

**Introduction :**

E-commerce is fast gaining ground as an accepted and used business paradigm. More and more business houses are implementing web sites providing functionality for performing commercial transactions over the web. It is reasonable to say that the process of shopping on the web is becoming commonplace.

This project is centered on e-commerce, and Here we intend to create a website for an online grocery store. Thanks to the Internet, all of our lives are easier now. Nowadays, practically anything can be done online, including grocery shopping. Today, many people choose to shop for their groceries online. With the use of this web application, customers can purchase daily necessities like groceries online. This comprises bread, fruits, vegetables, and other foods. It is very important to store the data in a specific format that can be accessible and manageable by our web application.

Every organization, whether big or small, has challenges to overcome and manage the information of customers, Grocery, stock, Address, and products. We believe choosing The database is the best option to do so. This web application will be using the NoSQL database, by which we can store the necessary data and perform Create, Read, Delete, and Update operations quickly and efficiently. Unlike traditional relational databases. NoSQL (MongoDB) provides high scalability and availability.

**Objective of project :**

The objective of this project is to develop a general-purpose e-commerce store where any product (such as books, CDs, computers, mobile phones, electronic items, and home appliances) can be bought from the comfort of home through the Internet. However, for implementation purposes, this project will deal with some extent of products from various categories.

We are trying to implement a No-SQL database for an e-commerce site. It is nothing new but I believe it is a good way to start learning non-relational Databases. Since we can go through the functionalities of many web applications like amazon, eBay, Walmart, etc., This Application should be a mini replica of

many of the applications online with some standards. Our web application will be using collections like “products”, ” users”, ” payments”, ”orders” and “Order status”.

### **Database Description and Business Rules:**

This is an E-commerce web application. We are using No-sql database model by taking references from several applications like amazon, flipkart, walmart etc. Using this application people can sign-up and login as a customer to keep track of every individual details and previous activity. We can populate all the products using the products collection but Only registered users can place the orders. We will be maintaining an inventory of all the products with several attributes to keep track of the products. Each product will have a unique item\_id, category, Available quantity etc. we have two types of customers , general users and people with admin access these people will have admin permissions using which they can perform crud operation on products and will have restricted permission on all the other collections.

Users can login to their accounts using their respective username and password. After sign-in they can view the products, add the products to the cart, and also remove the products from the cart. There is no need to have a separate collection for this we will be using session and cookies functionality to store the items in the local browser storage. Each customer can have any number of orders and each order can have any number of products. We can track each order using a unique order\_id and can know the order status. After adding the products to the cart in an order users can checkout by proceeding to the payment or can delete the order itself. Then we need to calculate the total price of the order based on individual items and the quantity which will be obtained using order\_id. We will get the payment information like payment\_method, type of card and shipping information from the customer collection. Then we go through the payment process. We can know the status of the payment using the payment\_status attribute in the payment collection. Users can cancel the order after 24 hours of the payment. After the delivery of the order, customers can return products which come under specific constraints like users cannot return products which come under the category of vegetables, meat etc.

Users can return some products (cosmetics) before a specific span of time from the day of delivery. Customers can know the return status with the help of return\_status attribute in returns collection.

**Technologies Used :** Python, MongoDB , Flask , Html , CSS Bootstrap.

## **Collections :**

- **Orders** collection contains Order\_id, Email\_id,total\_price, time\_order, Order\_status. Item\_details[] array which contains a list of item\_id, Qty, discount,price and category.
- **Customers** collection contains Email\_id(userName), Password, First\_name, Last\_name, PhoneNo, Address array including country, street1, street2, city, state, zip and Shipping\_Address [] Array which contains same attributes as aAddress Array and Payment\_details[] Array which contains cards details of the customer namely Name ,card\_type and exp\_date.
- **Products** collection contains item\_id, Title, description, price,quantity, category, discount and sku{ }.
- **Payment** collection contains Payment\_id, order\_id,email\_id, payment\_details[] Array which includes card\_Type,exp\_date and name, payment\_status,time\_payment,total\_price\_tax and ShippingAddress array including country, street1, street2, city, state, zip.
- **Returns** collections contain Return\_id, order\_id, payment\_id,email\_id,return\_status and return\_payment\_method.
- **Admin** collection contains name, username(email\_id), password and phone number.

## **Functionalities of Admin :**

- The Admin will login to the system using their respective Email\_Id and Password.
- Admin can Add inventory (products) to the Database for the ecommerce

site.

- Admin can View all the inventory of the ecommerce site and also can update the existing products details like product\_title, Description, Quantity and price etc.,
- Admin can view all the orders.
- Admin can also view the return product requested by the customers and Accept or Reject the return requests.

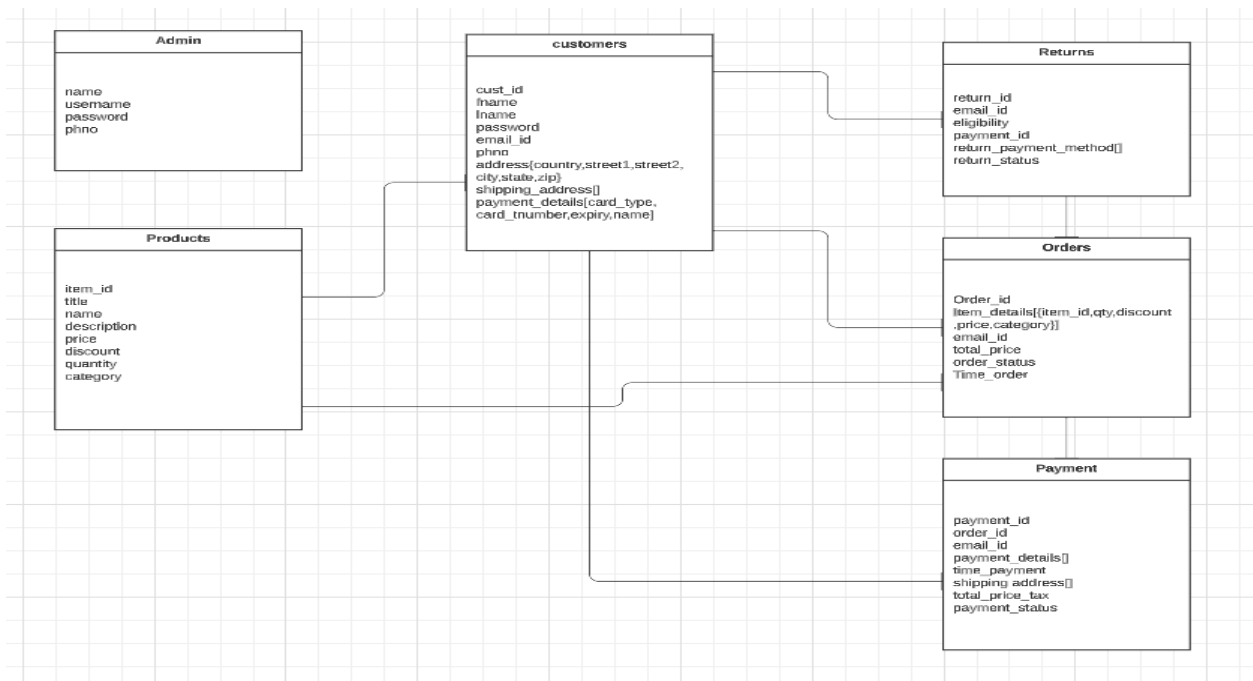
### **Functionalities of Customer :**

- Customers need to be Registered to order the products by filling the sign-up form.
- Only Registered Customers can Login to the system using Email\_id and password to access their respective Accounts.
- Customers can view all the products present in the home page.
- They can choose the products with quantity which are added to the cart.
- They can proceed to pay and order the products in the cart or remove some products and proceed.
- After payment is successful the product's quantity details are updated in the inventory.
- If the product is out of stock, customers cannot add those products to the cart.
- Customers can view their orders from my\_orders page.
- Customers can also raise a return request for a delivered product, the decision to accept or reject the return is handled by the admin.
- If the return is accepted then the product quantity is added into the inventory otherwise no change.
- Customers will have restrictions on return products like tim\_based and

category base etc.,

- Customers can check their returns status from my\_returns page.

## Database Model :



## Collections sample page :

**Collections**

[+ Create collection](#) [Refresh](#) View [Sort by](#) Collection Name [↑](#)

Collection Name	Storage size	Documents	Avg. document size	Indexes	Total index size
<b>Admin</b>	20.48 kB	2	197.00 B	1	36.86 kB
<b>customers</b>	20.48 kB	8	221.00 B	1	36.86 kB
<b>orders</b>	20.48 kB	1	247.00 B	1	36.86 kB
<b>payment</b>	20.48 kB	1	447.00 B	1	36.86 kB
<b>products</b>	20.48 kB	10	183.00 B	1	36.86 kB
<b>returns</b>	20.48 kB	1	300.00 B	1	36.86 kB

Sample data :

Customers-

- Assign1
- admin
- config
- database
- local
- marvelDB
  - Admin
  - customers**
  - orders
  - payment
  - products
  - returns

Filter [🔗](#) [🕒](#) Type a query: { field: 'value' }

[ADD DATA](#) [EXPORT COLLECTION](#)



```

{
  "fname": "Suresh",
  "lname": "Garimella",
  "email_id": "gsb31399@gmail.com",
  "password": "password",
  "phno": 9131234567,
  "address": {
    "country": "USA",
    "street1": "1415 sw 3rd street",
    "street2": " ",
    "city": "Lees Summit",
    "state": "Missouri",
    "zip": 64081
  },
  "shipping_address": [
    {
      "country": "USA",
      "street1": "1415 sw 3rd street",
      "street2": " ",
      "city": "Lees Summit",
      "state": "Missouri",
      "zip": 64081
    }
  ],
  "payment_details": [
    {
      "cart_type": "Credit",
      "card_number": 123456,
      "exp_date": "3-3-2029",
      "Name": "Suresh Garimella"
    }
  ]
}

```

## Orders-

- Assign1
- admin
- config
- database
- local
- marvelDB
  - Admin
  - customers
  - orders** ...
  - payment
  - products
  - returns

Filter   Type a query: { field: 'value' }



ADD DATA

EXPORT COLLECTION

```
_id: ObjectId('6416475235b9f34d6e7eeb74')
order_id: 123
item_details: Array
  0: Object
    item_id: 1
    qty: 4
    discount: 0.2
    price: 5.99
    category: "cosmetic"
email_id: "suresh@gmail.com"
total_price: 19.168
order_status: "delivered"
time_order: "3-15-2023"
```

## Payment-

- Assign1
- admin
- config
- database
- local
- marvelDB
  - Admin
  - customers
  - orders
  - payment** ...
  - products
  - returns

Filter   Type a query: { field: 'value' }



ADD DATA



EXPORT COLLECTION

```
_id: ObjectId('6418c36a35b9f34d6e7eeb89')
order_id: 4321
payment_id: 123456
email_id: "suresh@gmail.com"
payment_type: "Credit Card"
shippingAddress: Object
  country: "USA"
  Street1: "sw 3rd street"
  Street2: ""
  city: "Lees summit"
  state: "Missouri"
  zip: 64081
payment_details: Array
  0: Object
    cart_type: "Credit"
    card_number: 123456
    exp_date: "3-3-2029"
    Name: "Suresh Garimella"
time_payment: "3-9-2023"
total_price_tax: 22.99
payment_status: "successful"
```

## Products -

- Assign1
- admin
- config
- database
- local
- marvelDB
  - Admin
  - customers
  - orders
  - payment
  - products** ...
  - returns



Filter   Type a query: { field: 'value' }



 ADD DATA  EXPORT COLLECTION

```
_id: ObjectId('640bffdbc41a094d9328648f')
item_id: 1234
title: "Tomatos"
Description: "1lb of Fresh Organic Romania Tomatos"
price: 2.99
category: "vegetables"
discount: 0
sku: Object
  exp_date: "3-31-2013"
Quantity: 20
```

## Returns-

- Assign1
- admin
- config
- database
- local
- marvelDB
  - Admin
  - customers
  - orders
  - payment
  - products
  - returns** ...

Filter   Type a query: { field: 'value' }

 ADD DATA  EXPORT COLLECTION

```
_id: ObjectId('640c09b3c41a094d932864af')
return_id: 999
order_id: 4321
payment_id: 123456
email_id: "suresh@gmail.com"
eligibility: "True"
return_payment_details: Array
  0: Object
    cart_type: "Credit"
    card_number: 123456
    exp_date: "3-3-2029"
    Name: "Suresh Garimella"
    return_status: "delivered"
    time_stamp: "4-2-2023"
```



## Admin-

The screenshot displays a MongoDB Admin interface. On the left, a sidebar shows a tree view of databases and collections. The 'marvelDB' database is expanded, and the 'Admin' collection is selected. Below 'Admin', several other collections are listed: 'customers', 'orders', 'payment', 'products', and 'returns'. The main area on the right contains a search bar with the placeholder text 'Type a query: { field: 'value' }'. Below the search bar are two buttons: 'ADD DATA' and 'EXPORT COLLECTION'. The main area also displays a single document from the 'Admin' collection in a JSON format:

```
{
  "_id": ObjectId('64160f1e35b9f34d6e7eeb69'),
  "name": "Admin FirstName and LasrtName",
  "username": "admin@gmail.com",
  "password": "password",
  "phno": 9131234567
}
```

## Summary :

This project helped us to learn most of the real time experiences on mongodb and python and html bootstrap . Most of the features of online ecommerce websites are implemented here. We look forward to implementing further changes as per future scope.

## User interface and forms

Home page :

[Home](#) [Login](#) [Register](#)

<div><b>Tomatos</b> 1lb of Romania Tomatos \$2.99 ★★★★★ Qty : <input type="text" value="1"/> <b>Add</b></div>	<div><b>Onions</b> 1lb of Fresh Organic Onions \$2.99 ★★★★★ Qty : <input type="text" value="1"/> <b>Add</b></div>	<div><b>Eggs</b> fresh Organic Eggs \$7.99 ★★★★★ Qty : <input type="text" value="1"/> <b>Add</b></div>	<div><b>Yogurt</b> fresh Organic Yogurt \$3.99 ★★★★★ Qty : <input type="text" value="1"/> <b>Add</b></div>
<div><b>Cheese</b> Amazing Cheese \$4.99 ★★★★★ Qty : <input type="text" value="1"/> <b>Add</b></div>	<div><b>Fresh milk</b> fresh Ognic milk \$3.99 ★★★★★ Qty : <input type="text" value="1"/> <b>Add</b></div>	<div><b>Black Shoes</b> Formal black Shoes \$7.49 ★★★★★ Qty : <input type="text" value="1"/> <b>Add</b></div>	<div><b>White Shoes</b> White Shoes \$8.99 ★★★★★ Qty : <input type="text" value="1"/> <b>Add</b></div>

## Admin / customer Login Page:

[Home](#) [Login](#) [Register](#)

### Login

Email Address

Password

Account Type  

Customer ▾

**Login**

## Customer Registration Page:-

← → ↺ 127.0.0.1:5000/sign-up

Home Login Register

Sign Up

Email Address

Enter email

First Name

Enter first name

Password

Enter password

Password (Confirm)

Confirm password

Phone No

Enter Phone number

Address:

Country

Enter Country Name

Street 1:

Enter Street1

Street 2:

## User cart\_page:-

Home Cart My Orders My Returns Logout abcde@gmail.com		
Product	Quantity	Subtotal
Iphone 14	1	\$ 1099.99
Price: 1099.99		
Remove		
Yogurt	3	\$ 11.97
Price: 3.99		
Remove		
Hair brush	4	\$ 23.96
Price: 5.99		
Remove		
Subtotal		\$1135.92
Tax		\$102.23
Total		\$1238.15
Order		

## User All orders page:-

SNO	Tracking Id	Order Status	Time	Details
1	c40d00c6-ab6c-45cc-8f7e-4d4839b570a6	processing	2023-04-22 12:00:50.831000	<a href="#">view Order</a>
2	b308a62a-dffb-4b61-bef9-a08e9018cfbf	processing	2023-04-22 12:42:13.607000	<a href="#">view Order</a>
3	585d154e-1dff-41bb-8857-7104fe33092c	processing	2023-04-22 12:44:21.565000	<a href="#">view Order</a>
4	e2c28cb8-6f8d-4639-99ad-8440117bf903	processing	2023-04-22 12:47:10.506000	<a href="#">view Order</a>
5	03b0544f-967c-474d-a93f-f3f9651f068f	processing	2023-04-22 21:37:52.298000	<a href="#">view Order</a>
6	2464b95d-9204-4c80-ad57-0376345a500a	processing	2023-04-24 01:20:54.034000	<a href="#">view Order</a>
7	9ceef9e7-bc77-424c-ae19-35e394068ae2	Delivered	2023-04-24 22:44:17.879000	<a href="#">view Order</a>
8	b445a45f-b448-402b-b086-b6d697108a8c	Delivered	2023-04-25 09:02:12.977000	<a href="#">view Order</a>
9	016911d5-599d-475b-b965-01283793a939	Delivered	2023-04-25 09:56:39.440000	<a href="#">view Order</a>

## User view Individual Orders page:-

TRACKING	Product	Quantity	Subtotal	Status	Return
c40d00c6-ab6c-45cc-8f7e-4d4839b570a6,8	White Shoes	<input type="text" value="3"/>	\$ 7.99	processing	<a href="#">Return</a>
c40d00c6-ab6c-45cc-8f7e-4d4839b570a6,4	Yogurt	<input type="text" value="2"/>	\$ 3.99	processing	<a href="#">Return</a>

[BACK](#)



## User Order Returns Page:-

RETURN_ID	Product	Quantity	Price	Status
c40d00c6-ab6c-45cc-8f7e-4d4839b570a6,8	White Shoes	<input type="text" value="3"/>	\$ 7.99	Accepted
2464b95d-9204-4c80-ad57-0376345a500a,9	Hair brush	<input type="text" value="1"/>	\$ 7.99	Rejected
9ceef9e7-bc77-424c-ae19-35e394068ae2,10	Iphone 13	<input type="text" value="1"/>	\$ 1099.99	Accepted
016911d5-599d-475b-b965-01283793a939,10	Iphone 13	<input type="text" value="1"/>	\$ 1099.99	Accepted
72b141ed-9226-4ae3-bb67-f50b8b6214a2,10	Iphone 13	<input type="text" value="1"/>	\$ 1099.99	Accepted

BACK

## Admin Home page:-

<div>← → ↺ 127.0.0.1:5000</div> <div>Home viewAllOrders All Returns Check Inventory Add Inventory All Customer Logout abcd@gmail.com</div>	<div>Tomato</div> <div>1lb of Romania Tomatos</div> <div>\$2.99</div> <div>★★★★★</div> <div>Qty : <input type="text" value="1"/></div> <div>Add</div>	<div>Onions</div> <div>1lb of Fresh Organic Onions</div> <div>\$2.99</div> <div>★★★★★</div> <div>Qty : <input type="text" value="1"/></div> <div>Add</div>	<div>Eggs</div> <div>fresh Organic Eggs</div> <div>\$7.99</div> <div>★★★★★</div> <div>Qty : <input type="text" value="1"/></div> <div>Add</div>	<div>Yogurt</div> <div>fresh Organic Yogurt</div> <div>\$3.99</div> <div>★★★★★</div> <div>Qty : <input type="text" value="1"/></div> <div>Add</div>
	<div>Cheese</div> <div>Amazing Cheese</div> <div>\$4.99</div> <div>★★★★★</div> <div>Qty : <input type="text" value="1"/></div> <div>Add</div>	<div>Fresh milk</div> <div>fresh Ognic milk</div> <div>\$3.99</div> <div>★★★★★</div> <div>Qty : <input type="text" value="1"/></div> <div>Add</div>	<div>Black Shoes</div> <div>Formal black Shoes</div> <div>\$7.49</div> <div>★★★★★</div> <div>Qty : <input type="text" value="1"/></div> <div>Add</div>	<div>White Shoes</div> <div>White Shoes</div> <div>\$8.99</div> <div>★★★★★</div> <div>Qty : <input type="text" value="1"/></div> <div>Add</div>

## Admin View All Orders page:-

<a href="#">Home</a>	<a href="#">viewAllOrders</a>	<a href="#">All Returns</a>	<a href="#">Check Inventory</a>	<a href="#">Add Inventory</a>	<a href="#">All Customer</a>	<a href="#">Logout</a>	abcd@gmail.com
----------------------	-------------------------------	-----------------------------	---------------------------------	-------------------------------	------------------------------	------------------------	----------------

SNO	Order_Id	Time	user	items
1	123	3-15-2023	suresh@gmail.com	[ Item_id:1, Quantity:4 ]
2	c40d00c6-ab6c-45cc-8f7e-4d4839b570a6	2023-04-22 12:00:50.831000	abcde@gmail.com	[ Item_id:8, Quantity:3 Item_id:4, Quantity:2 ]
3	b308a62a-dffb-4b61-bef9-a08e9018cfbf	2023-04-22 12:42:13.607000	abcde@gmail.com	[ Item_id:1, Quantity:1 Item_id:5, Quantity:1 ]

## Admin View All Returns(Accept / Reject) Page:-

<a href="#">Home</a>	<a href="#">viewAllOrders</a>	<a href="#">All Returns</a>	<a href="#">Check Inventory</a>	<a href="#">Add Inventory</a>	<a href="#">All Customer</a>	<a href="#">Logout</a>	abcd@gmail.com
----------------------	-------------------------------	-----------------------------	---------------------------------	-------------------------------	------------------------------	------------------------	----------------

RETURN_ID	Product	Quantity	Price	Accept	Reject
72b141ed-9226-4ae3-bb67-f50b8b6214a2,10	Iphone 14	<input type="text" value="1"/>	\$ 1099.99	<a href="#">Accept</a>	<a href="#">Reject</a>
72b141ed-9226-4ae3-bb67-f50b8b6214a2,10	Iphone 14	<input type="text" value="1"/>	\$ 1099.99	<a href="#">Accept</a>	<a href="#">Reject</a>
42571a9f-14ee-49e6-8026-eafac15a3199,9	Hair brush	<input type="text" value="1"/>	\$ 5.99	<a href="#">Accept</a>	<a href="#">Reject</a>
0e2d723a-f21d-493e-a036-d019282e5ad2,1	Tomato	<input type="text" value="2"/>	\$ 2.99	<a href="#">Accept</a>	<a href="#">Reject</a>

[BACK](#)

## Admin view and Update Inventory page:-

Title	Description	Quantity	Price	Category	update
<input type="text" value="Tomato"/>	<input type="text" value="1lb of Romania Torr"/>	<input type="text" value="31"/>	<input type="text" value="\$ 2.99"/>	<input type="text" value="vegetables"/>	<input type="button" value="update"/>
<input type="text" value="Onions"/>	<input type="text" value="1lb of Fresh Organi"/>	<input type="text" value="21"/>	<input type="text" value="\$ 2.99"/>	<input type="text" value="vegetables"/>	<input type="button" value="update"/>
<input type="text" value="Eggs"/>	<input type="text" value="fresh Organic Eggs"/>	<input type="text" value="17"/>	<input type="text" value="\$ 7.99"/>	<input type="text" value="diary"/>	<input type="button" value="update"/>
<input type="text" value="Yogurt"/>	<input type="text" value="fresh Organic Yogur"/>	<input type="text" value="25"/>	<input type="text" value="\$ 3.99"/>	<input type="text" value="diary"/>	<input type="button" value="update"/>
<input type="text" value="Cheese"/>	<input type="text" value="Amazing Cheese"/>	<input type="text" value="27"/>	<input type="text" value="\$ 4.99"/>	<input type="text" value="diary"/>	<input type="button" value="update"/>
<input type="text" value="Fresh milk"/>	<input type="text" value="fresh Ognic milk"/>	<input type="text" value="10"/>	<input type="text" value="\$ 3.99"/>	<input type="text" value="diary"/>	<input type="button" value="update"/>
<input type="text" value="Black Shoes"/>	<input type="text" value="Formal black Shoes"/>	<input type="text" value="30"/>	<input type="text" value="\$ 7.49"/>	<input type="text" value="shoes"/>	<input type="button" value="update"/>
<input type="text" value="White Shoes"/>	<input type="text" value="White Shoes"/>	<input type="text" value="24"/>	<input type="text" value="\$ 8.99"/>	<input type="text" value="shoes"/>	<input type="button" value="update"/>
<input type="text" value="Hair brush"/>	<input type="text" value="Mens Hair brush"/>	<input type="text" value="7"/>	<input type="text" value="\$ 5.99"/>	<input type="text" value="cosmetics"/>	<input type="button" value="update"/>

## Admin Add Inventory Page:-

### Add Product

item\_id

Title

Description

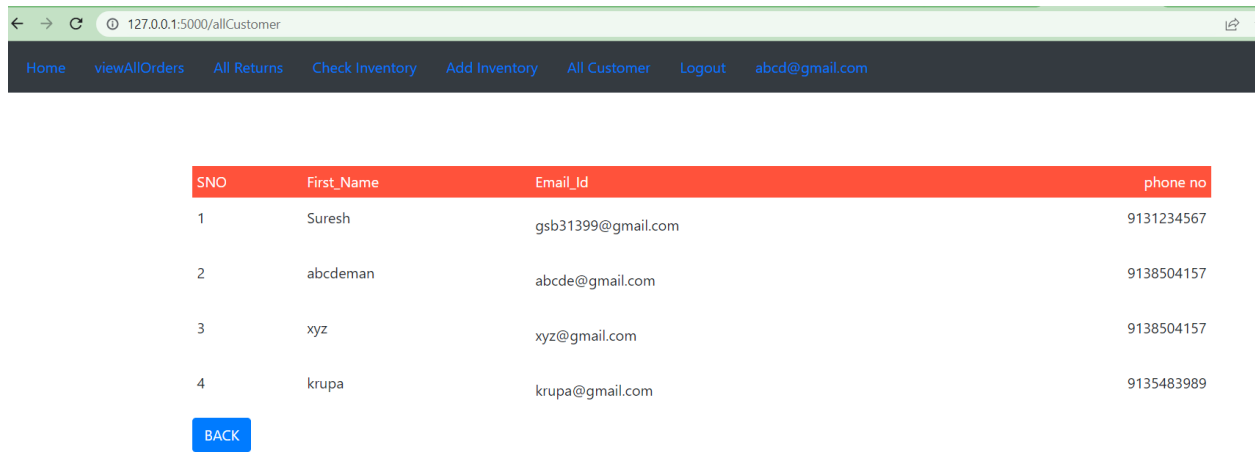
Quantity

Price

Category



## View All Customers Page:-

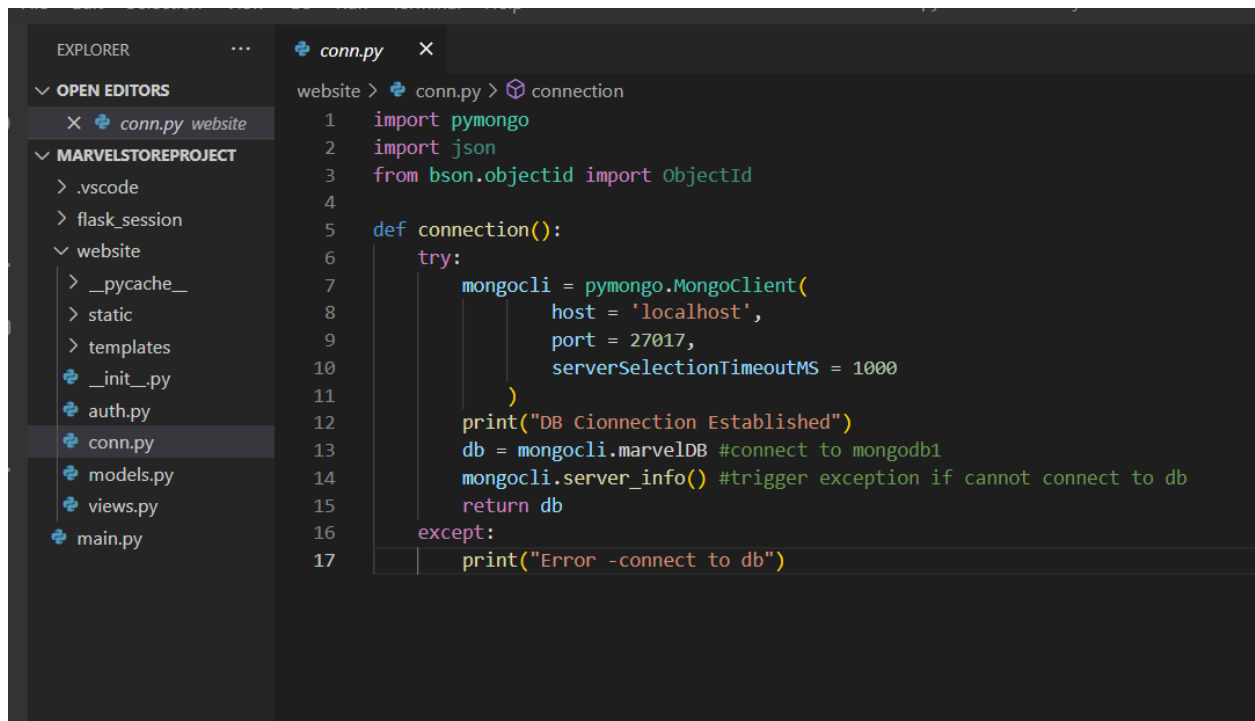


SNO	First_Name	Email_Id	phone no
1	Suresh	gsb31399@gmail.com	9131234567
2	abcdeman	abcde@gmail.com	9138504157
3	xyz	xyz@gmail.com	9138504157
4	krupa	krupa@gmail.com	9135483989

BACK

## Source code :

Mongodb connection logic



```
website > conn.py > connection
1 import pymongo
2 import json
3 from bson.objectid import ObjectId
4
5 def connection():
6     try:
7         mongocli = pymongo.MongoClient(
8             host = 'localhost',
9             port = 27017,
10            serverSelectionTimeoutMS = 1000
11        )
12        print("DB Cionnection Established")
13        db = mongocli.marvelDB #connect to mongodb1
14        mongocli.server_info() #trigger exception if cannot connect to db
15        return db
16    except:
17        print("Error -connect to db")
```

Login page code snippet :-

```
@auth.route('/login',methods=['GET','POST'])
def login():
    print("In the login afunction ")
    # session["name"] = None
    if request.method == 'POST':

        email = request.form.get('email')

        password = request.form.get('password')

        account = request.form.get('account')

        if account == 'admin':
            user = db.Admin.find_one({"email":email})
        else:
            user = db.customers.find_one({"email":email})

        if user ==[]:
            flash('No Account is Registered with this Email ',category='error')
        elif (not check_password_hash(user["password"],password)):
            flash('Incorrect Password',category='error')
        else:
            print(user["email"])
            session["name"] = user["email"]
            session["account"]= account
            session["cart"]=[]
            session["qty"]=[]
            print("session name is :")
            print(session["name"], session["account"])
            flash('Login Successfull!!',category='success')
            return redirect(url_for('views.home'))

    return render_template("/login.html",text="Testing a variable from backend")
    # return redirect(url_for('views.home'))
```

Sign-Up logic:-

```
@auth.route('/sign-up',methods=['GET','POST'])
def signup():
    if request.method == "POST":
        email = request.form.get('email')
        firstName = request.form.get('firstName')
        password1 = request.form.get('password1')
        password2 = request.form.get('password2')
        phno      = request.form.get('phone')
        country    = request.form.get('country')
        street1    = request.form.get('street1')
        street2    = request.form.get('street2')
        city       = request.form.get('city')
        state      = request.form.get('state')
        zip        = request.form.get('zip')
        cardtype   = request.form.get('cardtype')
        cardno     = request.form.get('cardno')
        expdate    = request.form.get('expdate')
        name       = request.form.get('name')
        if len(email)<4:
            flash('Email must be greater than 3 characters',category='error')
        elif len(firstName)<2:
            flash('firstName must be greater than 2 characters',category='error')
        elif password1!= password2:
            flash('passwords dont match',category='error')
        elif len(password1) <3:
            flash('password must be atleast 3 chasracters',category='error')
        else:
            try:
                print("Inside Try Block ")
                input_data = {
                    'email':email,
                    'firstName':firstName,
                    'password1':password1,
                    'password2':password2,
                    'phone':phno,
                    'country':country,
                    'street1':street1,
                    'street2':street2,
                    'city':city,
                    'state':state,
                    'zip':zip,
                    'cardtype':cardtype,
                    'cardno':cardno,
                    'expdate':expdate,
                    'name':name
                }
                db.customers.insert_one(input_data)
                flash('Account created!!',category='success')
                return redirect(url_for('views.home'))
            except Exception as ex:
                print(ex)
    return render_template("sign-up.html")
```

### Cart logic:-

```
21
22 @views.route('/add',methods=["GET", "POST"])
23 def addToCart():
24     print("Inside View.Add to cart")
25     if(session['name']):
26         temp=request.args
27         temp=temp.to_dict(flat=False)
28         pid=temp["pid"][0]
29         qty=temp["qty"][0]
30         if (pid in session["cart"]):
31             idx = session["cart"].index(pid)
32             session["qty"][idx]=str(int(qty)+int(session["qty"][idx]))
33             print("qNew Quantity si ",session["qty"])
34             documents = db.products.find()
35             products = [{item: data[item] for item in data if item != '_id'} for data in documents]
36             return render_template("home.html",products=products)
37         qty=temp["qty"][0]
38         product = db.products.find_one({'item_id':int(pid)})
39         if product['Quantity']<int(qty):
40             flash('Item Out of Stock',category='error')
41             documents = db.products.find()
42             products = [{item: data[item] for item in data if item != '_id'} for data in documents]
43             return render_template("home.html",products=products)
44         else:
45             session["cart"].append(pid)
46             session["qty"].append(qty)
47
48         documents = db.products.find()
49         products = [{item: data[item] for item in data if item != '_id'} for data in documents]
50         return render_template("home.html",products=products)
51
```

### Remove product from cart logic:-

```
@views.route('/remove')
def remove():
    print("Inside View.remove to cart")
    if(session['name']):
        temp=request.args
        temp=temp.to_dict(flat=False)

        item_id=temp["itemid"][0]

        idx=session["cart"].index(item_id)
        session["cart"].pop(idx)
        session["qty"].pop(idx)

    return redirect(url_for('views.viewCart'))
```

Remove product from cart logic:-

```
@views.route('/payment')
def payment():
    print("Inside Payment Function ")
    order_id=uuid.uuid4()
    payment_id=uuid.uuid4()
    email_id = session["name"]
    status=True
    payment_type=request.form.get('cardtype')
    session['paymentType']=payment_type
    shipping_address={}
    #shipping Address
    if payment_type== "cash":
        status=False
    if status==True:
        user = db.customers.find_one({"email":email_id})
        shipping_address=user['shipping_address']
        # print("-----",shipping_address['Street1'])
        payment_details=user['payment_details']
        # order Table details
        print(order_id,payment_id,email_id,payment_type,shipping_address['country'])
        # flash('Login Successfull!!',category='success')
        return render_template("payment.html",shippingAddress=shipping_address,paymentDetails=payment_details,status=status)
    else:
        user = db.customers.find_one({"email":email_id})
        shipping_address=user['shipping_address']
        payment_details=user['payment_details']
        time = datetime.datetime.now()
        return render_template("payment.html",shippingAddress=shipping_address,paymentDetails=payment_details,status=status)
```

LogOut Code:-

```
@auth.route("/logout")
def logout():
    print("inside logout")
    session["name"]=None
    session["account"]=None
    session["cart"]=None
    session["qty"]=None
    print("Session name is :",session["name"])
    return redirect(url_for('views.home'))
```

View Order Code:-

```
def viewOrders():
    print("Inside viewOrders page ")
    temp=request.args
    temp=temp.to_dict(flat=False)
    orderid=temp["orderid"][0]
    singleorder = db.orders.find_one({'order_id':orderid})
    orderid=singleorder['order_id']
    temp={}
    orderdata=[]
    for item in singleorder['item_details']:
        print(item['item_id'])
        product = db.products.find_one({'item_id':item['item_id']})
        title = product['title']
        category= item['category']
        returnid = str(singleorder['order_id'])+","+str(item['item_id'])
        price=item['price']
        quantity=item['qty']
        temp={
            "orderid":singleorder['order_id'],
            "emailid": singleorder['email_id'],
            "totalprice":singleorder['total_price'],
            "status":singleorder['order_status']
        }
        temp["title"]=title
        temp["category"]=category
        temp["returnid"]=returnid
        temp["price"]=price
        temp["quantity"]=quantity
        print("Before Adding ....")
        print(temp)
        orderdata.append(temp)
        temp={}
    return render_template("viewOrder.html",data=orderdata)
```

## Returns Code:-

```
@views.route('/returns',methods=["GET", "POST"])
def returns():
    print("Inside Returns Function")
    temp=request.args
    temp=temp.to_dict(flat=False)
    returnid=temp["returnid"][0]
    li=returnid.split(',')
    orderid= li[0]
    itemid=li[1]
    item= db.orders.find_one({'order_id':orderid})
    ordered_time = item["time_order"]
    items= item["item_details"]
    temp={}
    for i in items:
        print(i['item_id'])
        if str(i['item_id'])==str(itemid):
            temp['qty']=i['qty']
            temp['discount']=i['discount']
            temp['price']=i['price']
            temp['category']=i['category']
    if(temp["category"] in ["vegetables","diary"]):
        current_time = datetime.datetime.now()
        duration = current_time - ordered_time
        duration_in_s = duration.total_seconds()
        days = duration.days # Build-in datetime function
        days = divmod(duration_in_s, 86400)[0]
        if (days>=1):
            flash(' This Item Cannot be returned',category='error')
            return redirect(url_for('views.Orders'))
        current_time = datetime.datetime.now()
        product = db.products.find_one({'item_id':int(itemid)})
        title = product['title']
    > data={"return_id":returnid, ...
    db.returns.insert_one(data)
    flash(' Order Returned initiated',category='success')
    return redirect(url_for('views.home'))
```

## Inventory (View & Update) code:-

```
@views.route('/inventory',methods=["GET", "POST"])
def allinventory():
    print("Inside Admin inventory page ")
    documents = db.products.find()
    products = [{item: data[item] for item in data if item != '_id'} for data in documents]
    # orders=inventoryfun()
    return render_template("inventory.html",data=products)

@views.route('/inventoryupdate',methods=["GET", "POST"])
def inventoryupdate():

    if(request.method=="POST"):
        print("Inside Update Inventory method")
        db.products.update_one({
            "item_id" :int(request.form.get('itemid'))},
            {"$set":{
                "Quantity":int(request.form.get('qty')),
                "title":request.form.get('title'),
                "Description":request.form.get('desc'),
                "price":request.form.get('price'),
                "category":request.form.get('category')
            }})
        flash(' Item Details Updated!!!',category='success')
        return redirect(url_for('views.allinventory'))
    return render_template("/inventory.html")
```

## Inventory Add Code:-

```
@views.route('/addinventory',methods=["GET", "POST"])
def addinventory():
    print("Inside Add inventory page")
    if (request.method == "POST"):
        # item_id=uuid.uuid4().int & (1<<64)-1
        data={
            "item_id": int(request.form.get('itemid')),
            "title": request.form.get('title'),
            "Description": request.form.get('desc'),
            "price": request.form.get('price'),
            "category": request.form.get('category'),
            "discount": 0,
            "sku": {},
            "Quantity": int(request.form.get('qty'))
        }
        print(data)
        db.products.insert_one(data)
        flash(' New product Added!!!',category='success')

    return render_template("/addinventory.html")
```



## Mongodb Queries :

- Login Query:-
  - user = db.Admin.find\_one({"email":email})
- Register Query:
  - db.customers.insert\_one(input\_data)
- Home Page View Products:
  - documents = db.products.find()
- Queries in add cart

```
qty=temp["qty"][0]
product = db.products.find_one({'item_id':int(pid)})
if product['Quantity']<int(qty):
    flash('Item Out of Stock',category='error')
    documents = db.products.find()
    products = [{item: data[item] for item in data if item != '_id'} for data in documents]
    return render_template("home.html",products=products)
```

- 
- Payment Queries:-
  - user = db.customers.find\_one({"email":email\_id})
  - db.payment.insert\_one(input\_data)
- View Orders Query:-
  - documents = db.orders.find({'email\_id':session["name"]})
  - single order = db.orders.find\_one({'order\_id':orderid})
- Returns Query:-
  - db.returns.update\_one(  
◦ {"return\_id" : returnid}, {"\$set":{"return\_status":"Accepted"}})  
◦ db.products.update\_one({'item\_id':int(itemid)}, { "\$set": { "Quantity":  
int(new\_quantity) } } )