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CSE3002 Internet and Web Programming

Link to Code & Video Demonstration:
https://drive.google.com/drive/folders/17UeAiz9gViJHpixSqLym78A9rI80zrup?usp=share_link

Faculty: -

Prof. Jayakumar K

Title of the project: -

Orket - An Online Marketplace

Team members: -

20BCE0457 – AYUSH KUMAR

20BCE0462 – RISHIKESH SURESH KUMAR

20BCE0468 – VAIBHAV SINGH

Lab Slot: -

L31+L32

ABSTRACT

A surprisingly large portion of small business owners may be missing out on a relatively easy way to attract and retain customers. According to the CNBC/SurveyMonkey Small Business Survey, 45% of business owners said they don’t have a website for their business.

It’s a surprising statistic, given how common business websites are. “Having a website is like having a business card,” digital marketing expert said Antara Dutta in the report. A similar sentiment can be made for e-commerce functionality. After all, customers regularly shop online or check a store’s website to look at information for products. E-commerce for small business levels the playing field, helping smaller establishments compete with larger companies.

Thankfully, small business can take advantage of e-commerce rather easily. By understanding the importance of implementing an online storefront and some of your options for inexpensive, easy-to-maintain e-commerce solutions, we can help business take its next step as painlessly as possible.

Our project is Orket. This is a website to buy, sell and rent products and second-hand products. Our Aim is to provide a platform to ease the process of conventional retail system and help common people by facilitating them with this system. Orket is an interactive e-commerce solution supporting even small-scale business. Hence, this not only contributes to the society but also enables people be a part of an easy and affordable online e-commerce system.

In this website we have basically 5 modules. The modules include the functionalities for customer(buyer/seller). The customer has to register using login/sign-up portal. The registered customer can view details of products and he/she can buy or sell or rent the commodities of his/her need. The modules also contain the access of admin page on the website. The admin can change everything in the website. He has the ability to add, delete, and update any information regarding the website and also change user roles.

Languages/Technologies used

Front End: -

1. HTML
2. CSS
3. JAVASCRIPT
4. React

Back End: -

1. Node.js
2. Mongo DB
3. Express
4. JSON (JWT)
5. Stripe API
6. Cloudinary

For the backend side, we would be using the Express library on top of Nodejs. We would use MongoDB as the NoSQL database to store our data as documents in JSON format. We would use mongoose to connect to our MongoDB database. We use jwt to manage user tokens. We integrated stripe api to handle payments to our website and to manage orders via receipts. We used cloudinary to store the images of the products getting listed on our website.

MODULES

1. Login and Sign-Up

- Users can create an account or log in to their account
- Users can enter their user email ID and password or create a new account giving their details and login into the portal.
- Validating the login and sign-up fields.
- Users open the login page and enter credentials to log in.
- User's account information is stored to the database.

2. Home Page

- Enables user to see newly arrived items listed by sellers/admins.
- Users can select products to purchase and add that to the cart.

3. Posting Page

- Allows authorized user to create a listing for the item he/she wants to sell.
- To get a listing up in minutes and upload photos straight from user's device along with the description of the product.

4. Manage User Account Page

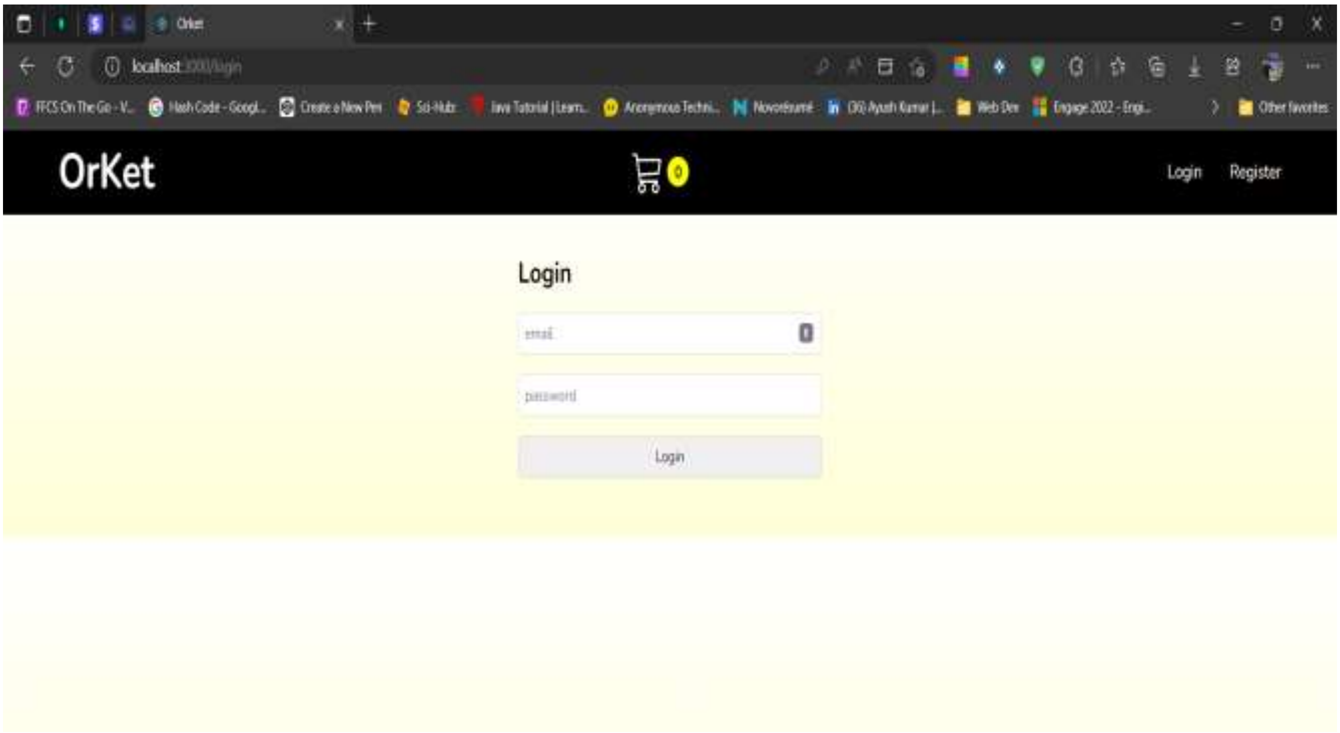
- Allows admin to manage the user record in the database by provision of operations like delete or edit or view record.

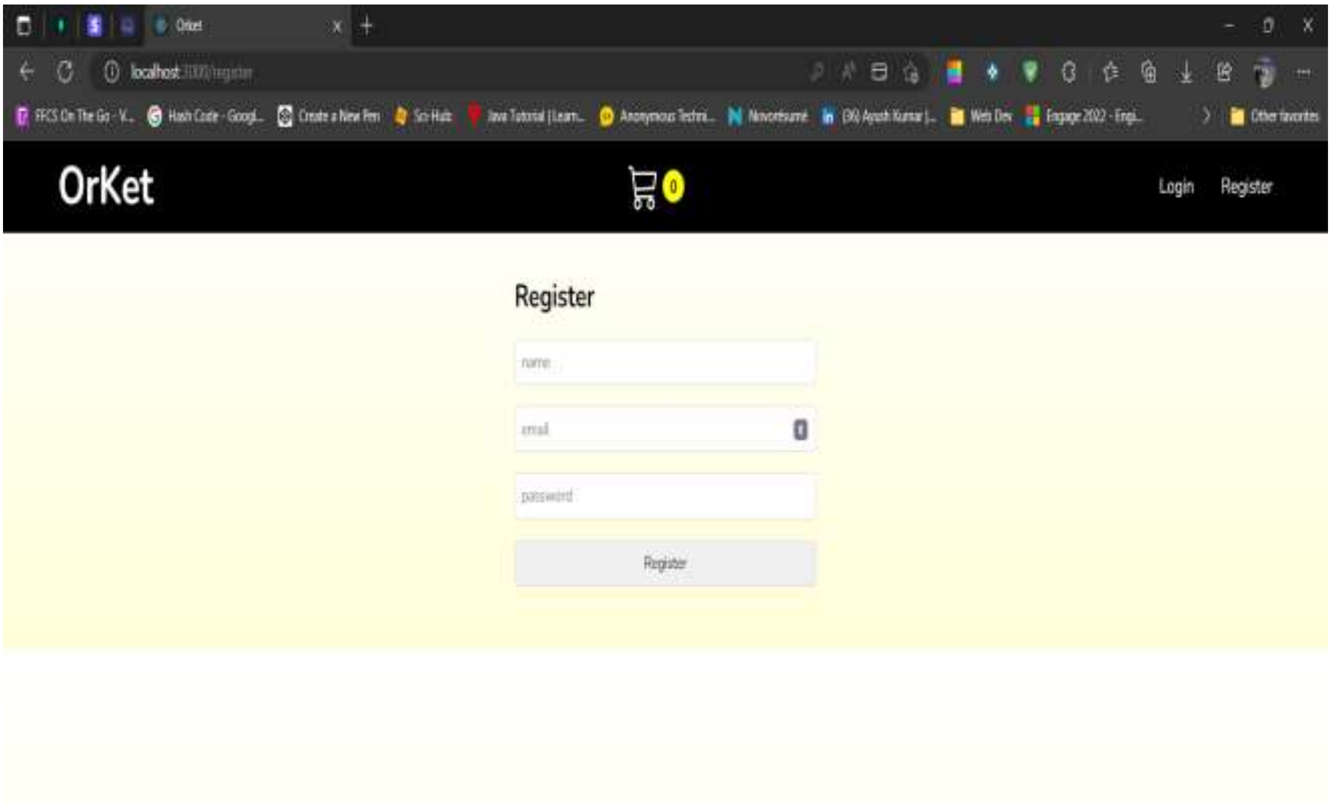
5. Manage Orders

- Allows to keep track of orders and payments done by users.
- Also allows to send order receipts to user after successful payment.

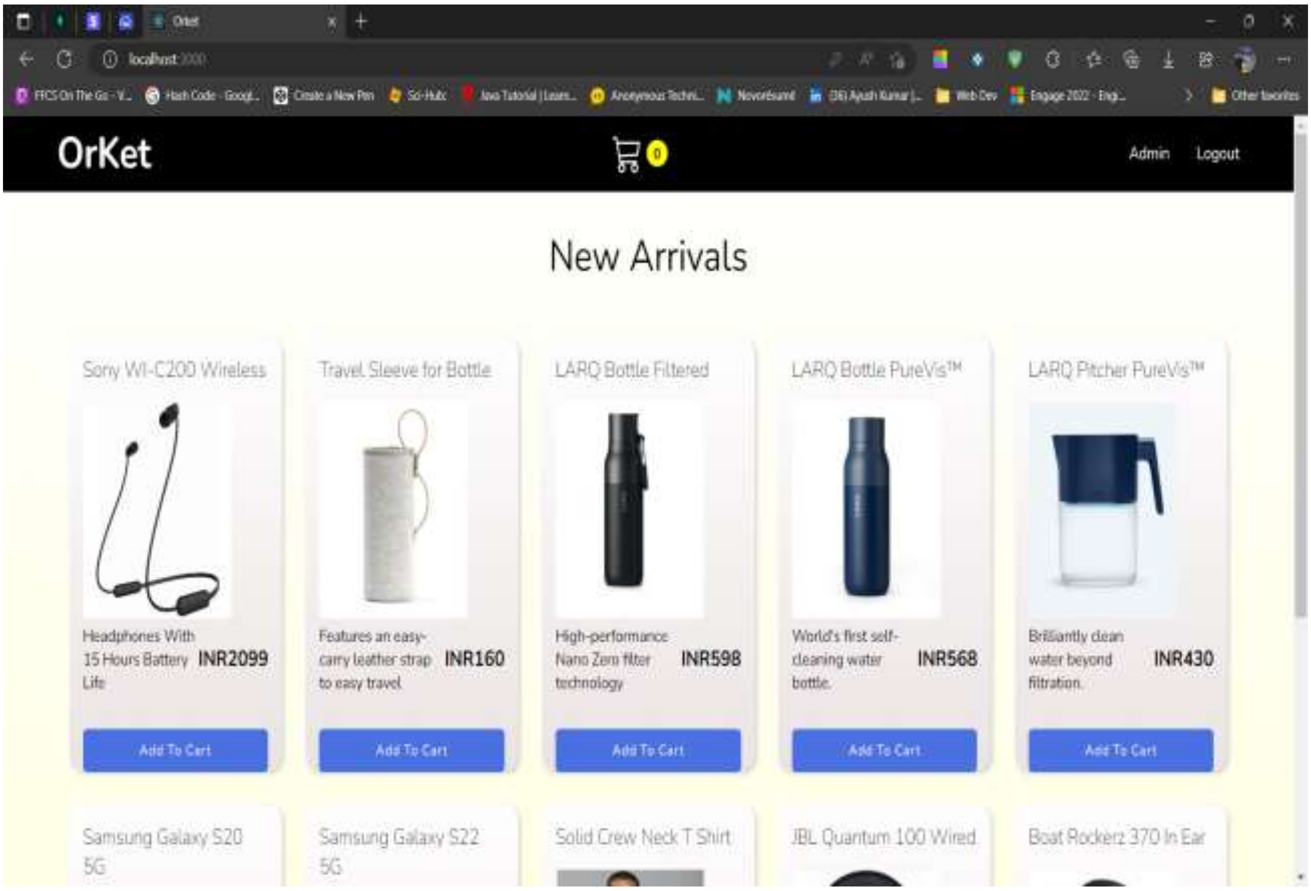
Implementation

Login page/Sign-Up page:





Homepage:



New Arrivals

Sony WI-C200 Wireless
Headphones With 15 Hours Battery Life
INR2099

Travel Sleeve for Bottle
Features an easy-carry leather strap to easy travel
INR160

LARQ Bottle Filtered
High-performance Nano Zero filter technology
INR598

LARQ Bottle PureVis™
World's first self-cleaning water bottle.
INR568

LARQ Pitcher PureVis™
Brilliantly clean water beyond filtration.
INR430

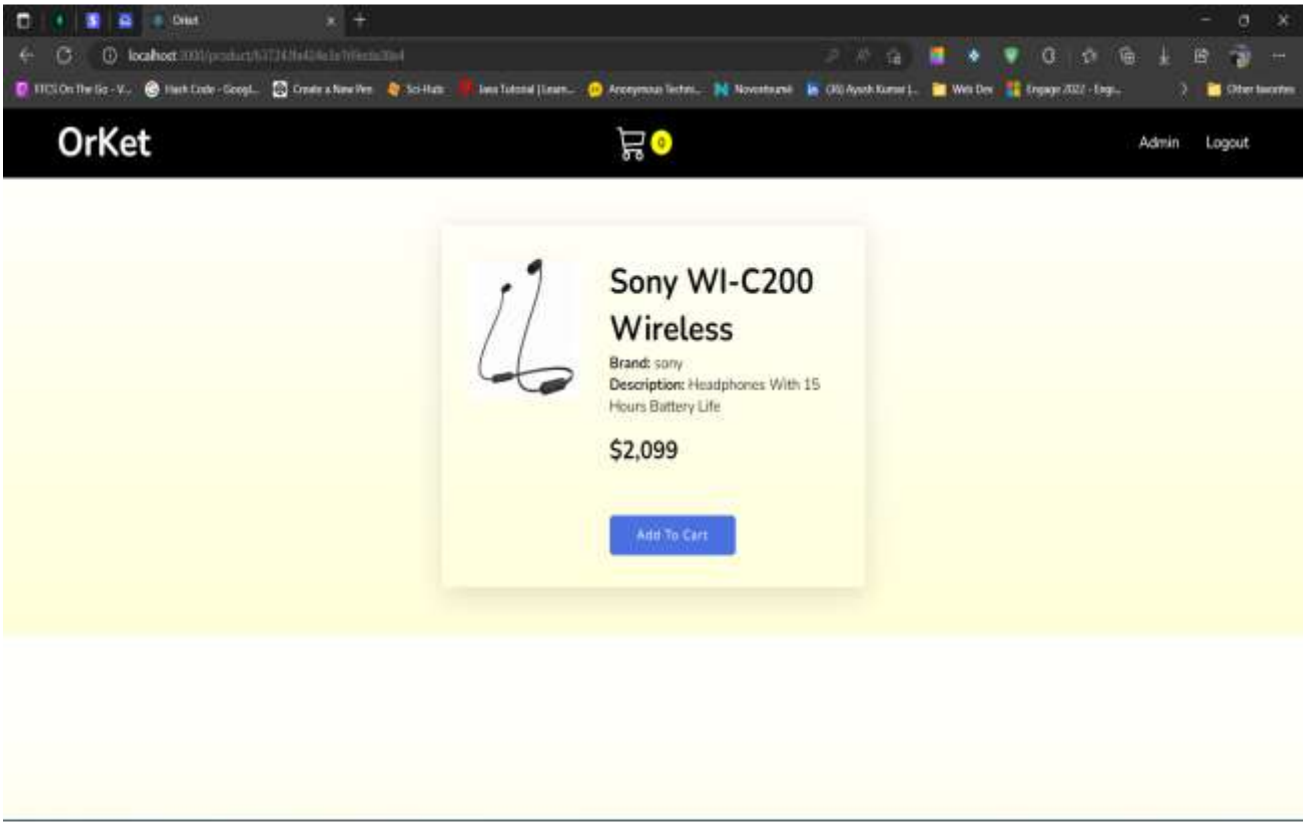
Samsung Galaxy S20 5G

Samsung Galaxy S22 5G

Solid Crew Neck T Shirt

JBL Quantum 100 Wired

Boat Rockerz 370 In Ear



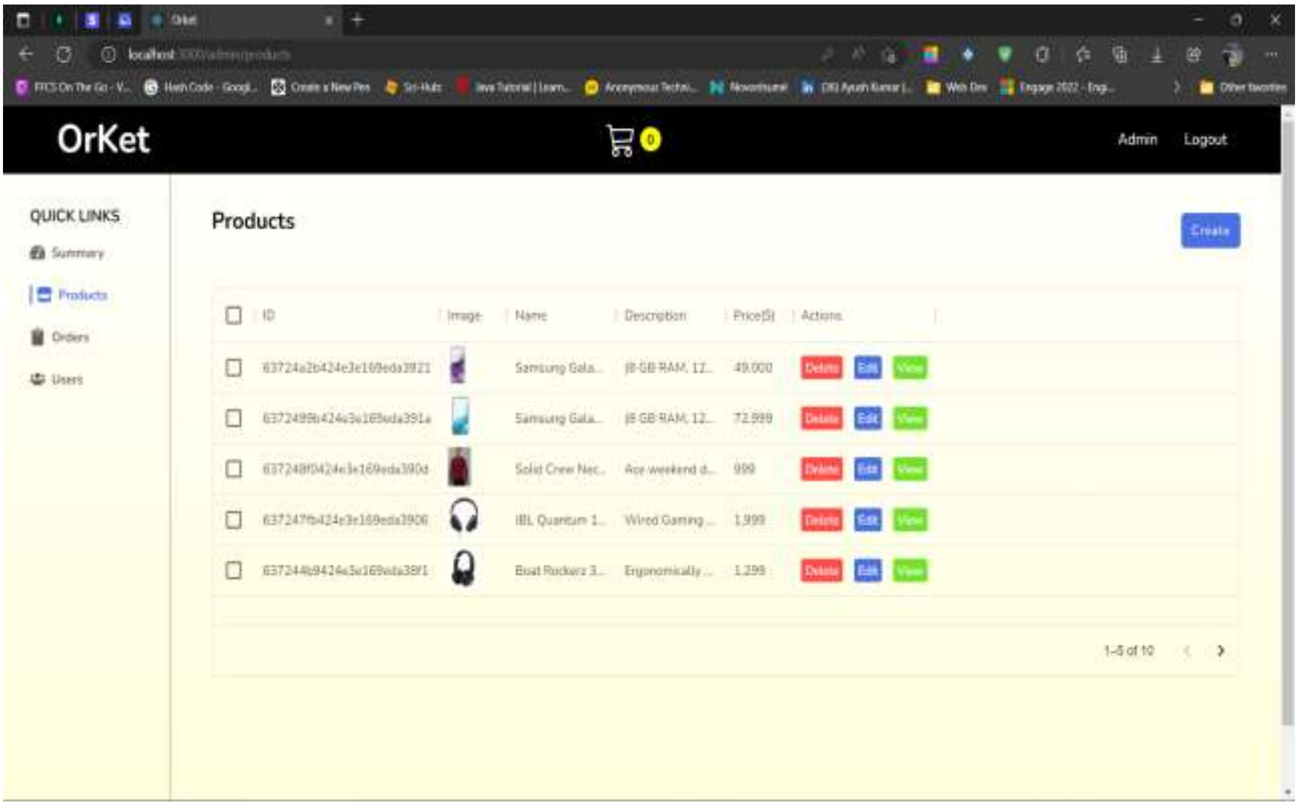
Sony WI-C200 Wireless

Brand: sony

Description: Headphones With 15 Hours Battery Life

$2,099

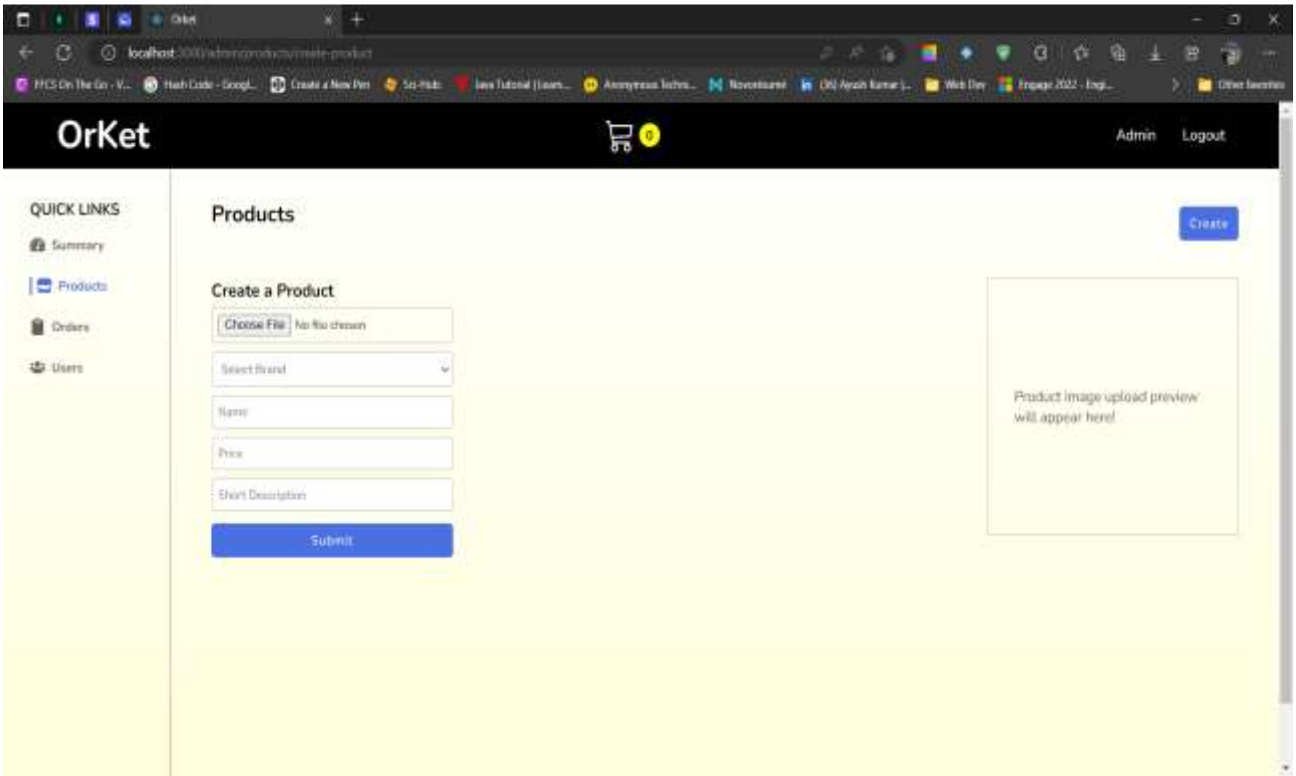
Posting Page:



Products

☐	ID	Image	Name	Description	Price($)	Actions
☐	63724a2b424e3e169eda3921		Samsung Gala...	8 GB RAM, 12...	49,000	Delete Edit View
☐	637249b424e3e169eda391a		Samsung Gala...	8 GB RAM, 12...	72,999	Delete Edit View
☐	637248f0424e3e169eda390d		Solid Crew Nec...	Ace weekend d...	999	Delete Edit View
☐	637247fb424e3e169eda3906		JBL Quantum 1...	Wired Gaming ...	1,999	Delete Edit View
☐	637244b9424e3e169eda38f1		Boat Rockerz 3...	Ergonomically ...	1,299	Delete Edit View

1–5 of 10

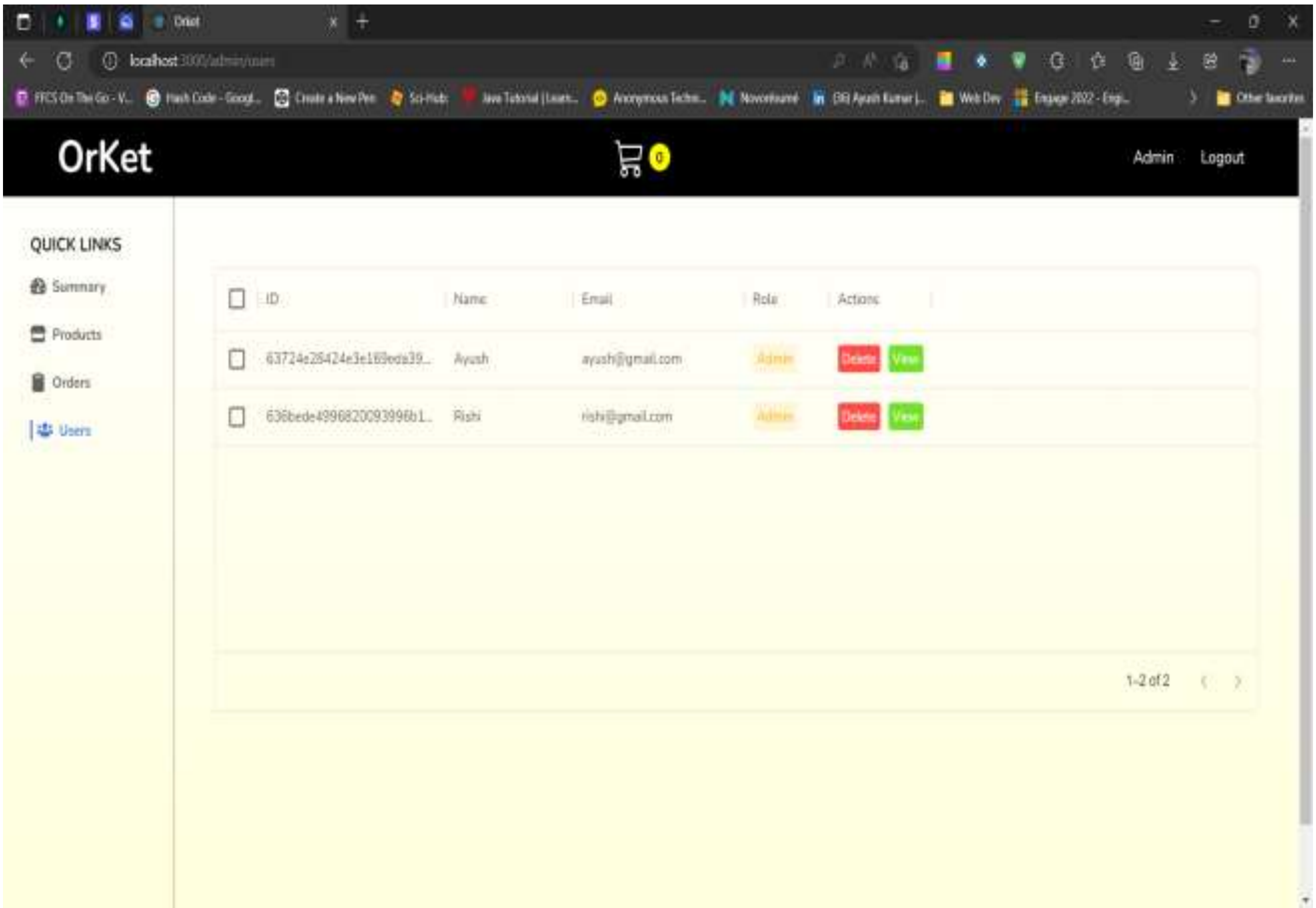


Products

Create a Product

Product image upload preview will appear here!

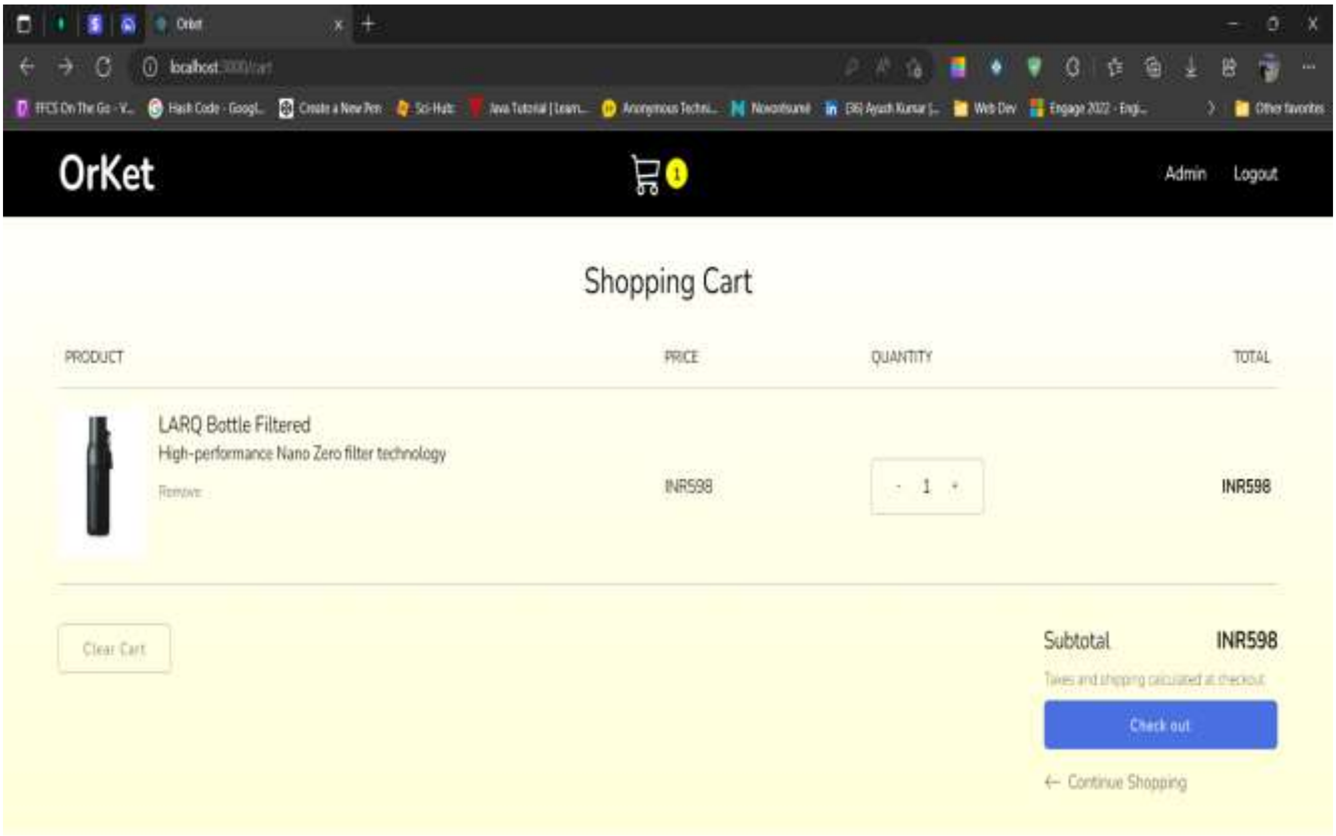
Manage User Account Page:



□	ID	Name	Email	Role	Actions
□	63724e28424e3e169eda39...	Ayush	ayush@gmail.com	Admin	Delete View
□	636bede4996820093996b1...	Rishi	rishi@gmail.com	Admin	Delete View

1-2 of 2

Cart:



Shopping Cart

PRODUCT	PRICE	QUANTITY	TOTAL
LARQ Bottle Filtered High-performance Nano Zero filter technology Remove	INR598	- 1 +	INR598

Clear Cart

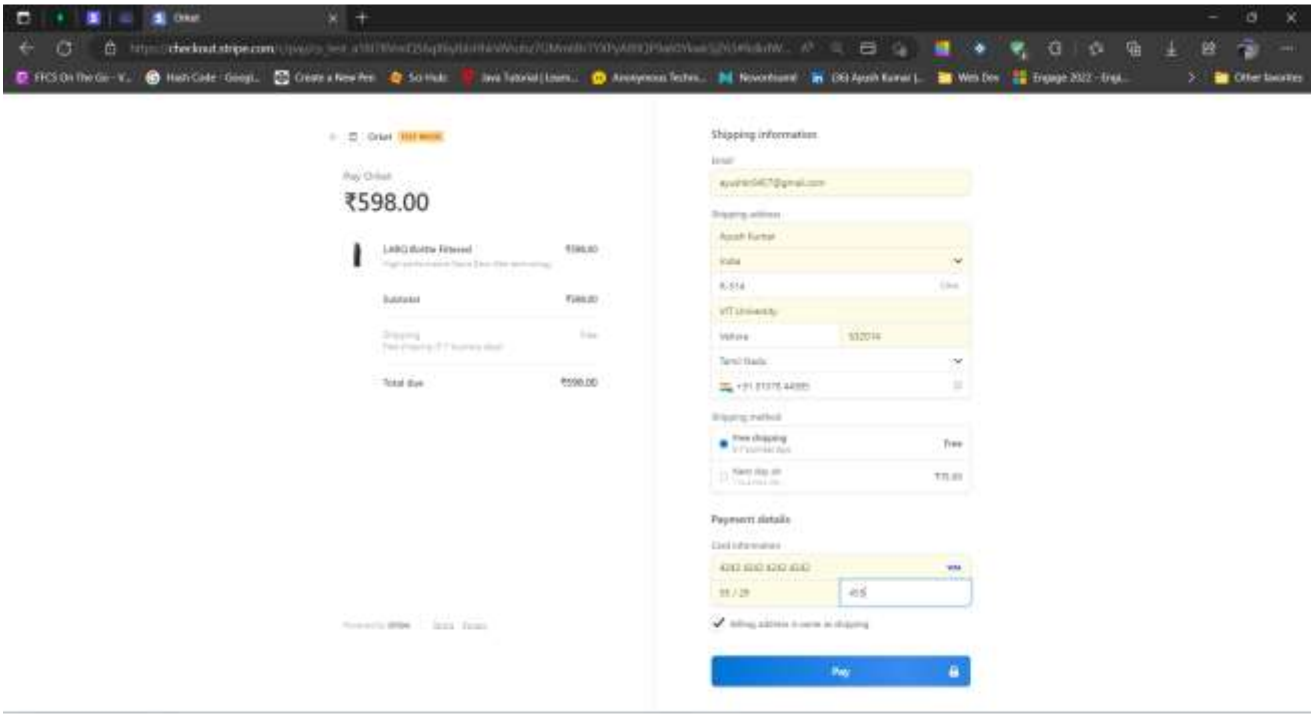
Subtotal INR598

Taxes and shipping calculated at checkout

Check out

← Continue Shopping

Checkout Page:



Order TEST MODE

Pay Order

₹598.00

LARQ Bottle Filtered	₹598.00
Subtotal	₹598.00
Shipping Free shipping (5-7 business days)	Free
Total due	₹598.00

Shipping information

Email: ayushin0467@gmail.com

Shipping address: Ayush Kumar, India, K-514, VIT University, Vellore 632014, Tamil Nadu, +91 81375 44085

Shipping method

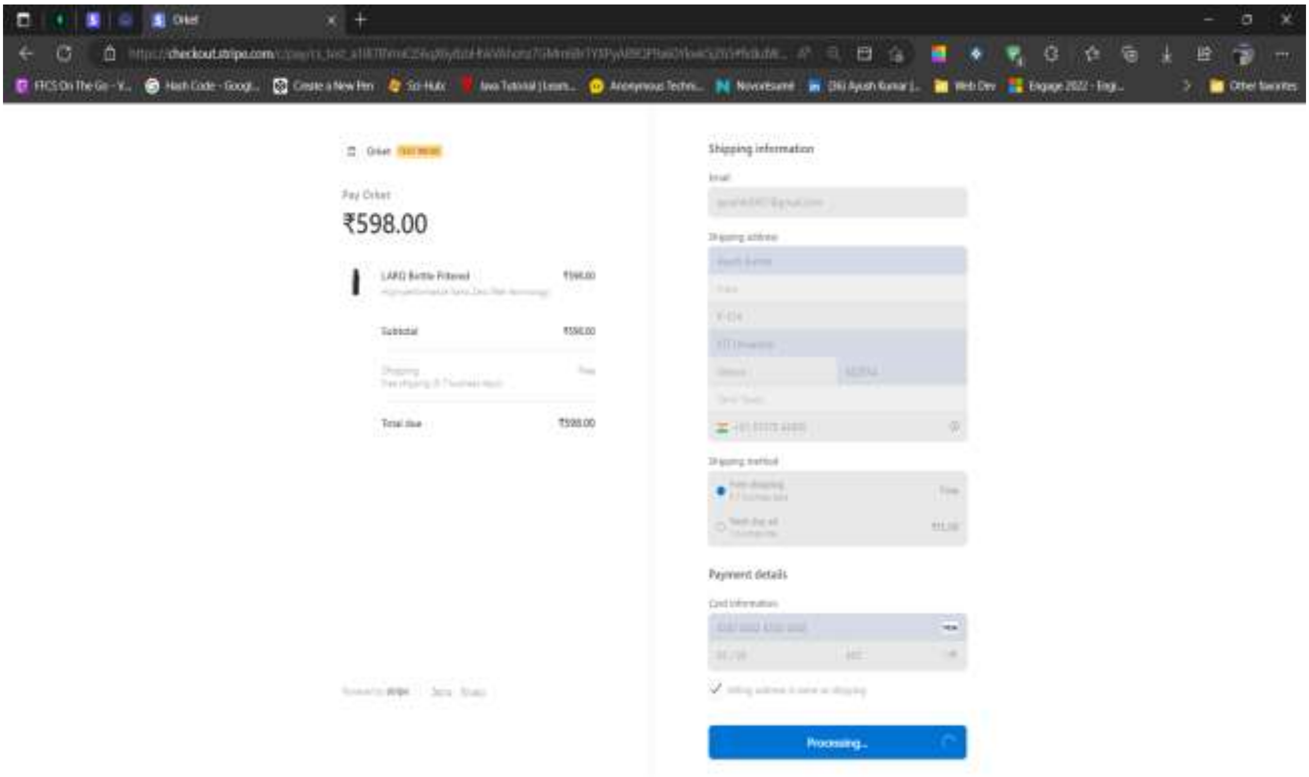
● Free shipping, 5-7 business days: Free

○ Next day air: ₹15.00

Payment details

Card information: 4242 4242 4242 4242, 08 / 28, 456

✓ Billing address is same as shipping



Order TEST MODE

Pay Order

₹598.00

LARQ Bottle Filtered	₹598.00
Subtotal	₹598.00
Shipping Free shipping (5-7 business days)	Free
Total due	₹598.00

Shipping information

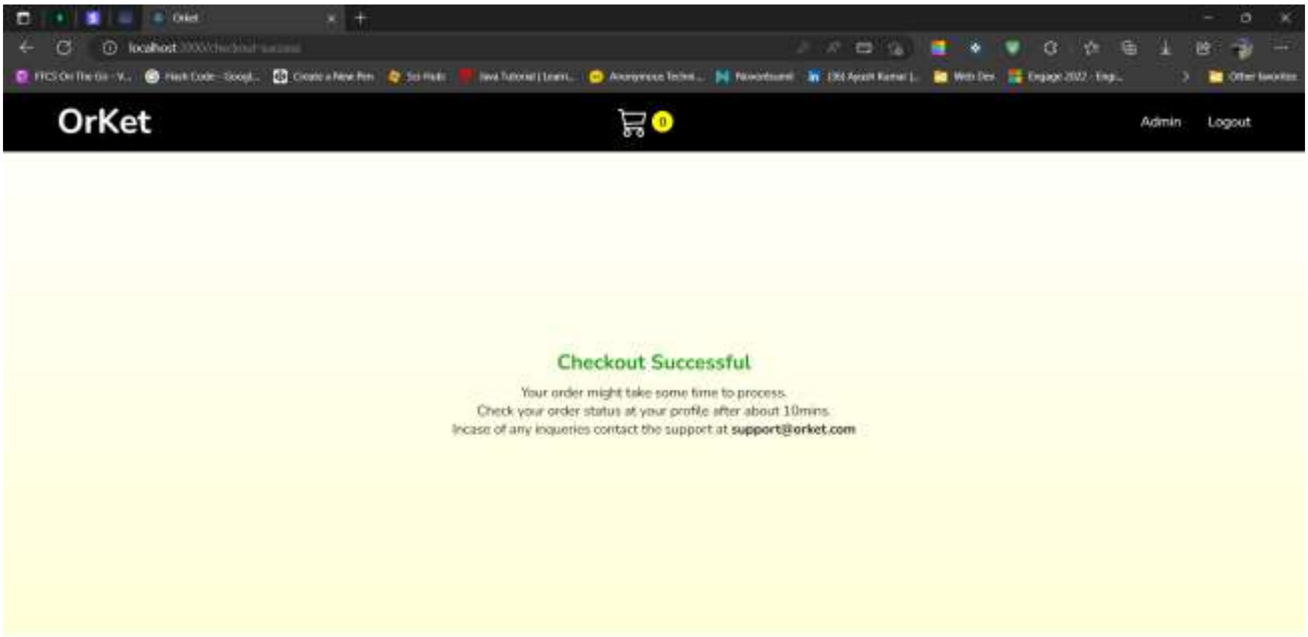
Email

Shipping address

Shipping method

Payment details

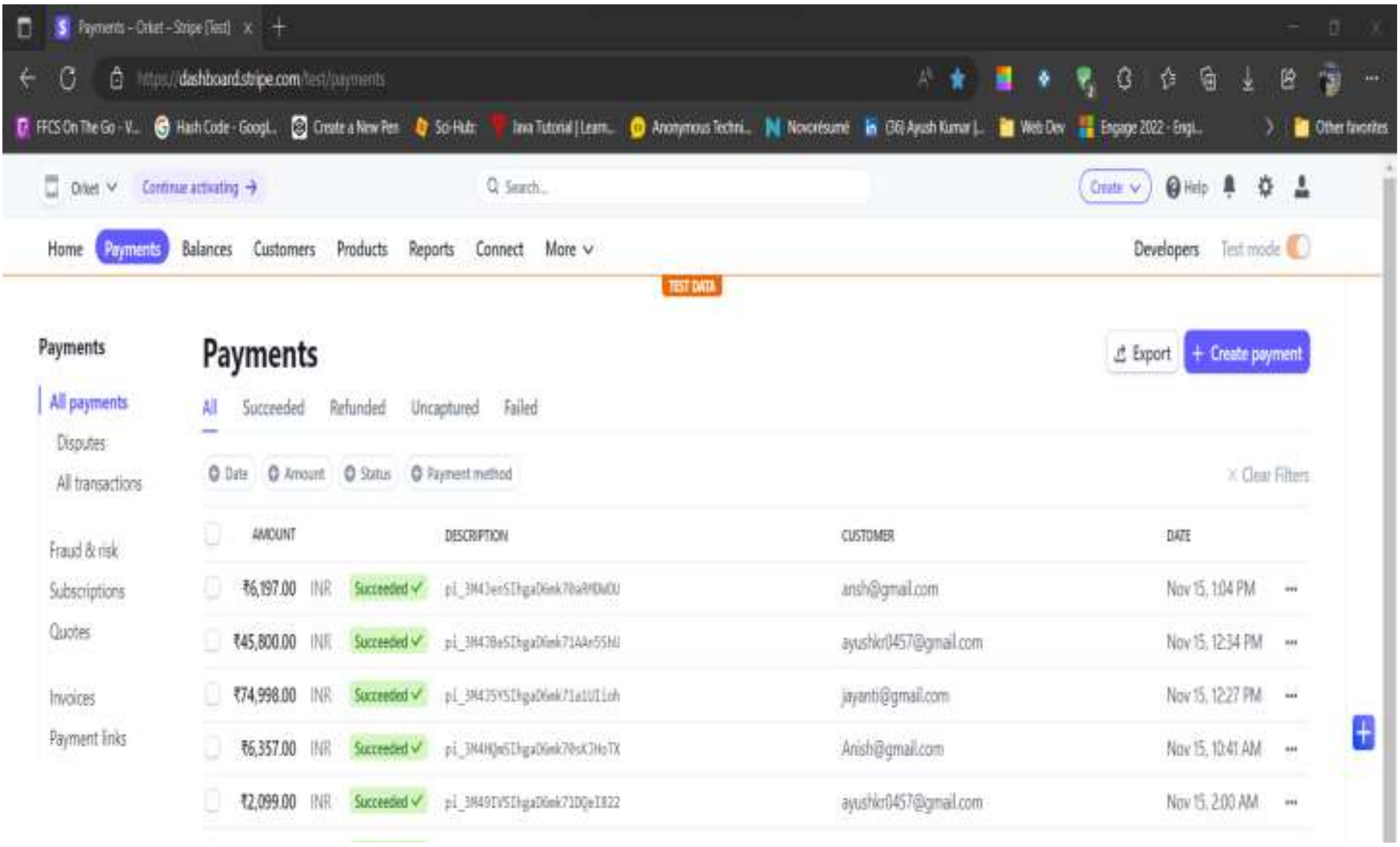
Card information



Checkout Successful

Your order might take some time to process.
Check your order status at your profile after about 10mins.
Incase of any inqueries contact the support at **support@orket.com**

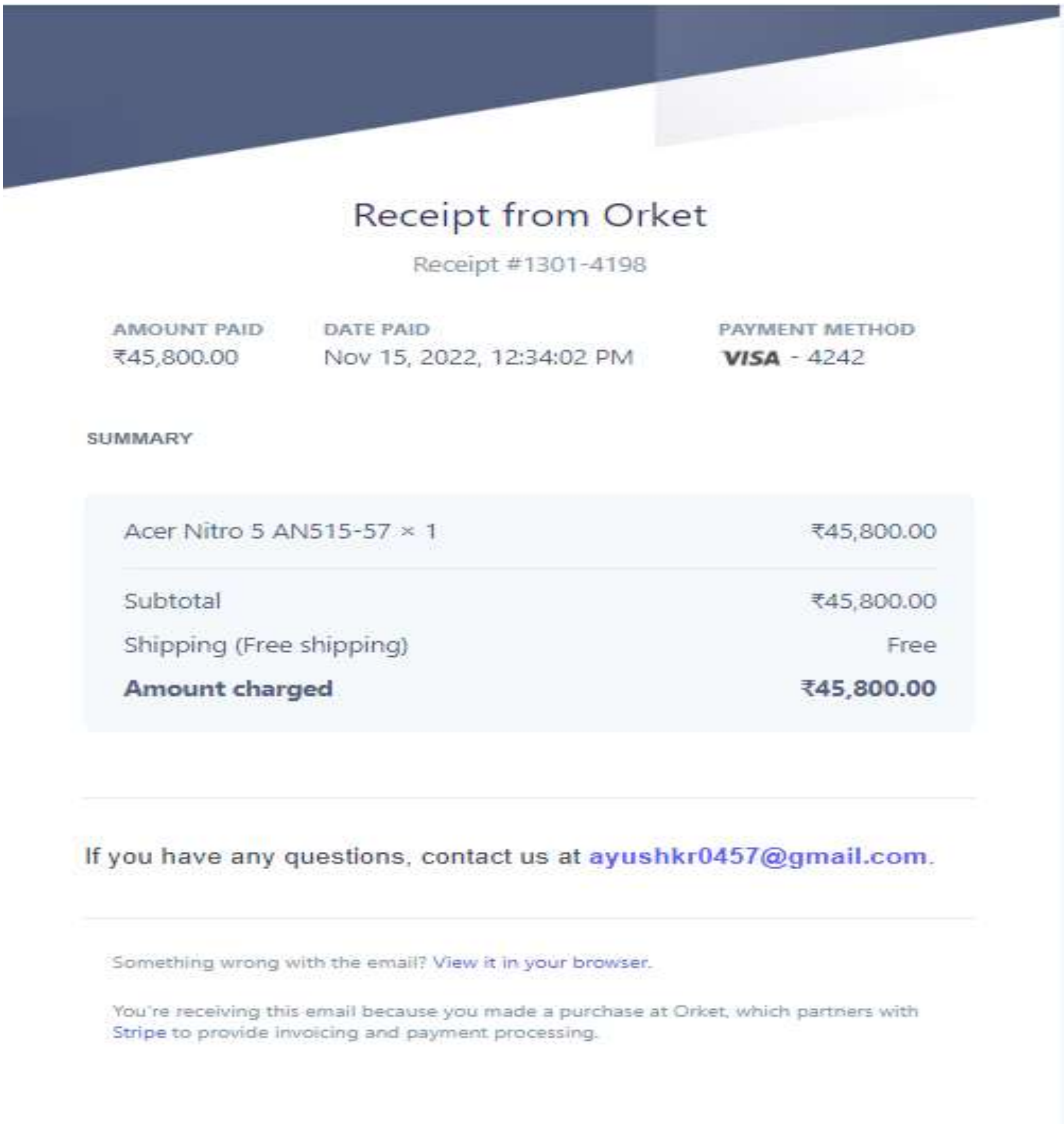
We used Stripe to integrate payment into our E-Commerce website.



Payments

AMOUNT			DESCRIPTION	CUSTOMER	DATE
₹6,197.00	INR	Succeeded ✓	pi_3M4JenSIhgaD6mk70aRMDwOU	ansh@gmail.com	Nov 15, 1:04 PM
₹45,800.00	INR	Succeeded ✓	pi_3M43BeSIhgaD6mk71AAn55hU	ayushkr0457@gmail.com	Nov 15, 12:34 PM
₹74,998.00	INR	Succeeded ✓	pi_3M435YSIhgaD6mk71a1UIioh	jayanti@gmail.com	Nov 15, 12:27 PM
₹6,357.00	INR	Succeeded ✓	pi_3M4HQmSIhgaD6mk70sK3HoTX	Anish@gmail.com	Nov 15, 10:41 AM
₹2,099.00	INR	Succeeded ✓	pi_3M49IVSIhgaD6mk71DQeI822	ayushkr0457@gmail.com	Nov 15, 2:00 AM

Order Receipt Page:



Receipt from Orket

Receipt #1301-4198

AMOUNT PAID	DATE PAID	PAYMENT METHOD
₹45,800.00	Nov 15, 2022, 12:34:02 PM	VISA - 4242

SUMMARY

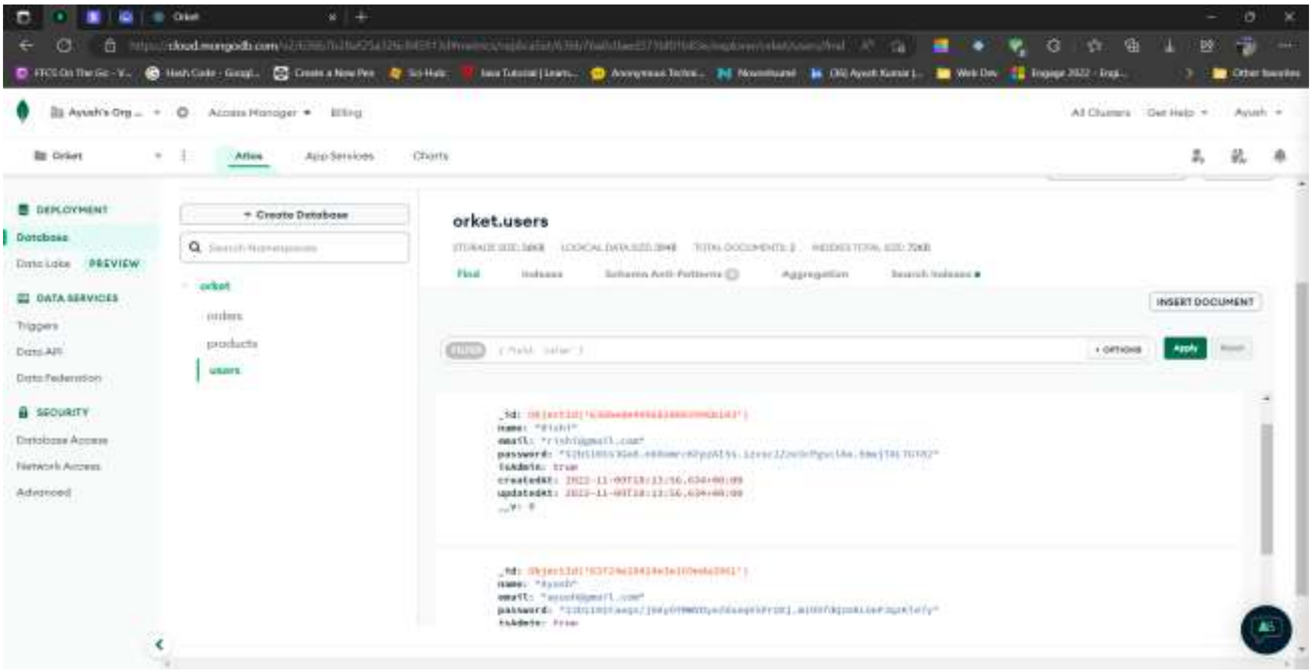
Acer Nitro 5 AN515-57 × 1	₹45,800.00
Subtotal	₹45,800.00
Shipping (Free shipping)	Free
Amount charged	**₹45,800.00**

If you have any questions, contact us at ayushkr0457@gmail.com.

Something wrong with the email? View it in your browser.

You're receiving this email because you made a purchase at Orket, which partners with Stripe to provide invoicing and payment processing.

MongoDB Record Page:

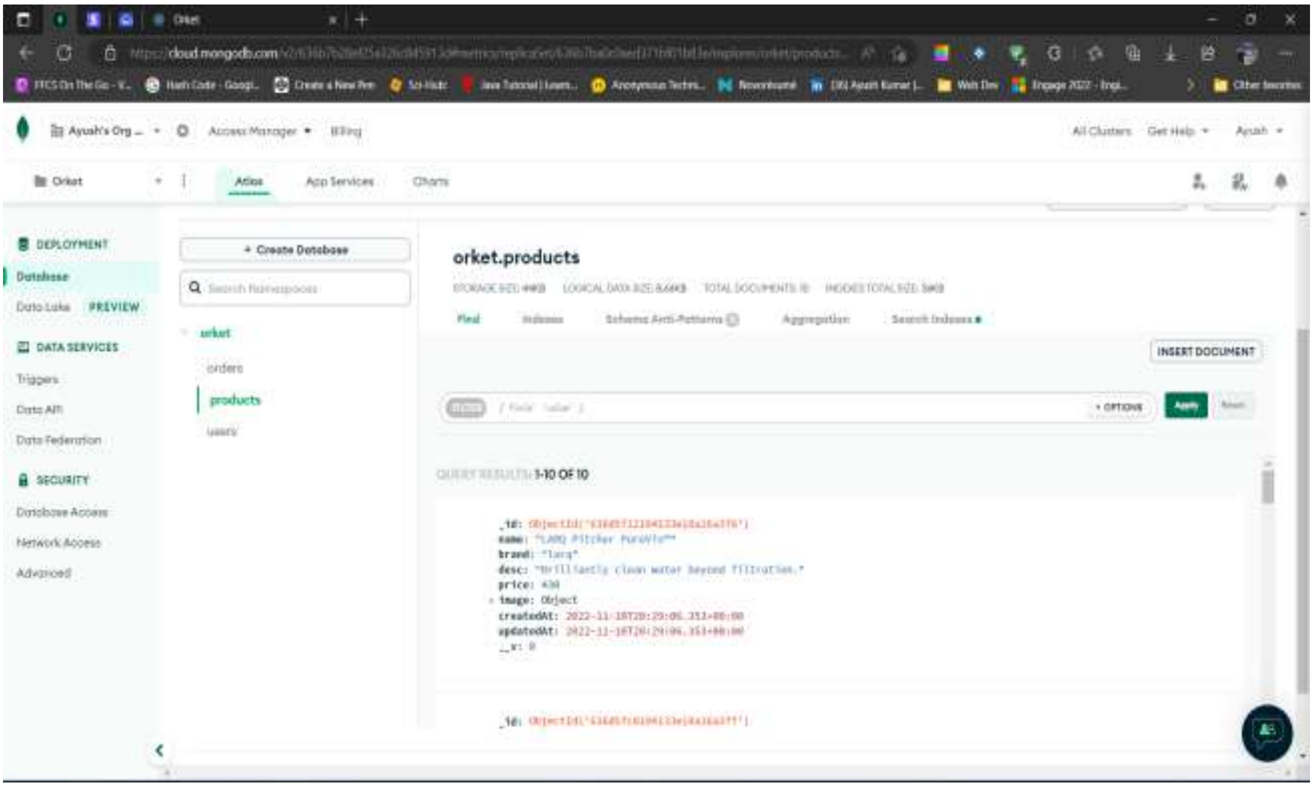


orket.users

STORAGE SIZE: 36KB LOGICAL DATA SIZE: 384B TOTAL DOCUMENTS: 2 INDEXES TOTAL SIZE: 72KB

```
_id: ObjectId('[illegible]')
name: "Rishi"
email: "rishi@gmail.com"
password: "$2b$10$[illegible]"
isAdmin: true
createdAt: 2022-11-09T18:13:56.634+00:00
updatedAt: 2022-11-09T18:13:56.634+00:00
__v: 0
```

```
_id: ObjectId('[illegible]')
name: "Ayush"
email: "ayush@gmail.com"
password: "$2b$10$[illegible]"
isAdmin: false
```



orket.products

STORAGE SIZE: 44KB LOGICAL DATA SIZE: 8.64KB TOTAL DOCUMENTS: 10 INDEXES TOTAL SIZE: 36KB

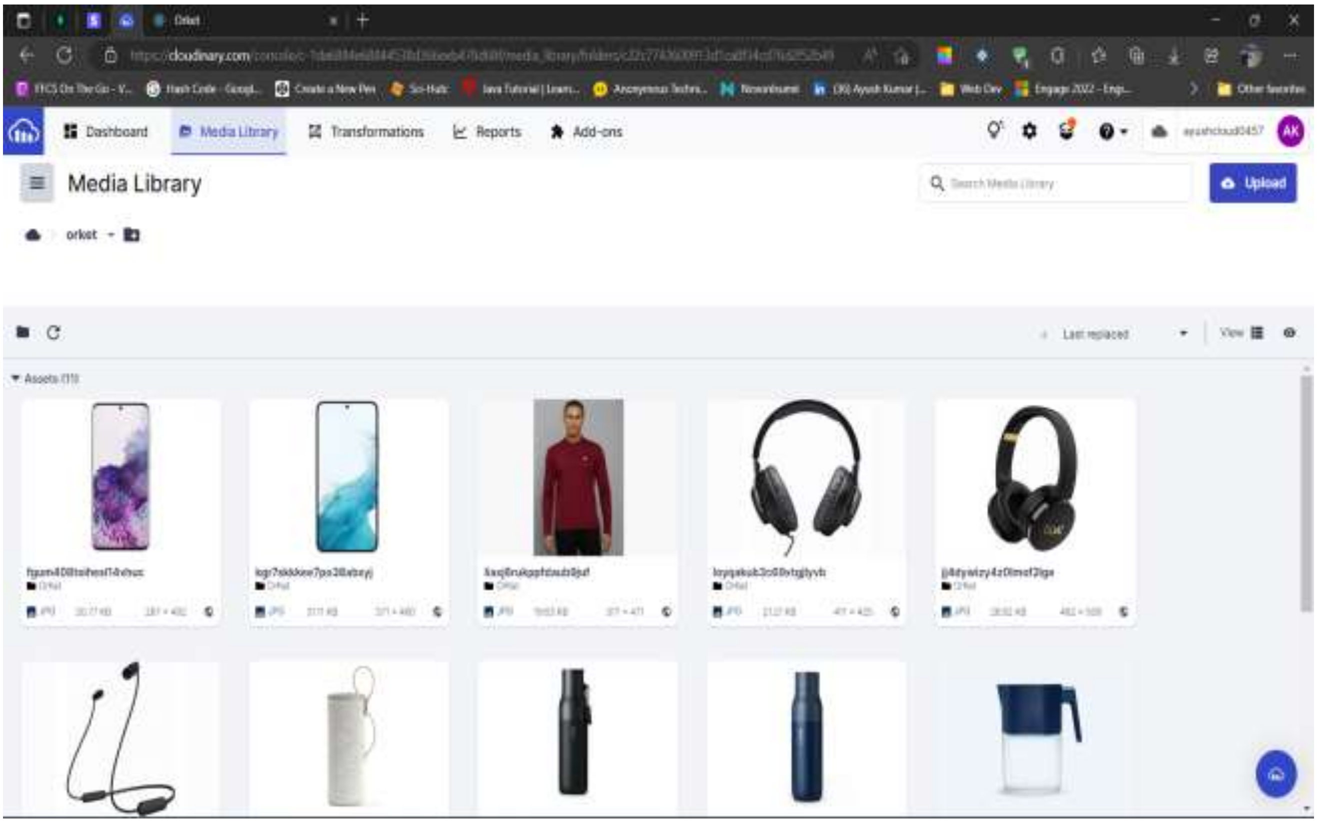
QUERY RESULTS: 1-10 OF 10

```
_id: ObjectId('[illegible]')
name: "LARQ Pitcher PureVis™"
brand: "larq"
desc: "Brilliantly clean water beyond filtration."
price: 430
image: Object
createdAt: 2022-11-18T20:29:06.353+00:00
updatedAt: 2022-11-18T20:29:06.353+00:00
__v: 0
```

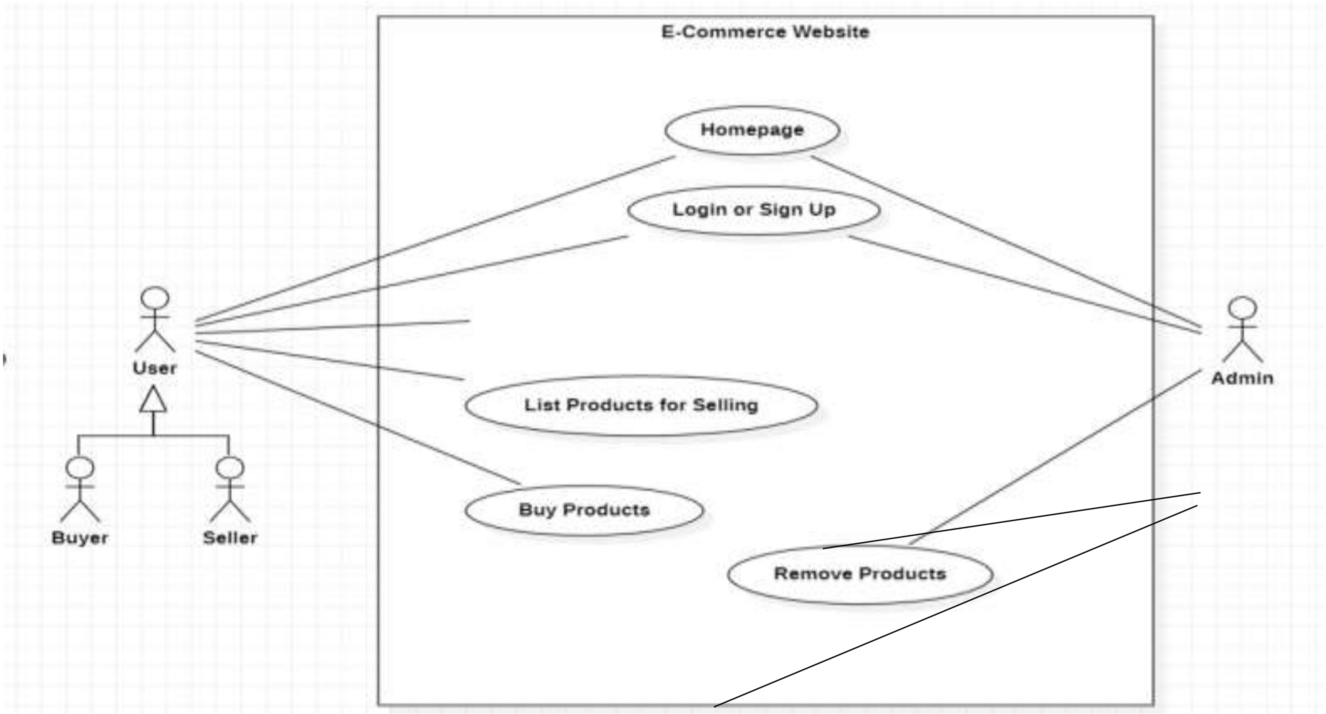
```
_id: ObjectId('[illegible]')
```

Media Library:

For storing the product image, we have used cloudinary platform to achieve it.



Use Case Diagram:



Database Schema:

```
const mongoose = require("mongoose");
const userSchema = new mongoose.Schema(
  {
    name:
    {
      type: String,
      required: true,
      minlength: 3,
      maxlength: 30
    },
    email: {
      type: String,
      required: true,
      minlength: 3,
      maxlength: 200,
      unique: true,
    },
    password:
    {
      type: String,
      required: true,
      minlength: 3,
      maxlength: 1024
    },
    isAdmin:
    {
      type: Boolean,
      default: false
    },
  },{ timestamps: true });
const User = mongoose.model("User", userSchema);
exports.User = User;
const mongoose = require("mongoose");
const productSchema = new mongoose.Schema({
    name:
    {
      type: String, required: true
    },
    brand:
    { type: String, required: true
    },
    desc:
    { type: String, required: true
    },
    price:
    { type: Number, required: true
    },
    image:
    { type: Object, required: true
    },
  },{ timestamps: true });
const Product = mongoose.model("Product", productSchema);
exports.Product = Product;
```

Result Analysis:

Through this project we gained a deep insight on the concepts of web development. The website "OrKet" which is the name of our project is an E-commerce site. We have used programming languages such as HTML, CSS, JavaScript and React for developing the frontend of the website which the user views. The backend where the administrator can make changes to the product such as add new products or remove existing products has been done using Nodejs and React. We have used MongoDB as the database of the project.

The modules created in the project include the signup and login page for the customer to register as legitimate user. Followed by the homepage where the products being sold are enlisted user can select the products here and add it to the cart followed by buying it and through the checkout module.

The administrator privileges include a module for adding products, followed by a module for managing the customer details. Finally, we have our database in MongoDB which stores the details of customer, products and order placed.

References:

[1] Getting Started with Create React App - https://github.com/facebook/create-react-app

[2] Available Scripts `npm start` at http://localhost:3000

[3] https://facebook.github.io/create-react-app/docs/running-tests

[4] Deployment (https://facebook.github.io/create-react-app/docs/deployment)

[5] *Documentation | Stripe*. (n.d.). Stripe.com. https://stripe.com/docs

[6] *Cloudinary Image & Video Management - Documentation Home | Cloudinary*. (n.d.). Cloudinary.com. https://cloudinary.com/documentation

[7] *MongoDB Documentation*. (n.d.). https://Github.com/Mongodb/Docs-Bi-Connector/Blob/DOCSP-3279/Source/Index.txt. https://www.mongodb.com/docs/

[8] *Managed MongoDB Hosting | Database-as-a-Service*. (n.d.). MongoDB. https://www.mongodb.com/atlas

[9] *MDN Web Docs*. (2019, May 29). MDN Web Docs. https://developer.mozilla.org/en-US/

[10] *Introduction · React Native*. (n.d.). Reactnative.dev. https://reactnative.dev/docs/getting-started