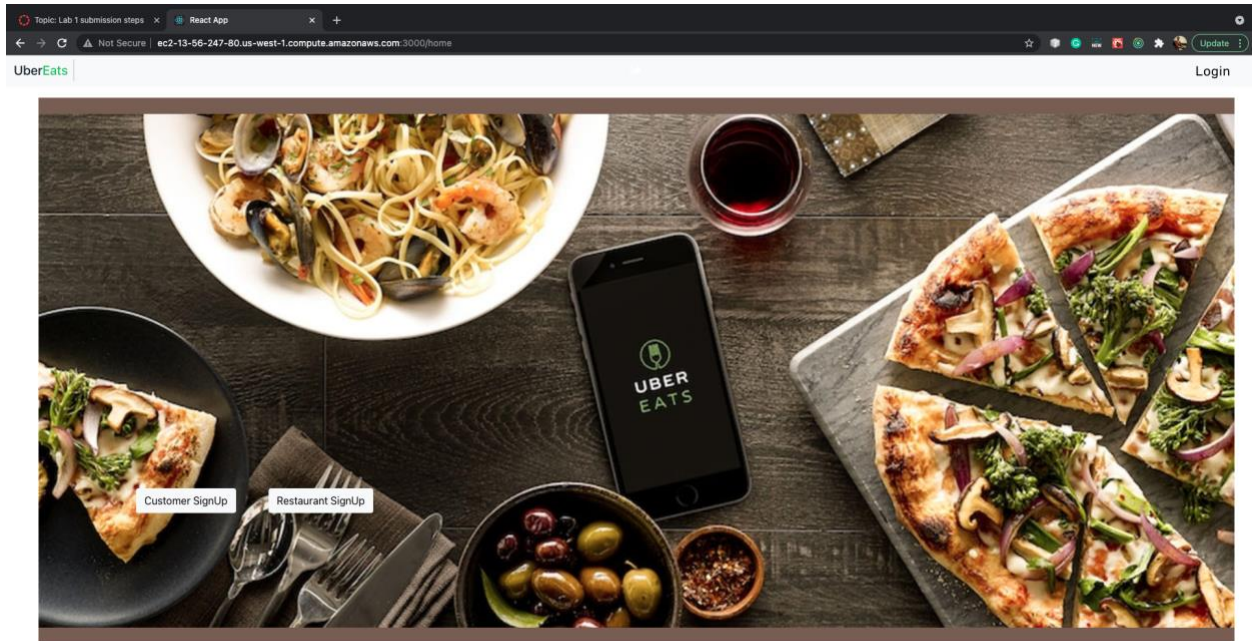
Server Side: I have used NodeJS, ExpressJS to handle incoming requests from the client end. The server will communicate with the database through kafka message queues. Used MongoDB as the database.

Database: I am using MongoDB database.

Additionally, used bcrypt to encrypt sensitive information like passwords. Used Passport-JWT for authentication and authorization. Application deployed on EC2 instance.

UI Screenshots:

New features added were pagination in the customer's orders page. Accepting note while placing order.



Customer Sign Up

Name

Email

Password

Phone Number

Street

City

State

Country

Zip Code

Restaurant Sign Up

Restaurant Name

Email

Password

Street

City

State

Country

Zip Code

Phone Number





Login

Email

Password

Login

[illegible]

-  Dashboard
-  Profile
-  My Favourites
-  Orders

Delivery

PickUp

San Ramon

Search by Restaurant name, Dish name..

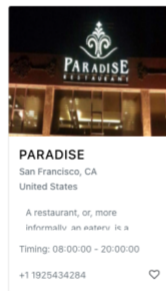
Filters

All

O Veg

O Non-Veg

O Vegan



Topic: Lab 1 submission stepsReact App

← → Not Secure ec2-13-56-247-80.us-west-1.compute.amazonaws.com:3000/myDashboard

Update

UberEats

Cart - 0Logout

Dashboard

Profile

My Favourites

Orders

DeliveryPickUp

San Ramon

Search by Restaurant name, Dish name...

Filters

AllC/VegC/Non-VegC/Vegan

RESTAURANT1
San Jose, CA
United States

A restaurant, or, more informally an eatery is a
Timing: 08:00:00 - 20:00:00
+1 9254342819

RESTAURANT2
San Jose, CA
United States

A restaurant, or, more informally an eatery is a
Timing: 08:00:00 - 20:00:00
+1 9254342819

RESTAURANT3
San Jose, CA
United States

A restaurant, or, more informally an eatery is a
Timing: 08:00:00 - 20:00:00
+1 9254342819

RESTAURANT4
San Francisco, CA
United States

A restaurant, or, more informally an eatery is a
Timing: 08:00:00 - 20:00:00
+1 9254342819

RESTAURANT5
Santa Clara, CA

PARADISE
San Francisco, CA

Topic: Lab 1 submission stepsReact App

← → Not Secure ec2-13-56-247-80.us-west-1.compute.amazonaws.com:3000/myProfile

Update

UberEats

Cart - 0Logout

Dashboard

Profile

My Favourites

Orders

My Profile

Edit

Profile Picture
Choose FileNo file chosen

Name

User1

Email

user1@user.com

Nickname

User1

Date Of Birth

09/06/2003

Phone Number

3456789876

About

I am User1

Street

190 Ryland St., Apr. no. 5404

City

San Ramon

State

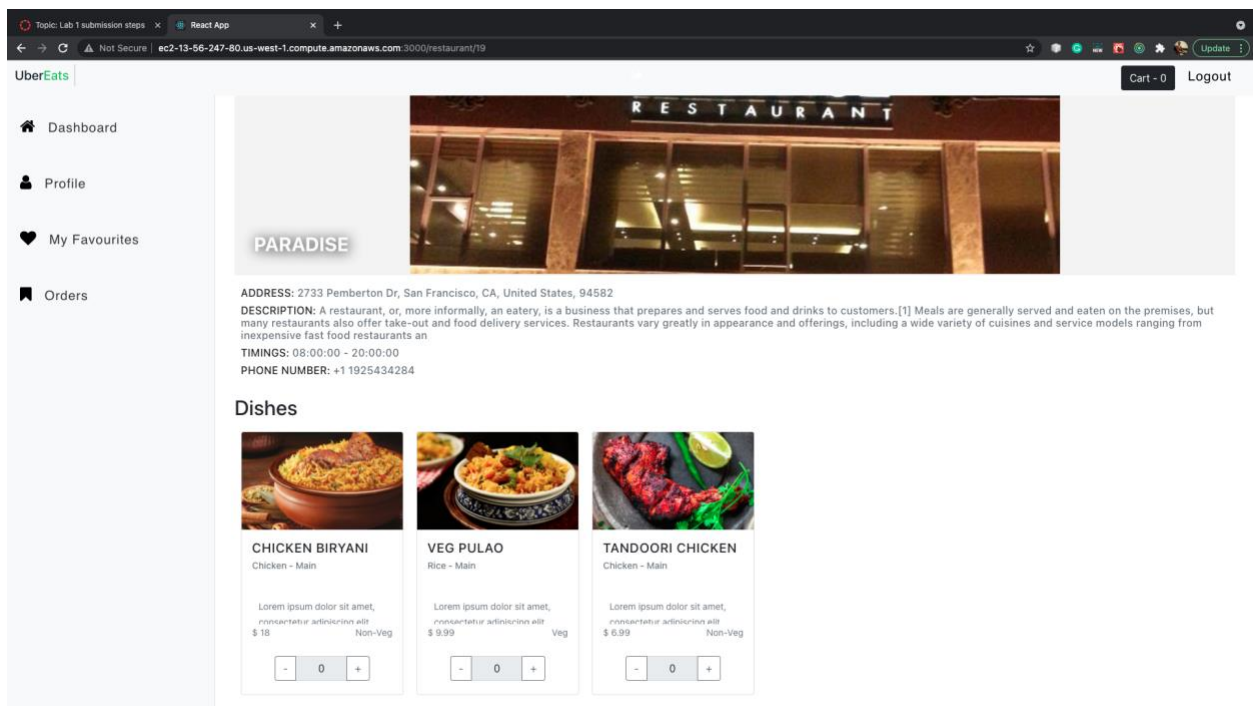
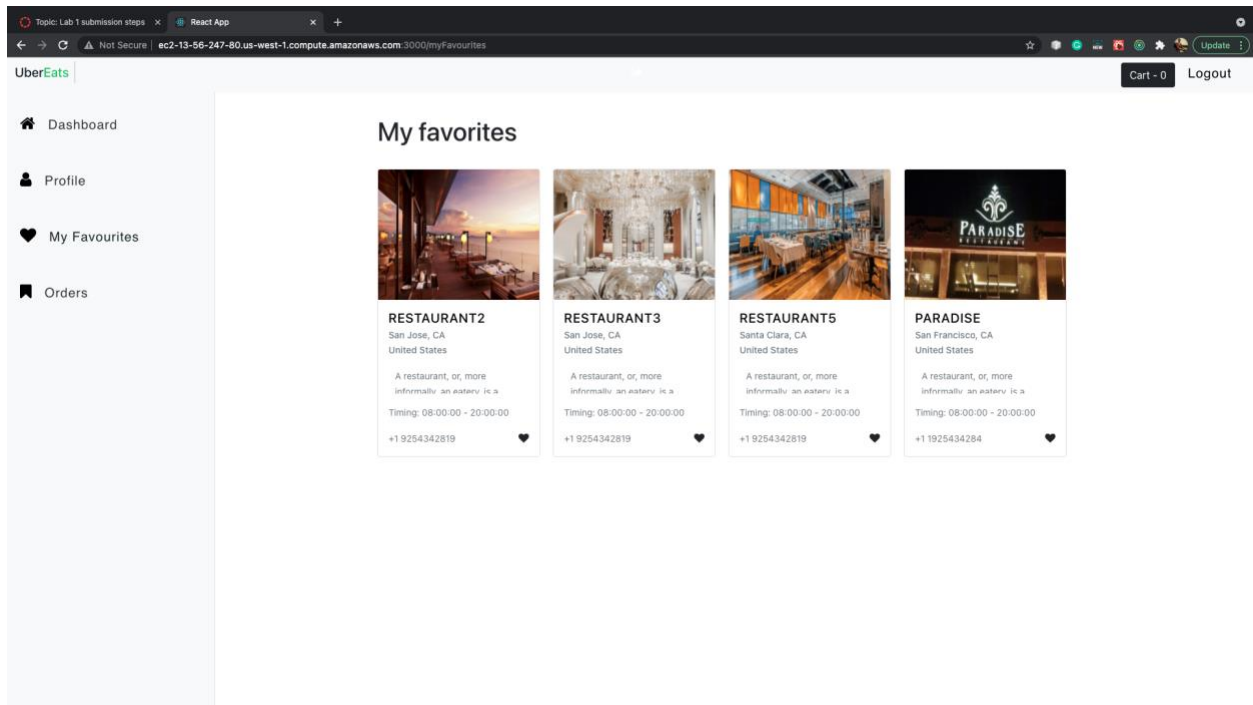
CA

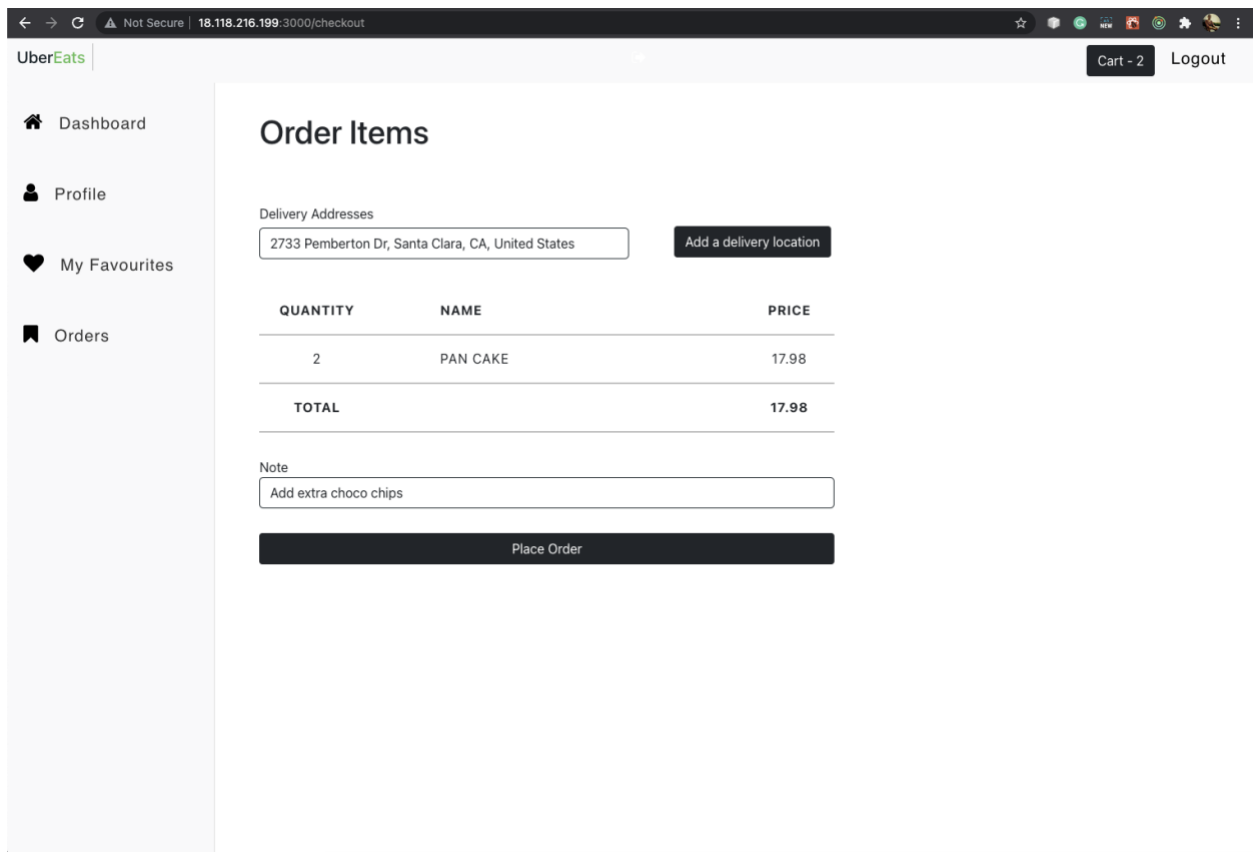
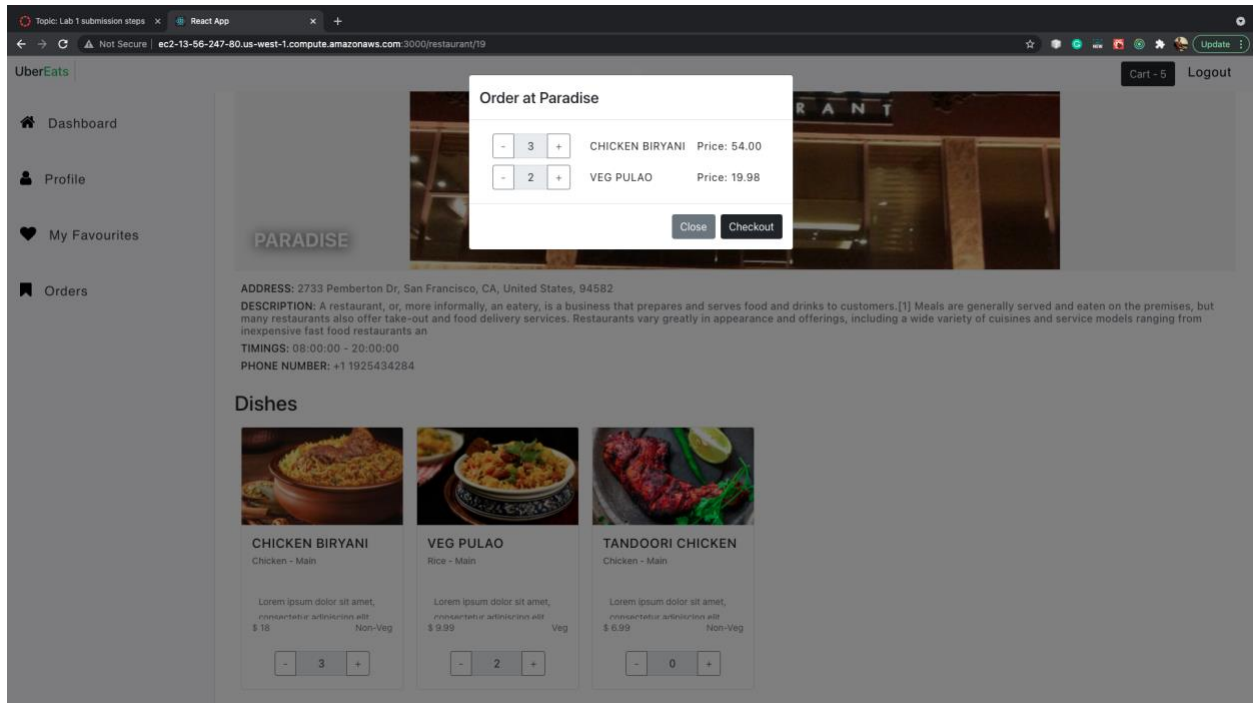
Country

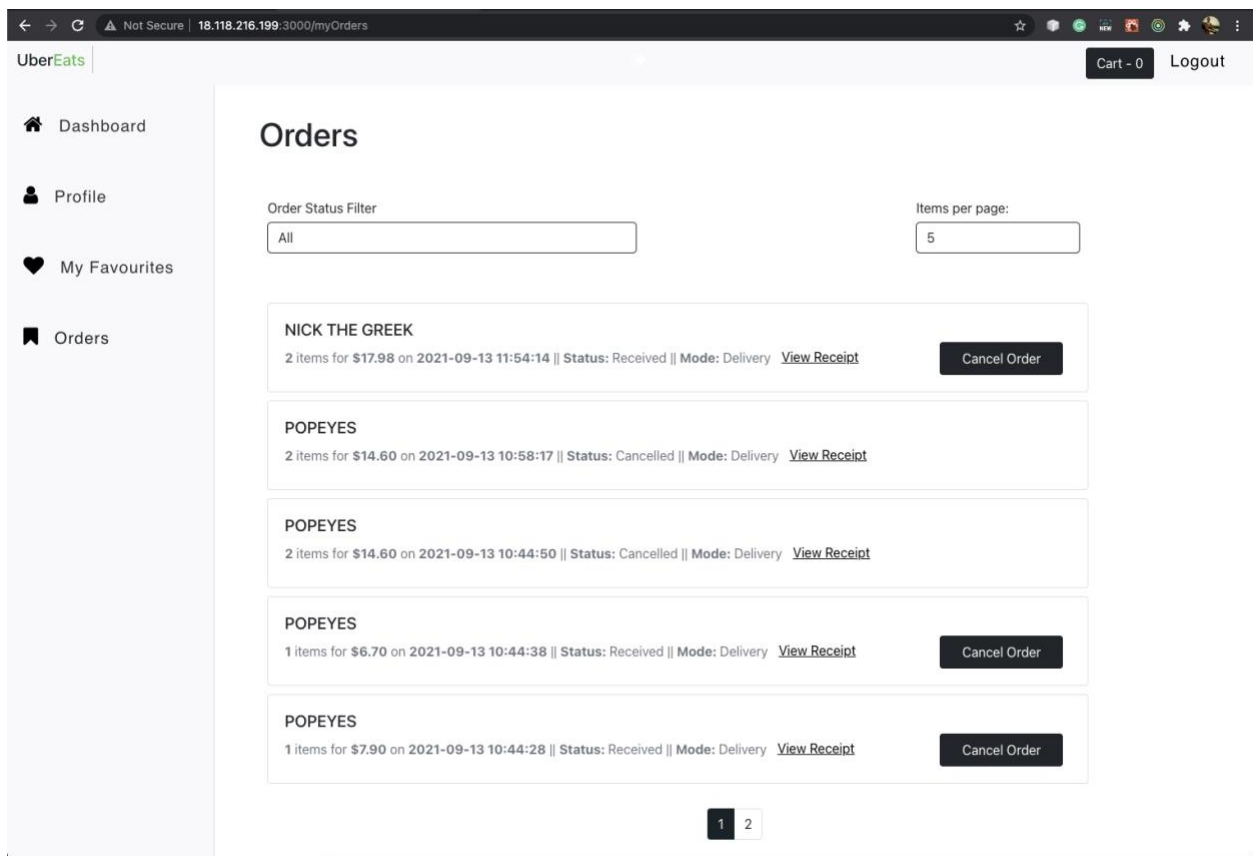
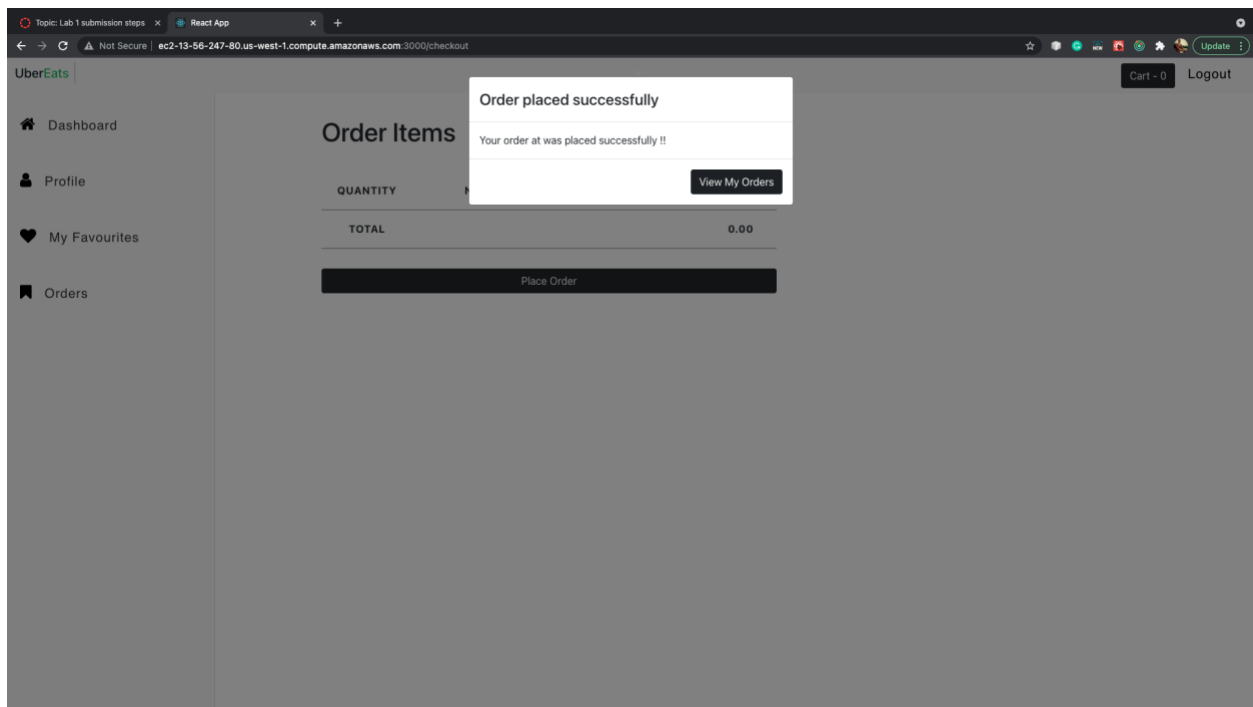
United States

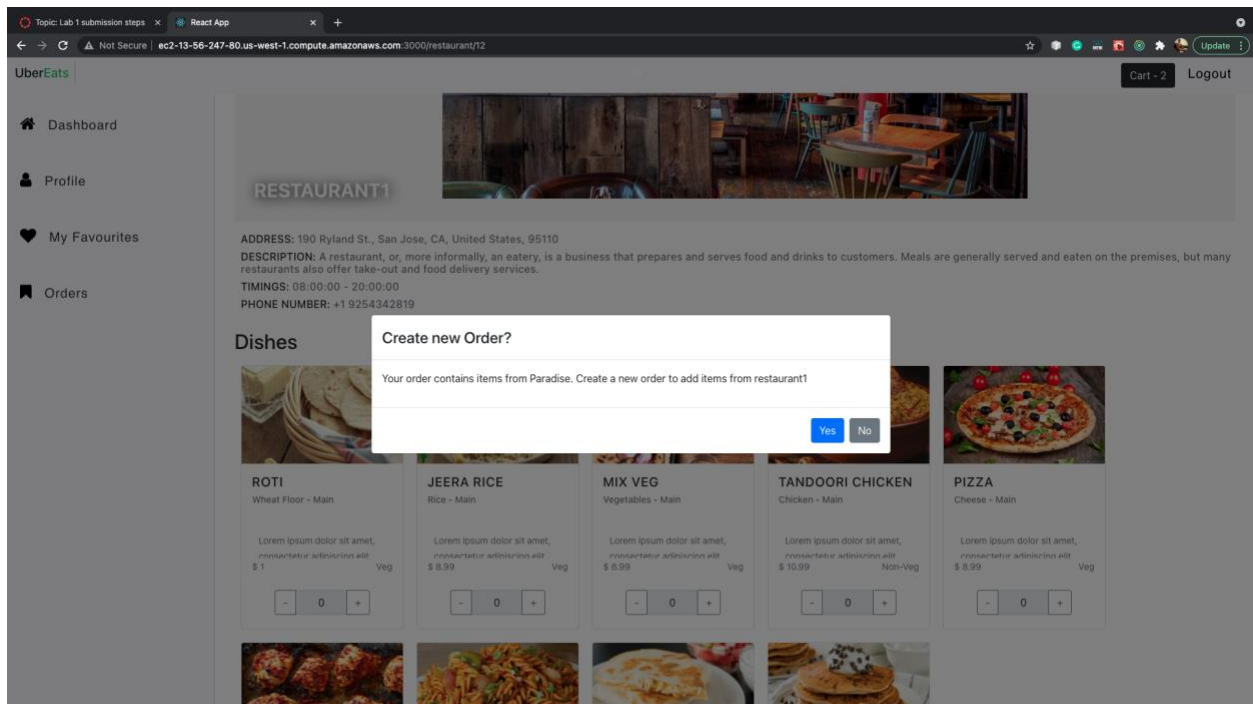
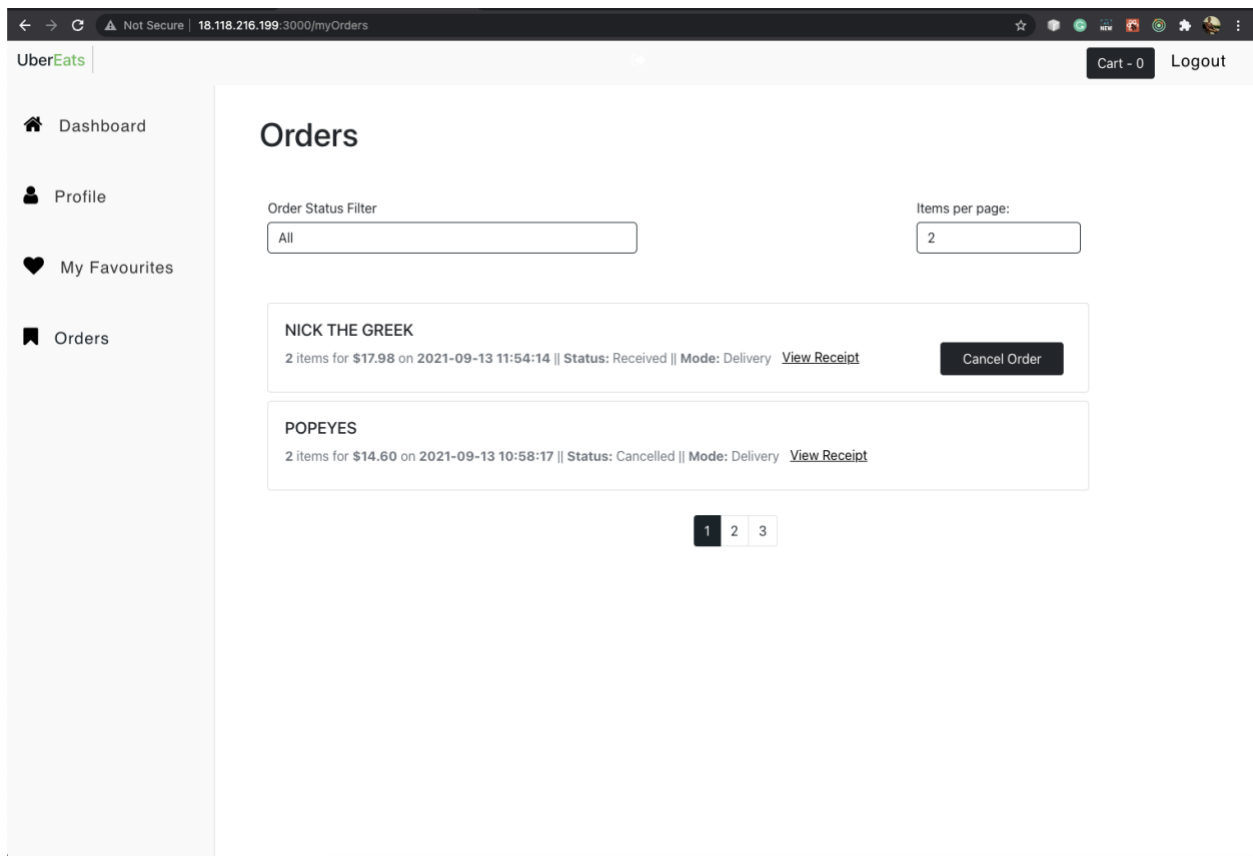
Zip Code

95110









Topic: Lab 1 submission stepsReact App

← → Not Secure ec2-13-56-247-80.us-west-1.compute.amazonaws.com:3000/restaurantDashboard

Update

UberEats


Logout

Dashboard

Dashboard

Orders

Dishes



Profile Picture

Choose File

No file chosen

Restaurant Name

restaurant1

Email

restaurant1@restaurant1.com

Street

190 Ryland St.

City

San Jose

State

CA

Country

United States

Zip Code

95110

Phone Number

9254342819

Description

A restaurant, or, more informally, an eatery, is a business that prepares and serves food and drinks to cust

Opening Time

08:00 AM

Closing Time

08:00 PM

☒ Pickup Mode Supported

☐ Delivery Mode Supported

Edit

Topic: Lab 1 submission stepsReact App

← → Not Secure ec2-13-56-247-80.us-west-1.compute.amazonaws.com:3000/restaurantDishes

Update

UberEats


Logout

Dishes

Dashboard

Orders

Dishes




ROTI

Wheat Flour - Main

Lorem ipsum dolor sit amet,
consectetur adipiscing elit

\$ 1

Veg




JEERA RICE

Rice - Main

Lorem ipsum dolor sit amet,
consectetur adipiscing elit

\$ 8.99

Veg




MIX VEG

Vegetables - Main

Lorem ipsum dolor sit amet,
consectetur adipiscing elit

\$ 8.99

Veg




TANDOORI CHICKEN

Chicken - Main

Lorem ipsum dolor sit amet,
consectetur adipiscing elit

\$ 10.99

Non-Veg




PIZZA

Cheese - Main

Lorem ipsum dolor sit amet,
consectetur adipiscing elit

\$ 8.99

Veg




SPICY CHICKEN

Chicken - Main

Lorem ipsum dolor sit amet,
consectetur adipiscing elit

\$ 13.99

Non-Veg




PASTA

Pasta - Main

Lorem ipsum dolor sit amet,
consectetur adipiscing elit

\$ 6.99

Vegan




TORTILLA

Cheese - Appetizer

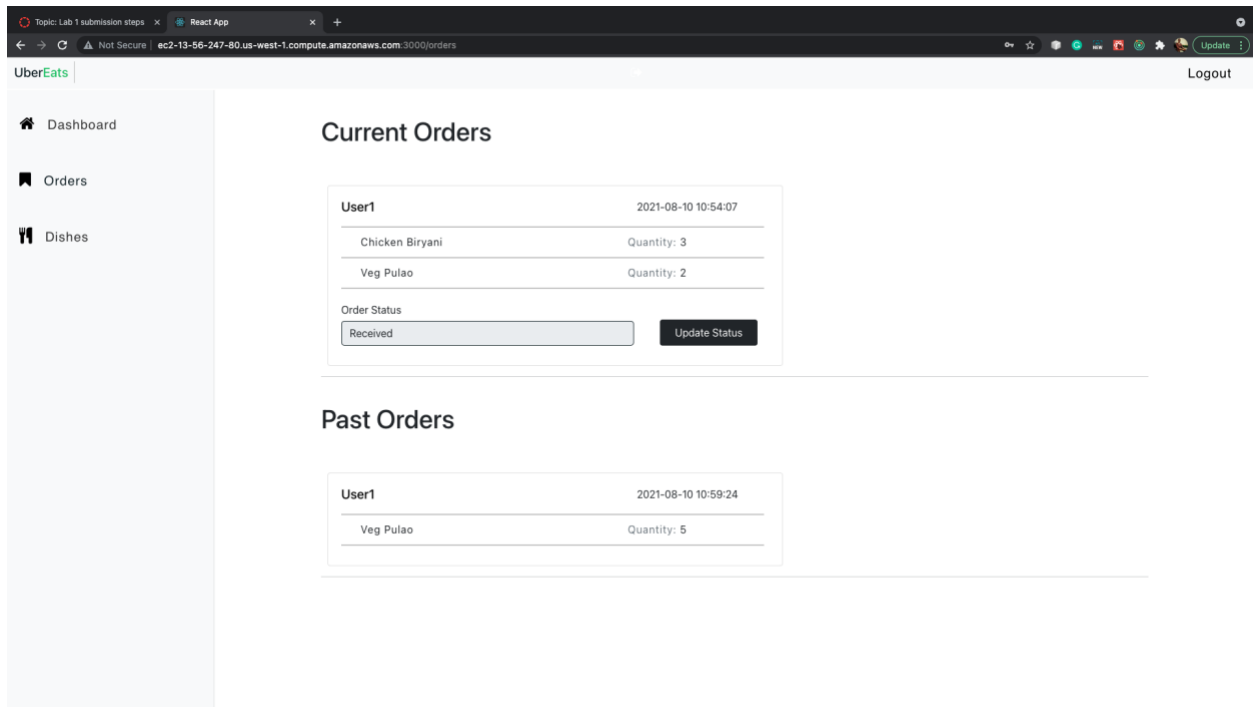
Lorem ipsum dolor sit amet,
consectetur adipiscing elit

\$ 4.99

Vegan



Add New

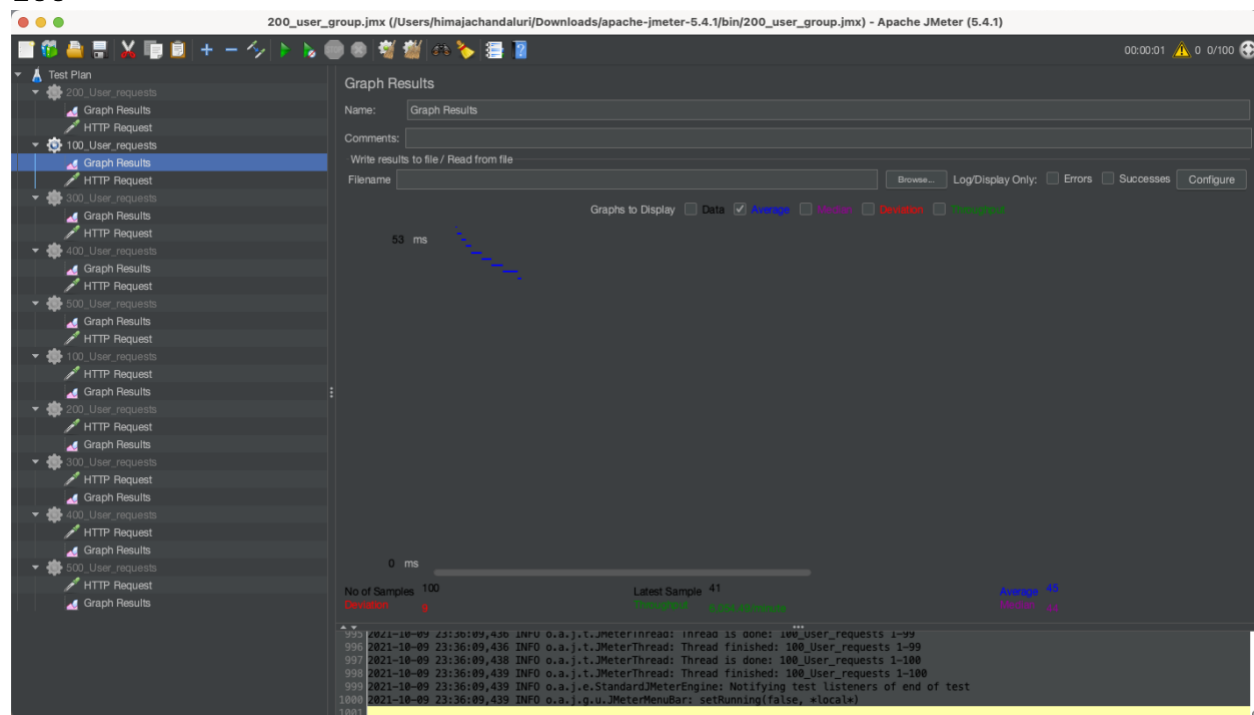


JMeter Testing:

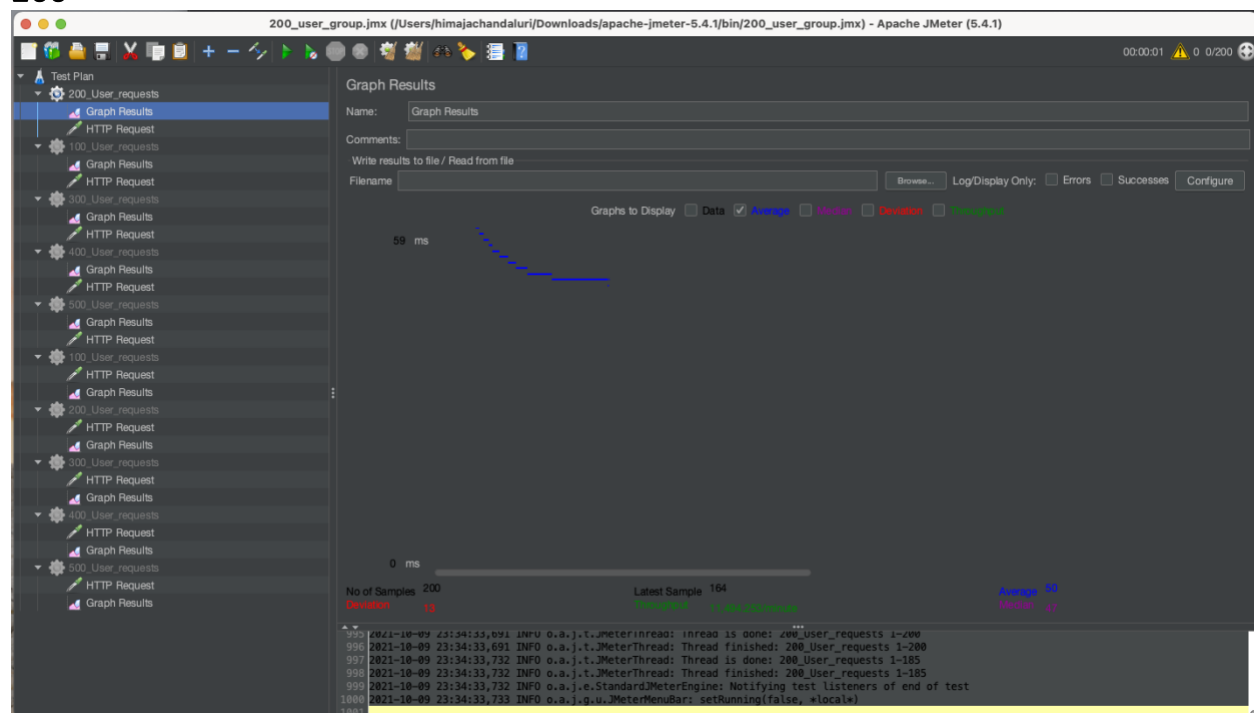
The application was tested with JMeter using 100, 200, 300, 400 and 500 threads. The throughput averaged around 6000 per minute with connection pooling and around 3000 without connection pooling.

With Connection Pooling – (mongodb connection pool - 20)

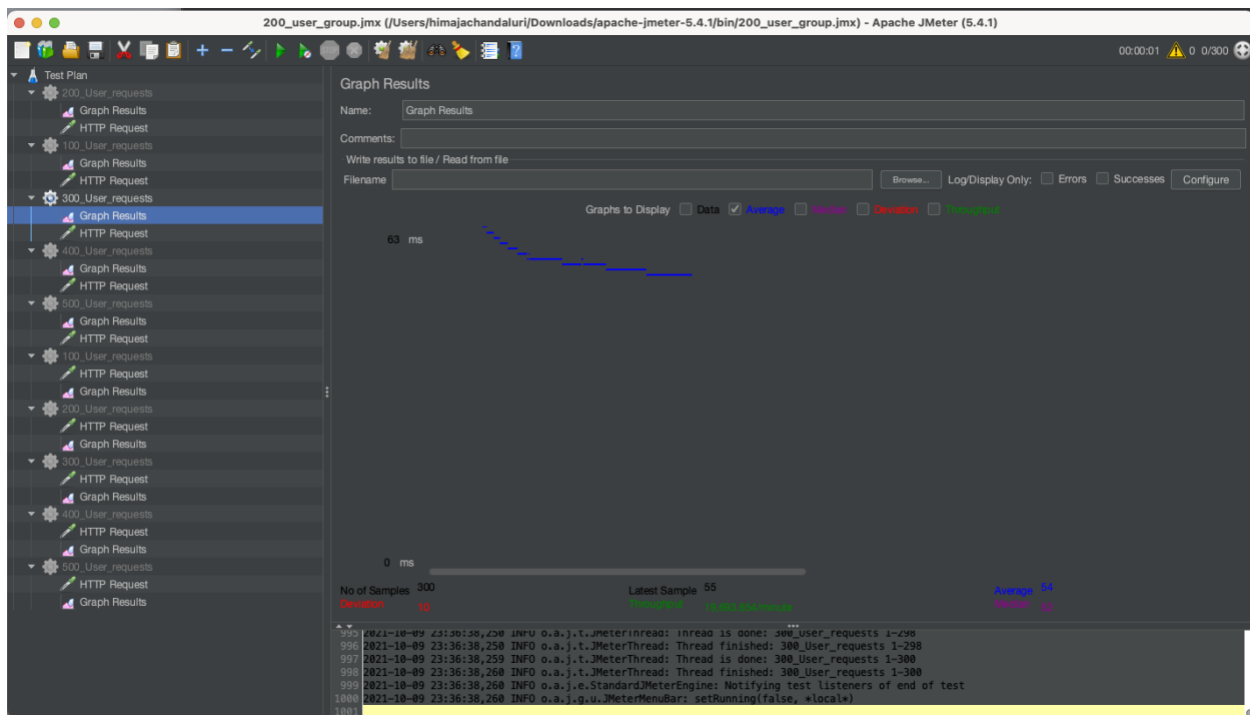
100—



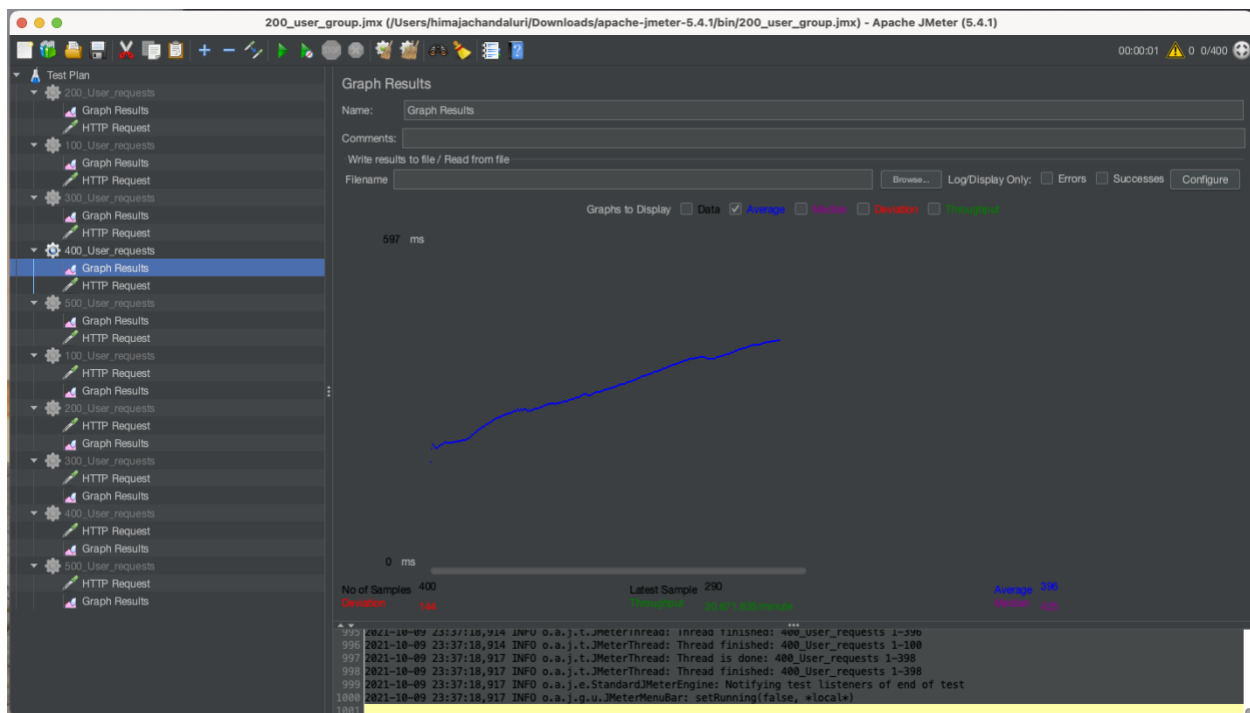
200—



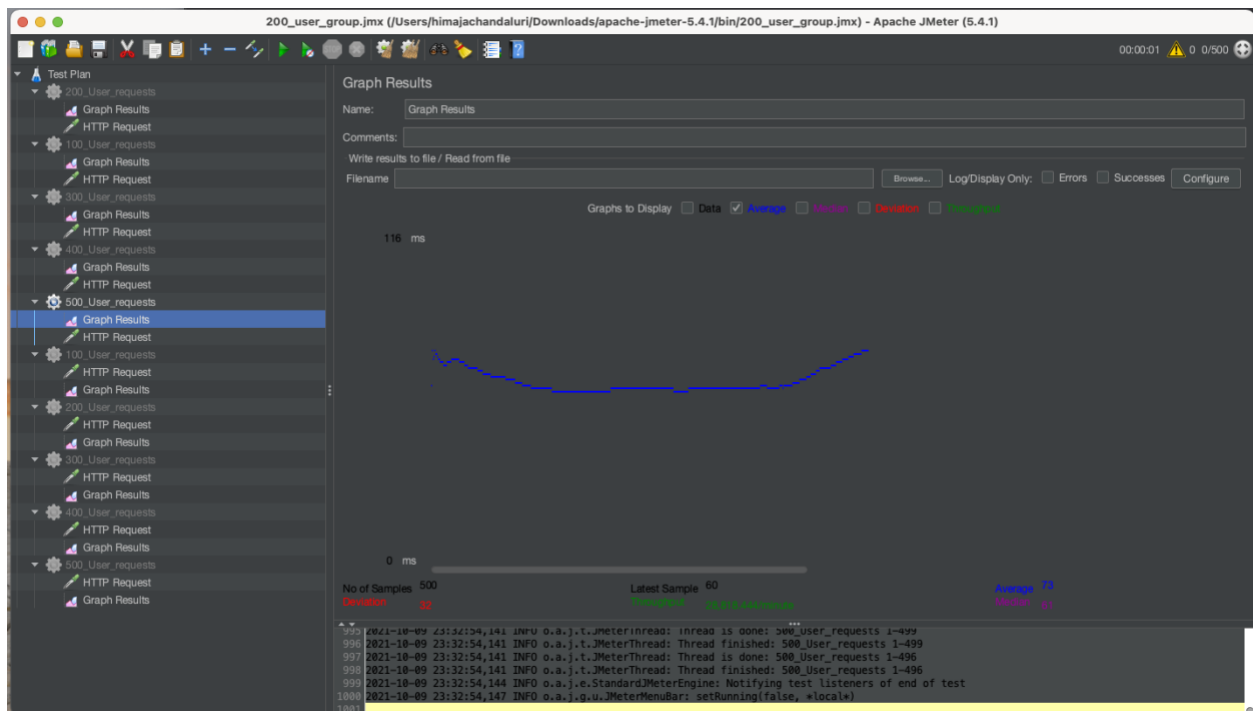
300 -



400 -

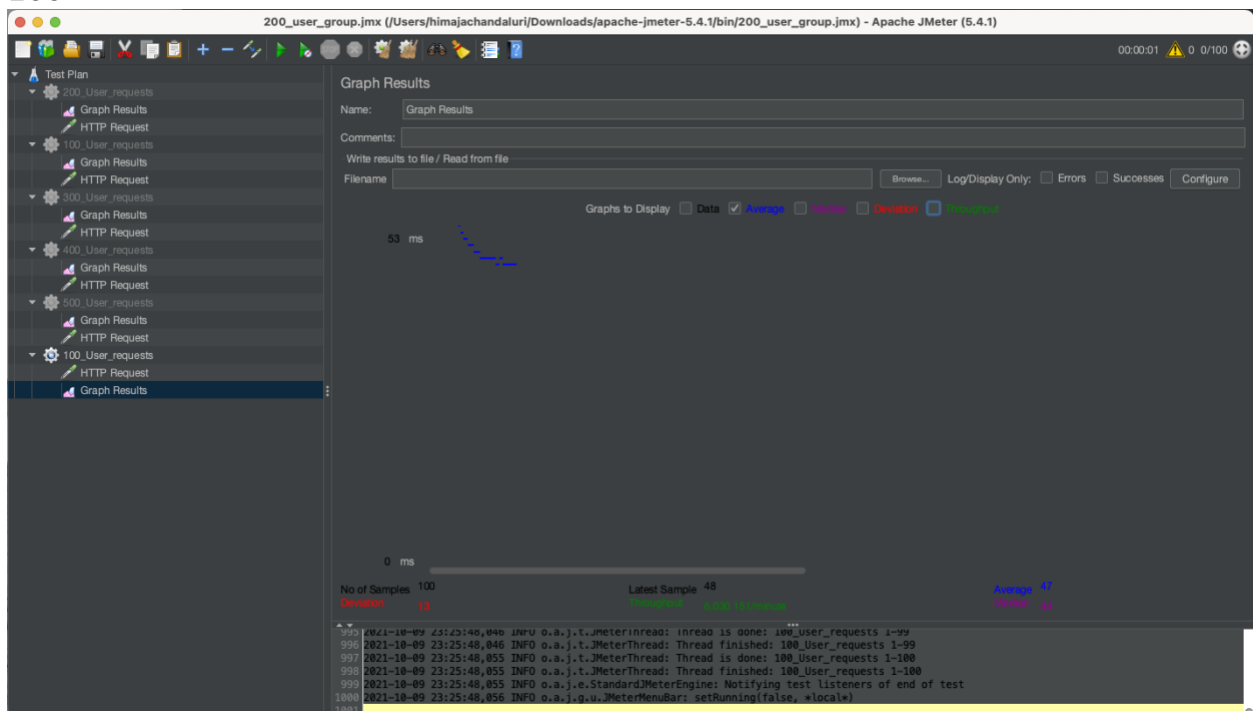


500 –

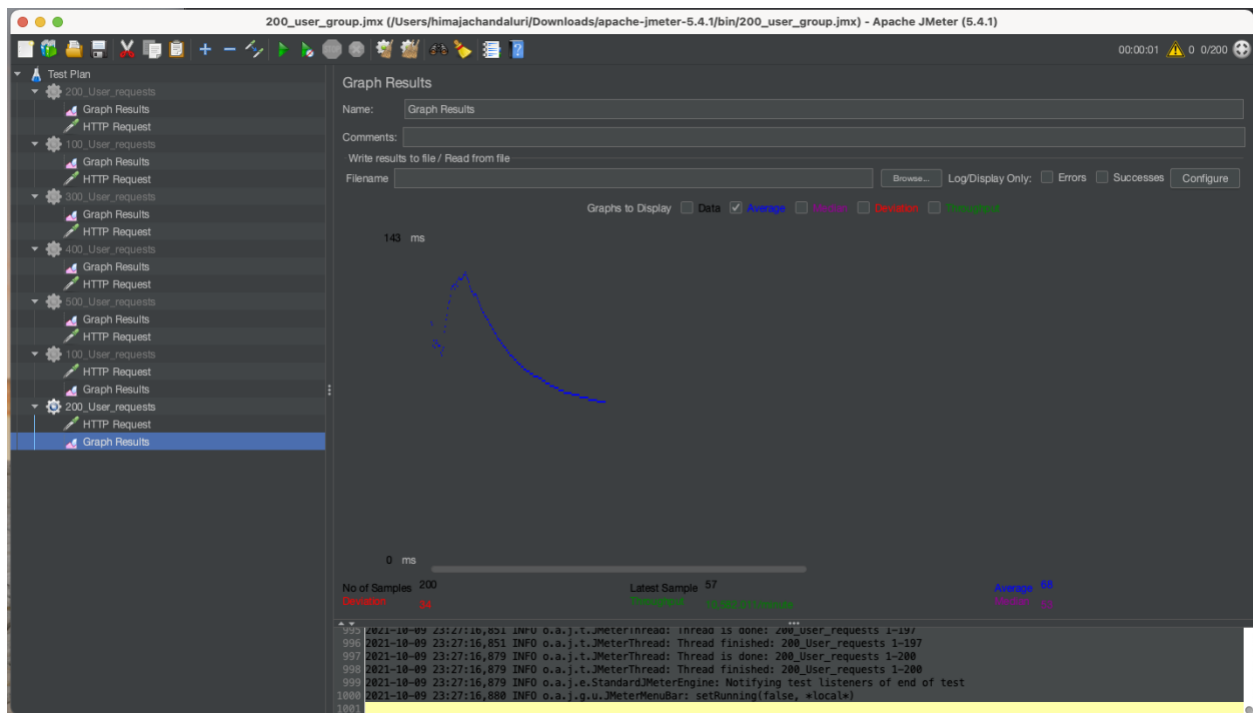


Without Connection Pooling – (MongoDB connection pool default – 5)

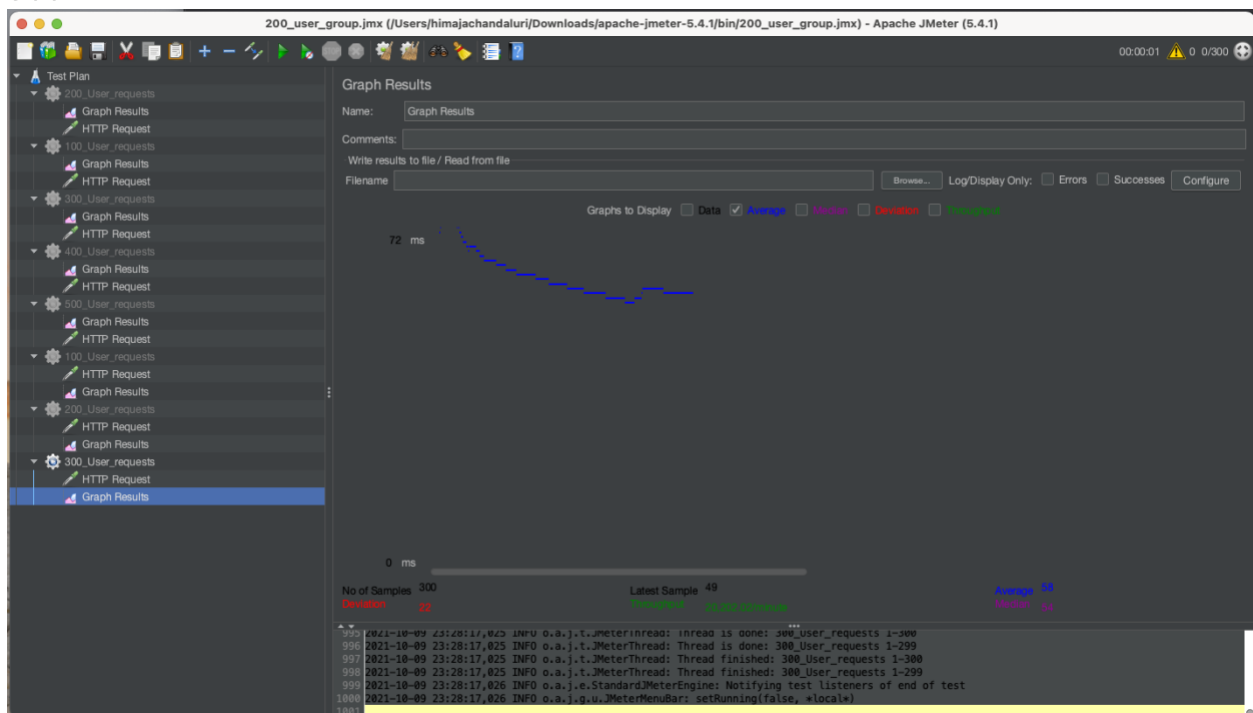
100 –



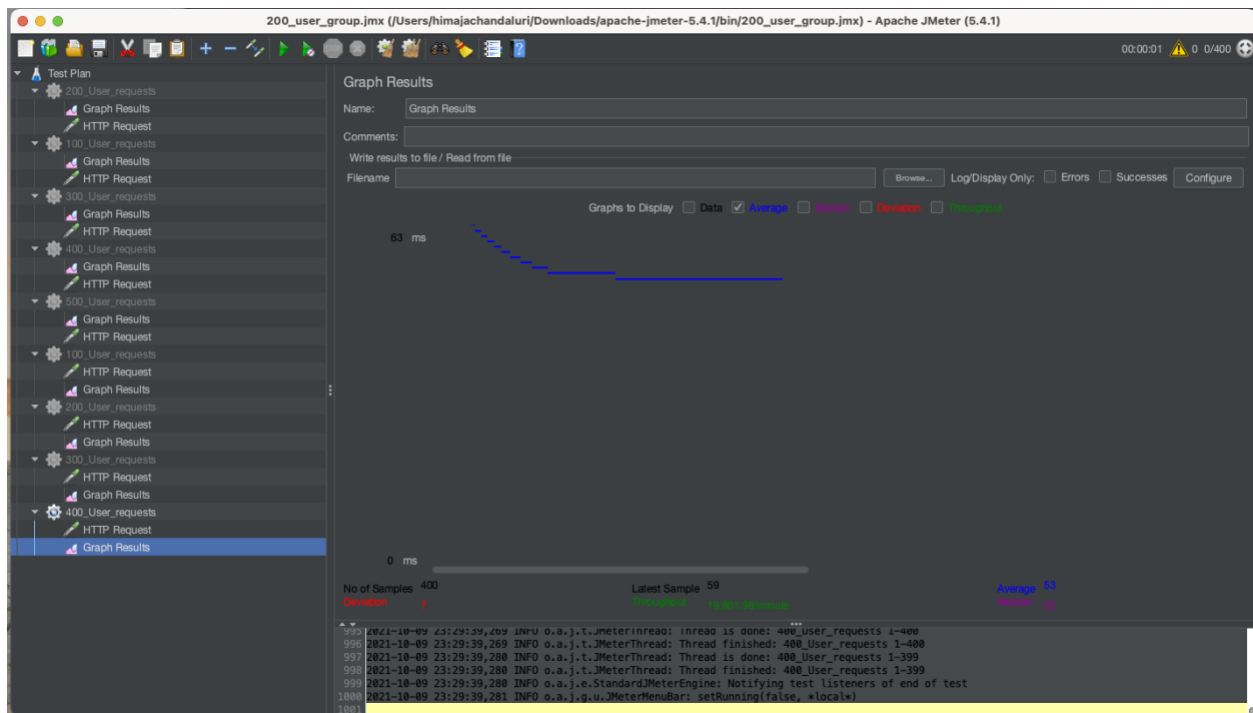
200 –



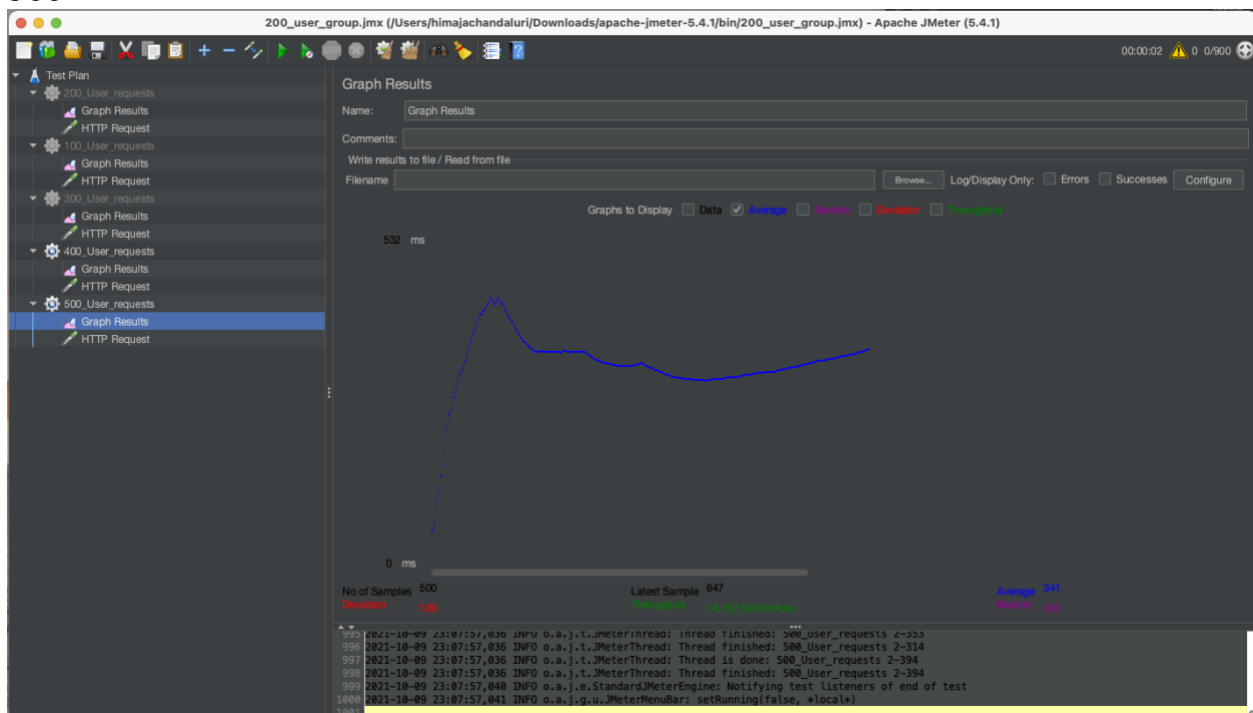
300 –



400 –



500 –



Mocha Testing

```
const axios = require("axios");

const assert = require("assert");

const apiUrl = "http://localhost:3900/api";

const customerJwt =
  "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiJyLCJlbWVpbCI6InN1amFabi5jb20iLCJp

describe("POST - get token during login (customer/restaurant)", () => {
  it("/auth", (done) => {
    axios
      .post(apiUrl + "/auth", { email: "user1@user.com", password: "123456" })
      .then((response) => {
        console.log(response.data);
        assert.equal(response.status, 200);
        done();
      })
      .catch((err) => {
        done(err);
      });
  });
});
```

```
25
26 describe("GET - get customer details by authID", () => {
27     axios.defaults.headers.common["x-auth-token"] = customerJwt;
28     it("/:id", (done) => {
29         axios
30             .get(apiUrl + "/customer/22")
31             .then((response) => {
32                 console.log(response.data);
33                 assert.equal(response.status, 200);
34                 done();
35             })
36             .catch((err) => {
37                 done(err);
38             });
39     });
40 });
41
42 describe("GET - customer delivery addresses by custID", () => {
43     axios.defaults.headers.common["x-auth-token"] = customerJwt;
44     it("/deliveryAddresses/:id", (done) => {
45         axios
46             .get(apiUrl + "/deliveryAddresses/8")
47             .then((response) => {
48                 console.log(response.data);
49                 assert.equal(response.status, 200);
50                 done();
51             })
52             .catch((err) => {
53                 done(err);
54             });
55     });
56 });
57
```

```
57
58 describe("GET - dish details by dishID", () => {
59     it("/dish/:id", (done) => {
60         axios
61             .get(apiUrl + "/dish/1")
62             .then((response) => {
63                 console.log(response.data);
64                 assert.equal(response.status, 200);
65                 done();
66             })
67             .catch((err) => {
68                 done(err);
69             });
70     });
71 });
72
73 describe("POST - toggle customer favorite option", () => {
74     it("/like", (done) => {
75         axios
76             .post(apiUrl + "/like", { _custId: 8, _restaurantId: 4 })
77             .then((response) => {
78                 console.log(response.data);
79                 assert.equal(response.status, 200);
80                 done();
81             })
82             .catch((err) => {
83                 done(err);
84             });
85     });
86 });
87
```

Output:

```
~/SJSU/2-Fall-2021/CMPE 273/CMPE273Lab1UberEats/backend npx mocha test/test.js
```

```
POST - get token during login (customer/restaurant)
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfcmFpbGUiOiJ1bWVzZXIuY29tIiwiaXNzX290YXVybm50IjowLCJpYXQiOi
✓ /auth (530ms)
```

```
GET - get customer details by authID
{
  _id: 28,
  _authId: 59,
  nickname: 'User1',
  name: 'User1',
  dateOfBirth: '2003-10-07T07:00:00.000Z',
  profilePic: 'https://ubereatsimages273.s3.amazonaws.com/photo-1504194104404-433180773017.jpeg',
  phoneNumber: '3456789876',
  about: 'I am User1'
}

✓ /:id (200ms)
```

```
GET - customer delivery addresses by custID
[
  {
    _id: 25,
    _custId: 28,
    city: 'San Ramon',
    state: 'CA',
    country: 'United States',
    zipCode: '95110',
    street: '190 Ryland St., Apr. no. 5404'
  }
]

✓ /deliveryAddresses/:id (186ms)
```

```
GET - dish details by dishID
{
  _id: 20,
  _restaurantId: 12,
  name: 'Roti',
  mainIngredient: 'Wheat Floor',
  image: 'https://ubereatsimages273.s3.amazonaws.com/34567833.jpeg',
  price: 1,
  description: 'Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labora
tion ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate
category: 'Main',
type: 'Veg'
}

✓ /dish/:id (186ms)
```

```
POST - toggle customer favorite option
Successfully disliked
✓ /like (362ms)
```

5 passing (1s)

React Testing:

```
frontend > src > tests > JS customerDashboard.test.js > ...
```

```
1 import React from "react";
2 import { render, screen } from "@testing-library/react";
3 import CustomerDashboard from "../components/customerDashboard";
4 import { BrowserRouter } from "react-router-dom";
5 import { Provider } from "react-redux";
6 import store from "../redux/store";
7
8 test("renders Customer Dashboard", () => {
9   render(
10     <React.StrictMode>
11       <BrowserRouter>
12         <Provider store={store}>
13           <CustomerDashboard />
14         </Provider>
15       </BrowserRouter>
16     </React.StrictMode>
17   );
18   const linkElement = screen.getByText(/Filters/);
19   expect(linkElement).toBeInTheDocument();
20 });
21
```

```
frontend > src > tests > JS customerSignUp.test.js > ...
```

```
1 import React from "react";
2 import { render, screen } from "@testing-library/react";
3 import CustomerSignUp from "../components/customerSignUp";
4 import { BrowserRouter } from "react-router-dom";
5 import { Provider } from "react-redux";
6 import store from "../redux/store";
7
8 test("renders Customer SignUp", () => {
9   render(
10     <React.StrictMode>
11       <BrowserRouter>
12         <Provider store={store}>
13           <CustomerSignUp />
14         </Provider>
15       </BrowserRouter>
16     </React.StrictMode>
17   );
18   const linkElement = screen.getByText(/Sign Up/, { selector: "button" });
19   expect(linkElement).toBeInTheDocument();
20 });
21
```

```
frontend > src > tests > JS home.test.js > ...
```

```
1 import React from "react";
2 import { render, screen } from "@testing-library/react";
3 import Home from "../components/home";
4 import { BrowserRouter } from "react-router-dom";
5 import { Provider } from "react-redux";
6 import store from "../redux/store";
7
8 test("renders Home", () => {
9   render(
10     <React.StrictMode>
11       <BrowserRouter>
12         <Provider store={store}>
13           <Home />
14         </Provider>
15       </BrowserRouter>
16     </React.StrictMode>
17   );
18   const linkElement = screen.getByText(/Customer SignUp/);
19   expect(linkElement).toBeInTheDocument();
20 });
21
```

```
frontend > src > tests > JS login.test.js > ...
```

```
1 import React from "react";
2 import { render, screen } from "@testing-library/react";
3 import Login from "../components/login";
4 import { BrowserRouter } from "react-router-dom";
5 import { Provider } from "react-redux";
6 import store from "../redux/store";
7
8 test("renders Login", () => {
9   render(
10     <React.StrictMode>
11       <BrowserRouter>
12         <Provider store={store}>
13           <Login />
14         </Provider>
15       </BrowserRouter>
16     </React.StrictMode>
17   );
18   const linkElement = screen.getByText(/Login/, { selector: "button" });
19   expect(linkElement).toBeInTheDocument();
20 });
21
```

```
frontend > src > tests > JS restaurantSignUp.test.js > ...
```

```
1 import React from "react";
2 import { render, screen } from "@testing-library/react";
3 import RestaurantSignUp from "../components/restaurantSignUp";
4 import { BrowserRouter } from "react-router-dom";
5 import { Provider } from "react-redux";
6 import store from "../redux/store";
7
8 test("renders Restaurant SignUp", () => {
9   render(
10     <React.StrictMode>
11       <BrowserRouter>
12         <Provider store={store}>
13           <RestaurantSignUp />
14         </Provider>
15       </BrowserRouter>
16     </React.StrictMode>
17   );
18   const linkElement = screen.getByText(/Sign Up/, { selector: "button" });
19   expect(linkElement).toBeInTheDocument();
20 });
21
```

Output:

```
PASS src/tests/home.test.js
  ● Console

    console.log
      Got user data again in HOME: {}

      at Home.render (src/components/home.js:9:13)

PASS src/tests/login.test.js
PASS src/tests/customerSignUp.test.js
PASS src/tests/restaurantSignUp.test.js
PASS src/tests/customerDashboard.test.js
  ● Console

    console.log
      LOCATION FILTER: []

      at CustomerDashboard.getFilteredRestaurants (src/components/customerDashboard.js:117:13)

    console.log
      PROPS: { marginLeft: '20px', marginRight: '20px' }

      at SearchBox (src/components/common/searchBox.js:4:11)

    console.log
      PROPS: { marginLeft: '10px', marginRight: '50px' }

      at SearchBox (src/components/common/searchBox.js:4:11)

    console.log
      getAllRestaurant call: http://13.56.247.80:3900/api/restaurant

      at getAllRestaurantsData (src/redux/allRestaurants/allRestaurantsActions.js:26:11)

    console.log
      ENDPOINT: http://13.56.247.80:3900/api/restaurant

      at src/redux/allRestaurants/allRestaurantsActions.js:29:15

Test Suites: 5 passed, 5 total
Tests: 5 passed, 5 total
Snapshots: 0 total
Time: 2.953 s
Ran all test suites.

Watch Usage: Press w to show more.
```

Git repository:

The screenshot shows a GitHub repository page for 'ChandaluriHimaja / CMPE273Lab1UberEats'. The repository is private and has 1 star and 0 forks. The main branch is 'main'. A security alert banner at the top indicates potential vulnerabilities in dependencies. The file list shows a directory structure with 'backend' and 'frontend' folders, and several files including '.DS_Store', '.gitignore', 'Lab1_CMPE273.docx (1).pdf', 'Lab2_CMPE273.docx', 'README.md', and 'relativeDoc.docx'. The README.md file is open, showing the title 'CMPE273Lab1UberEats'. The right sidebar contains sections for 'About', 'Releases', 'Packages', 'Contributors', and 'Languages'.

Repository: ChandaluriHimaja / CMPE273Lab1UberEats (Private)

Stats: 1 Star, 0 Fork

Navigation: Code, Issues, Pull requests, Actions, Projects, Wiki, Security (6), Insights, Settings

Security Alert: We found potential security vulnerabilities in your dependencies. Only the owner of this repository can see this message. [See Dependabot alerts](#)

Branches: main (1 branch), 0 tags

Files:

File	Commit Message	Time
backend	aws url	2 hours ago
frontend	aws url	2 hours ago
kafka-backend	jwt fix	2 hours ago
.DS_Store	Added order filter in customer orders page, accepting location info d...	last month
.gitignore	Initial commit	2 months ago
Lab1_CMPE273.docx (1).pdf	Added order filter in customer orders page, accepting location info d...	last month
Lab2_CMPE273.docx	Bug fixes	4 hours ago
README.md	Initial commit	2 months ago
relativeDoc.docx	bulk commit	2 months ago

README.md

CMPE273Lab1UberEats

About

No description, website, or topics provided.

Releases

No releases published. [Create a new release](#)

Packages

No packages published. [Publish your first package](#)

Contributors (2)

- HimajaChandaluri Himaja Chandaluri
- ChandaluriHimaja

Languages

- JavaScript 98.5%
- Other 1.5%

github.com/ChandaluriHimaja/CMPE273Lab1UberEats/commits?author=HimajaChandaluri

Search or jump to...

[Pull requests](#)[Issues](#)[Marketplace](#)[Explore](#)

ChandaluriHimaja / CMPE273Lab1UberEats Private

Unwatch

1

Star

0

Fork

0

<> CodeIssuesPull requestsActionsProjectsWikiSecurity6InsightsSettings

main

Commits on Nov 13, 2021

jwt fix

HimajaChandaluri committed 2 hours ago

f2dd98c

aws url

HimajaChandaluri committed 2 hours ago

db97c26

Starting frontend backend and kafka-backend concurrently

HimajaChandaluri committed 3 hours ago

2e2621d

Spelling error fix

HimajaChandaluri committed 3 hours ago

6ab15d2

Bug fixes

HimajaChandaluri committed 4 hours ago

7f53e36

Commits on Nov 11, 2021

Kafka integrated completely

HimajaChandaluri committed 2 days ago

167f142

Commits on Nov 1, 2021

SQL to Mongo conversion of all routes, added cacelation feature, orde...

HimajaChandaluri committed 12 days ago

8fe1f45

Commits on Oct 9, 2021

Bug fix

HimajaChandaluri committed on Oct 9

3ea7e59

Joi import bug

HimajaChandaluri committed on Oct 9

26dc3b5

Questions:

1. **Comparison of passport authentication process Vs the authentication process used in Lab1.**

In Lab1 I implemented authentication using JWT tokens by using the jsonwebtoken library directly, without any middleware. In Lab2 I used the Passport-JWT strategy from the Passport middleware.

2. **Performance comparison with and without Kafka**

Kafka makes sure that a request is not lost when the backend is overloaded with requests. It does this by placing a request into a message queue. Whenever the previous request execution is completed a new request from the queue is taken and processed. But Kafka does not increase the performance of the system. With Kafka in place an API call has to travel more in the network to reach the database layer and fetch the data and respond back to the frontend. Thus, using Kafka reduces the performance of the system but increases the latency of the system.

3. **If given an option to implement MySQL and MongoDB both in your application, specify which part of the data of the application you will store in MongoDB and MySQL respectively.**

If given an option I might store User login credentials in MySQL database and the rest of the data in the MongoDB database. Because login credentials are read multiple times but updated rarely MySQL is a good option. The rest of my data has fields with array of values which makes the data schema unstructured. MongoDB being an unstructured database best fits this requirement.