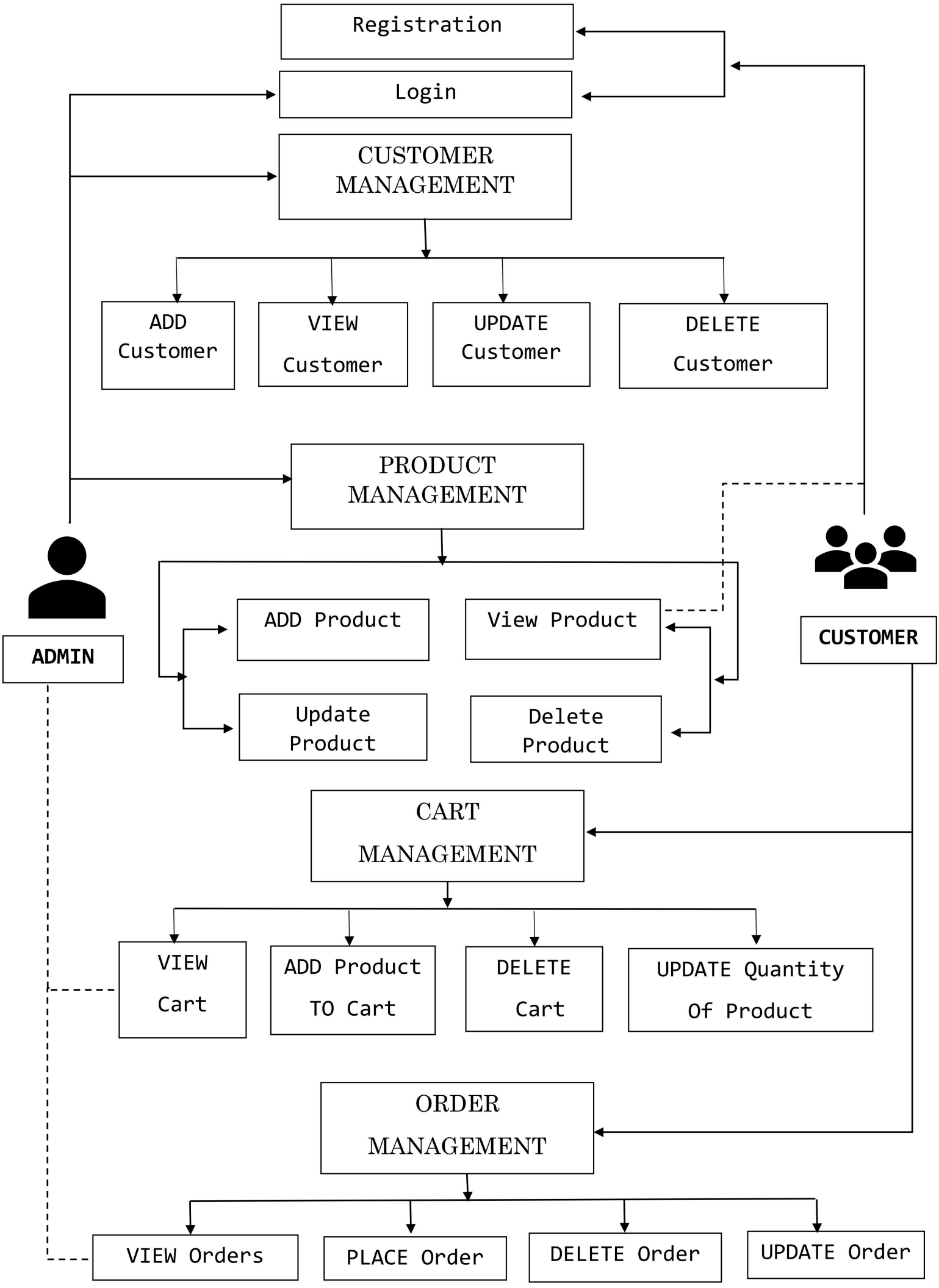
ECOMMERCE CAPSTONE PROJECT

BASIC FLOW/ SCENARIOS:

1. Customer Management
   - Add new customers, Update customer information, Retrieve customer details.
2. Product Management:
   - Users can view a list of available products, add, and delete products
3. Cart Management:
   - Users can add and remove products to their shopping cart
4. Order Management:
   - Users can place orders, which include product details, quantities, and shipping information.
   - The order total is calculated based on the cart contents.

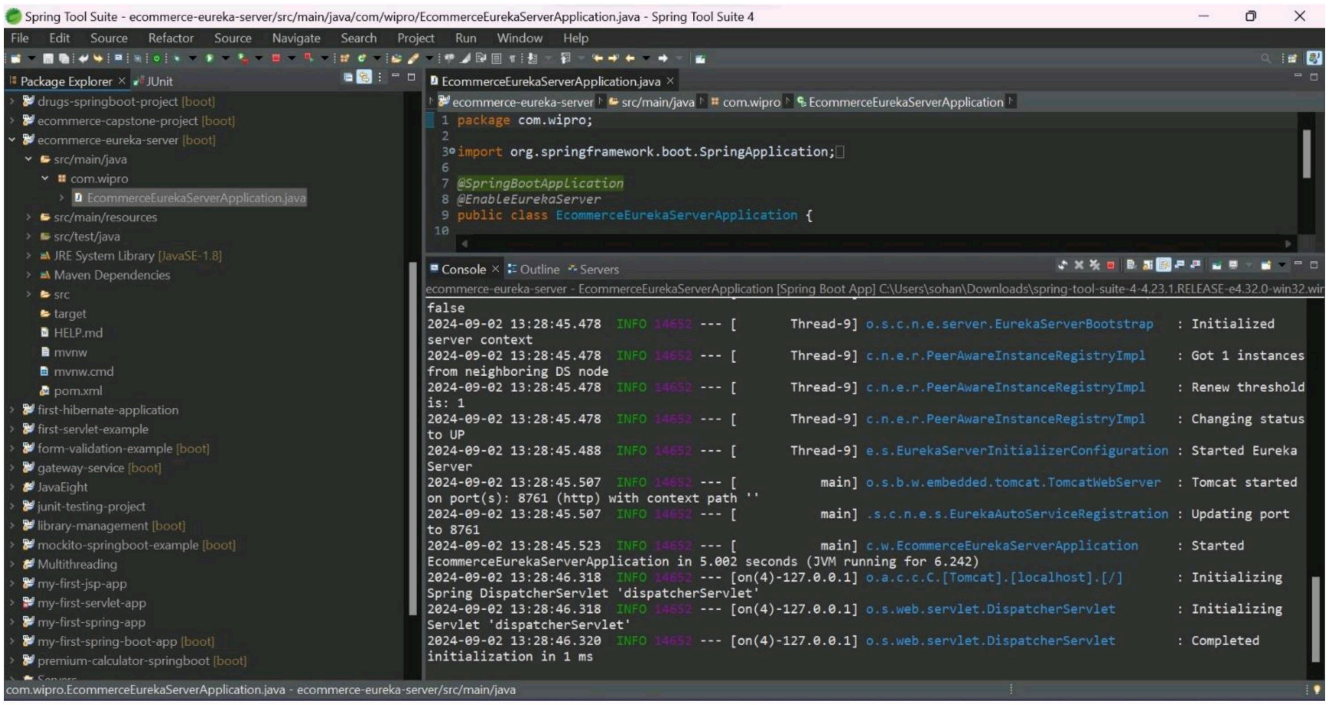
❖ All the requirements as per the basic flow/scenario provided has been met.

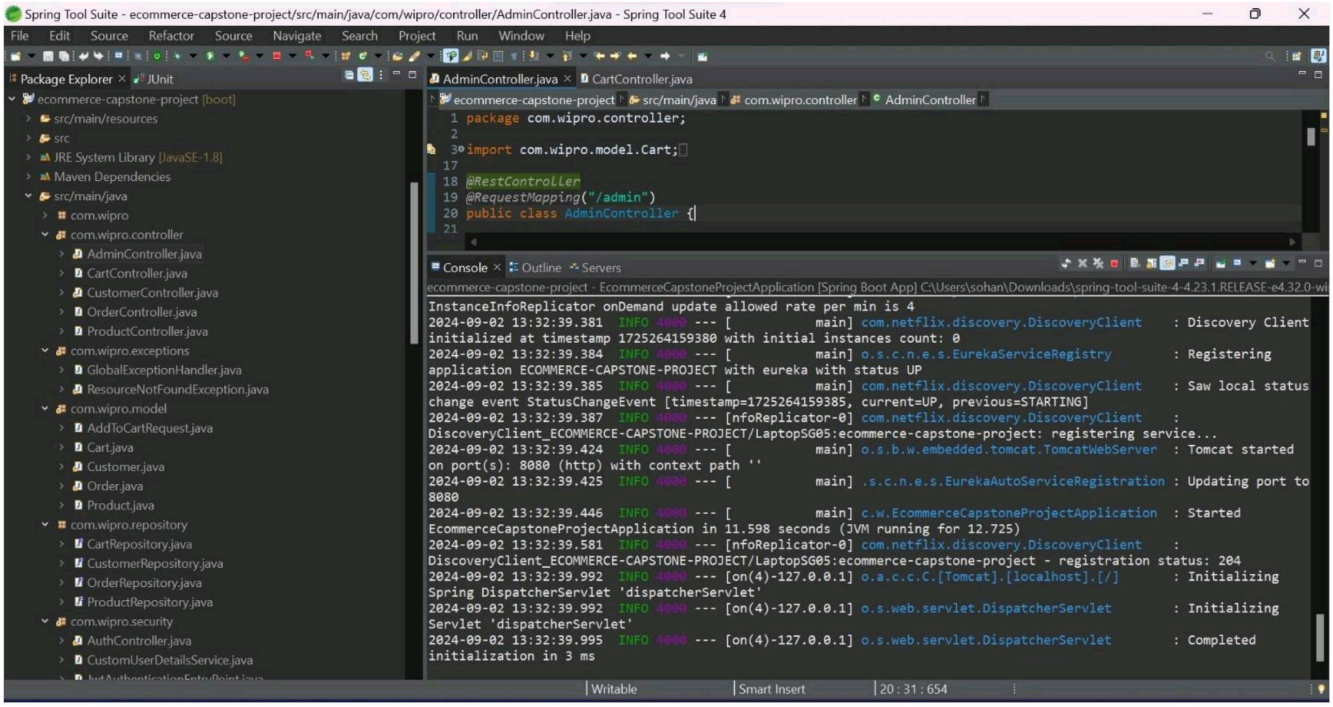
❖ Below is the use case diagram for the E-commerce Capstone project


Registration
Login
CUSTOMER MANAGEMENT
ADD Customer
VIEW Customer
UPDATE Customer
DELETE Customer
PRODUCT MANAGEMENT
ADMIN
CUSTOMER
ADD Product
View Product
Update Product
Delete Product
CART MANAGEMENT
VIEW Cart
ADD Product TO Cart
DELETE Cart
UPDATE Quantity Of Product
ORDER MANAGEMENT
VIEW Orders
PLACE Order
DELETE Order
UPDATE Order

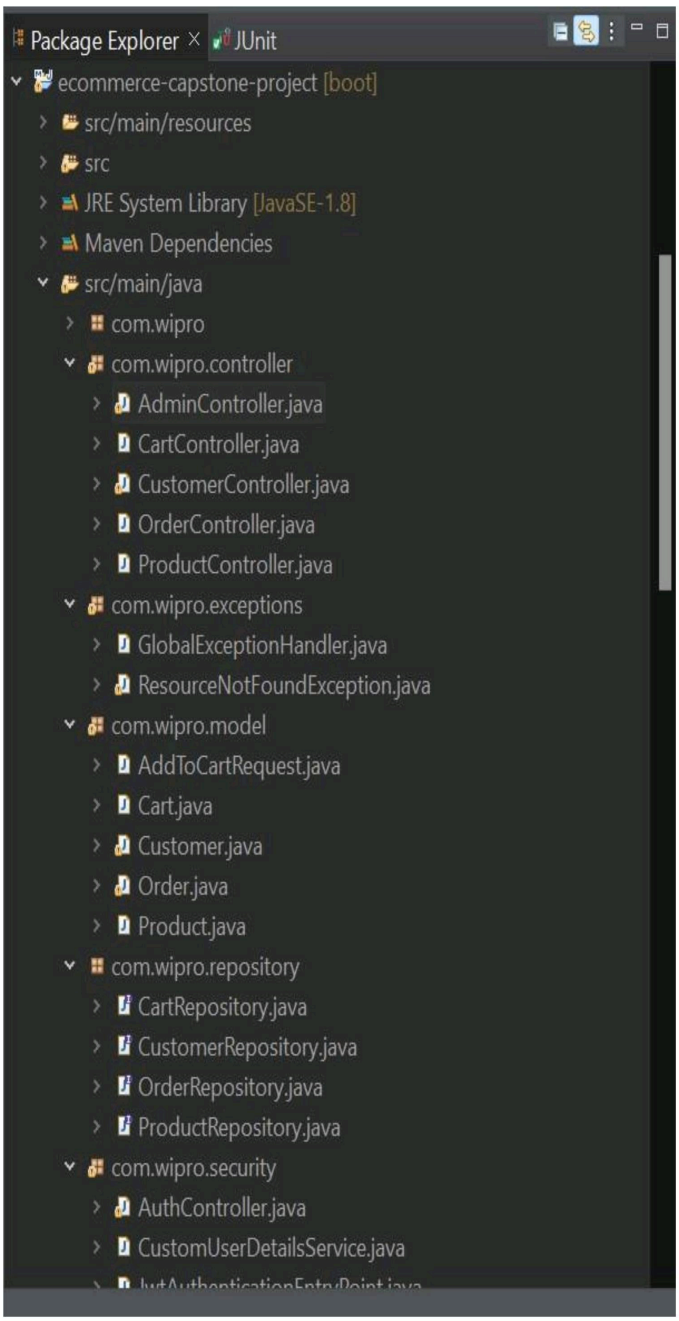
Console Output

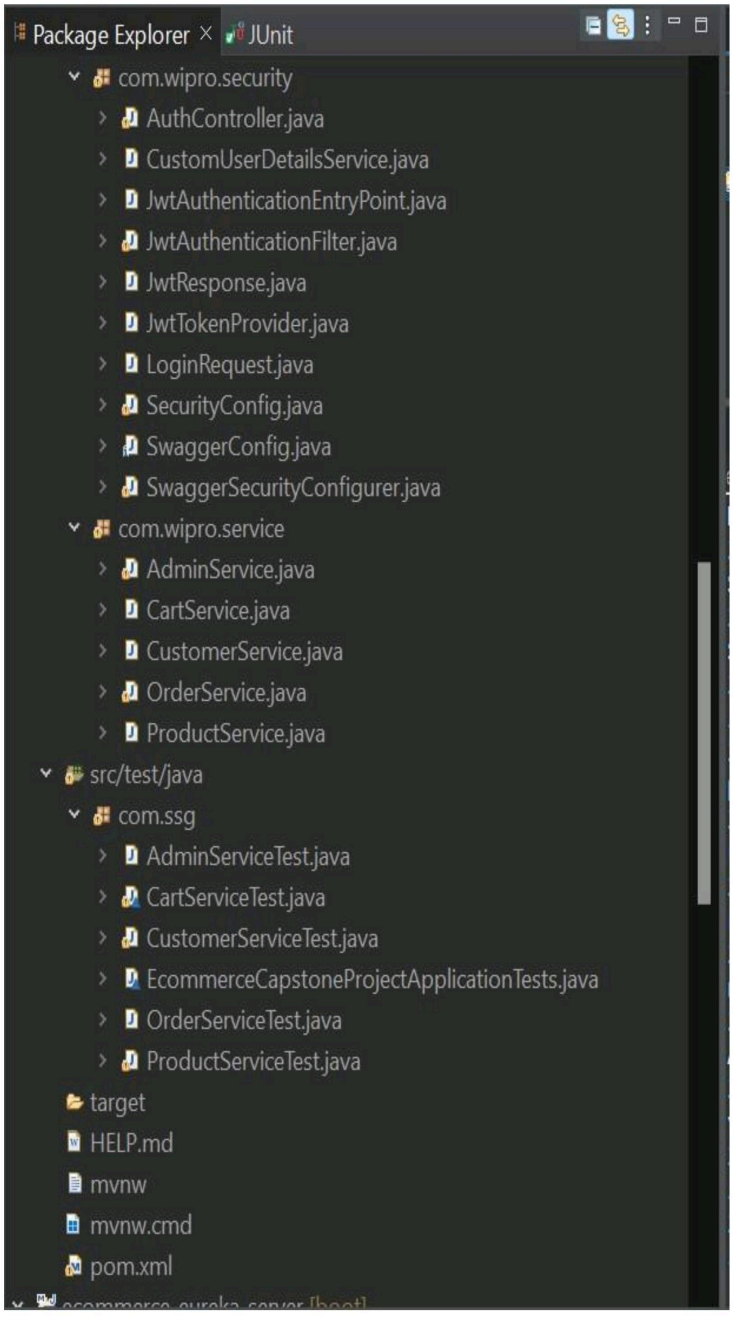
Both the eureka server application and the ecommerce capstone project application have been successfully executed without any errors.





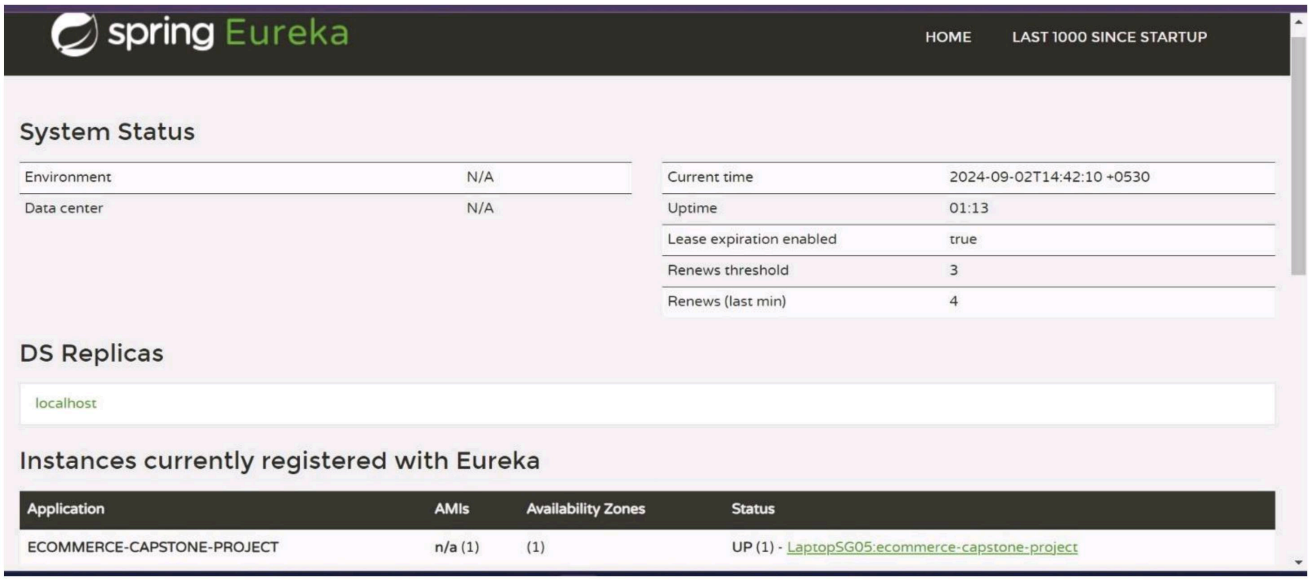
Package Explorer Screenshots





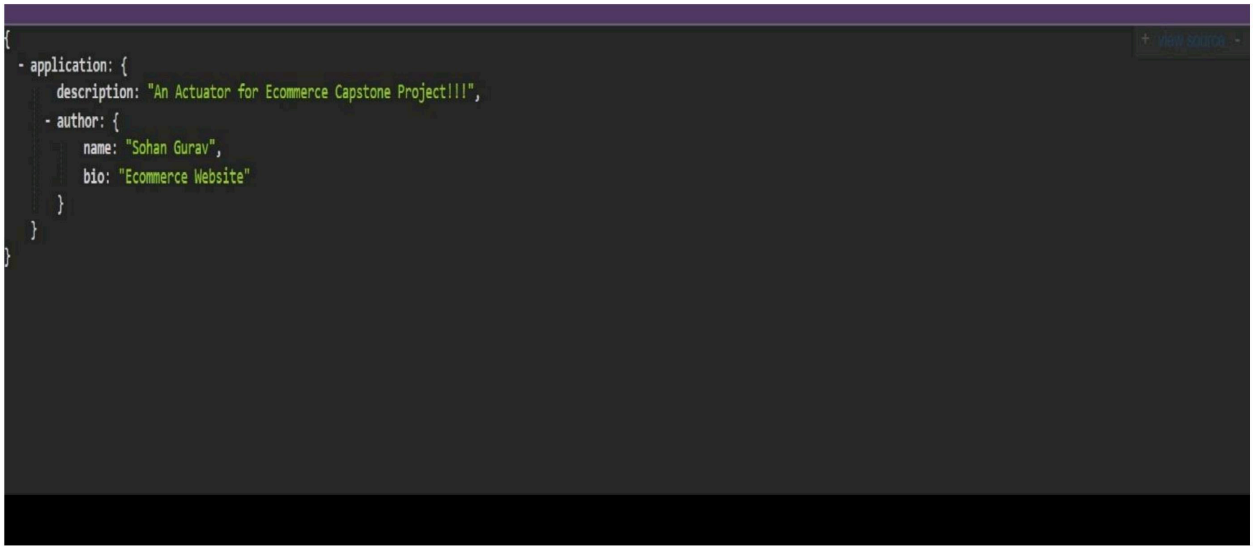
Eureka Discovery Service

The Capstone project is successfully registered on eureka server



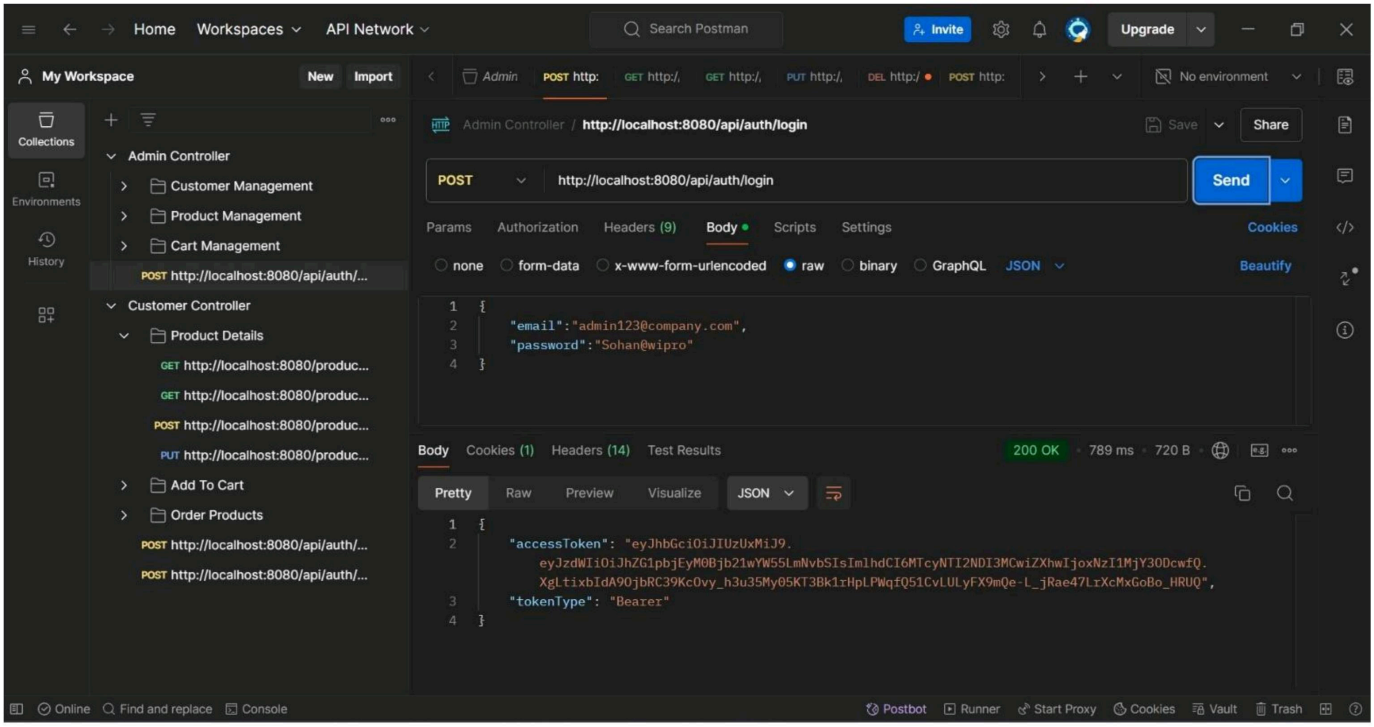
Actuator

The actuator shows the info, health and env of the project successfully

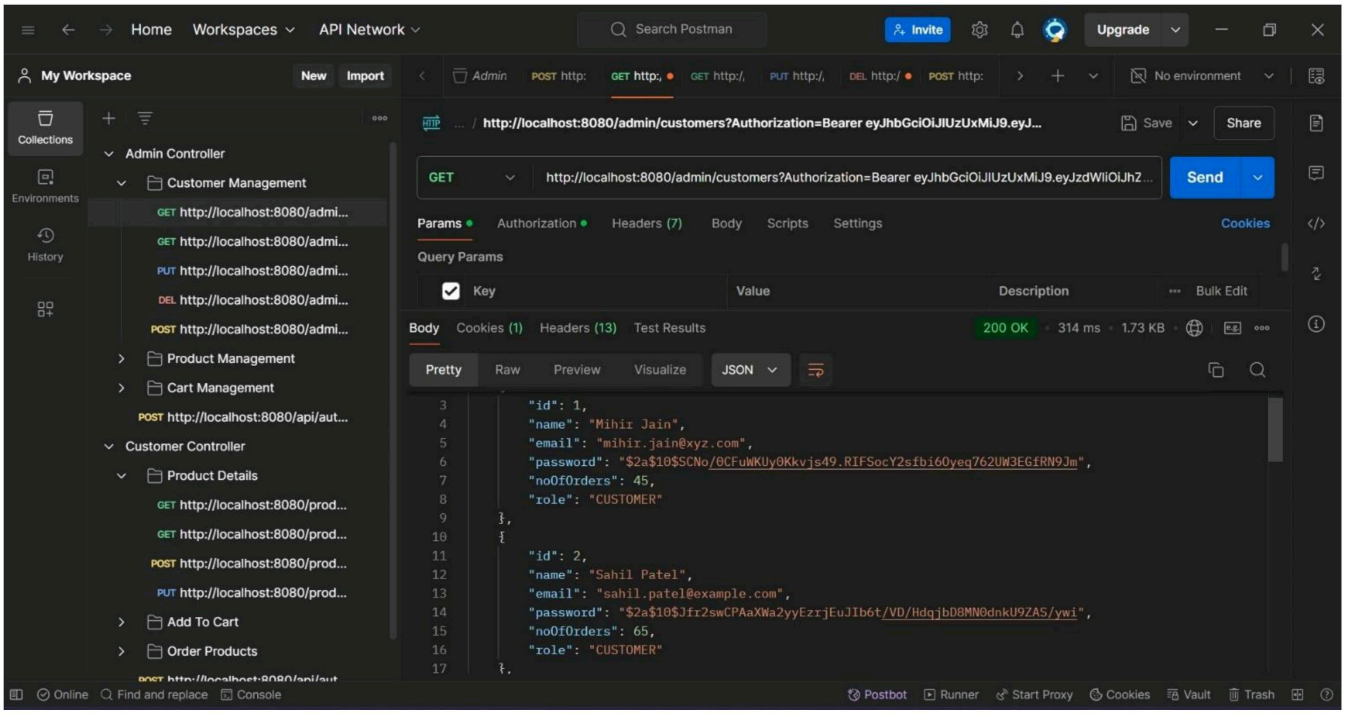


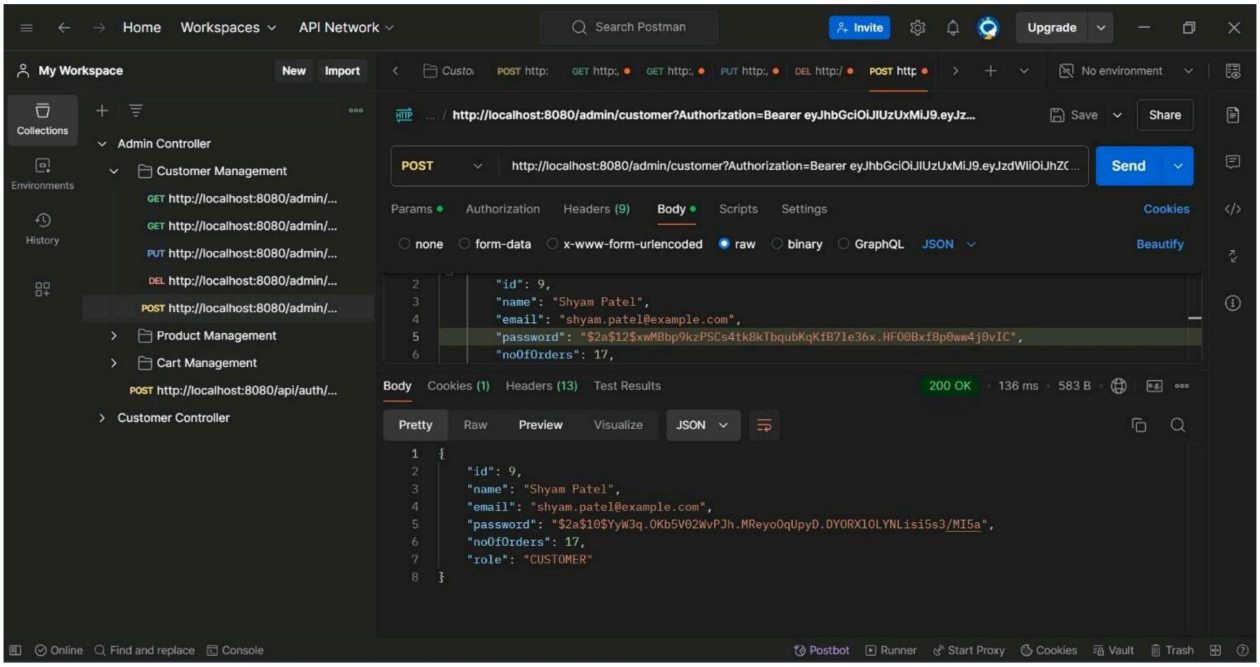
Outputs on Postman:

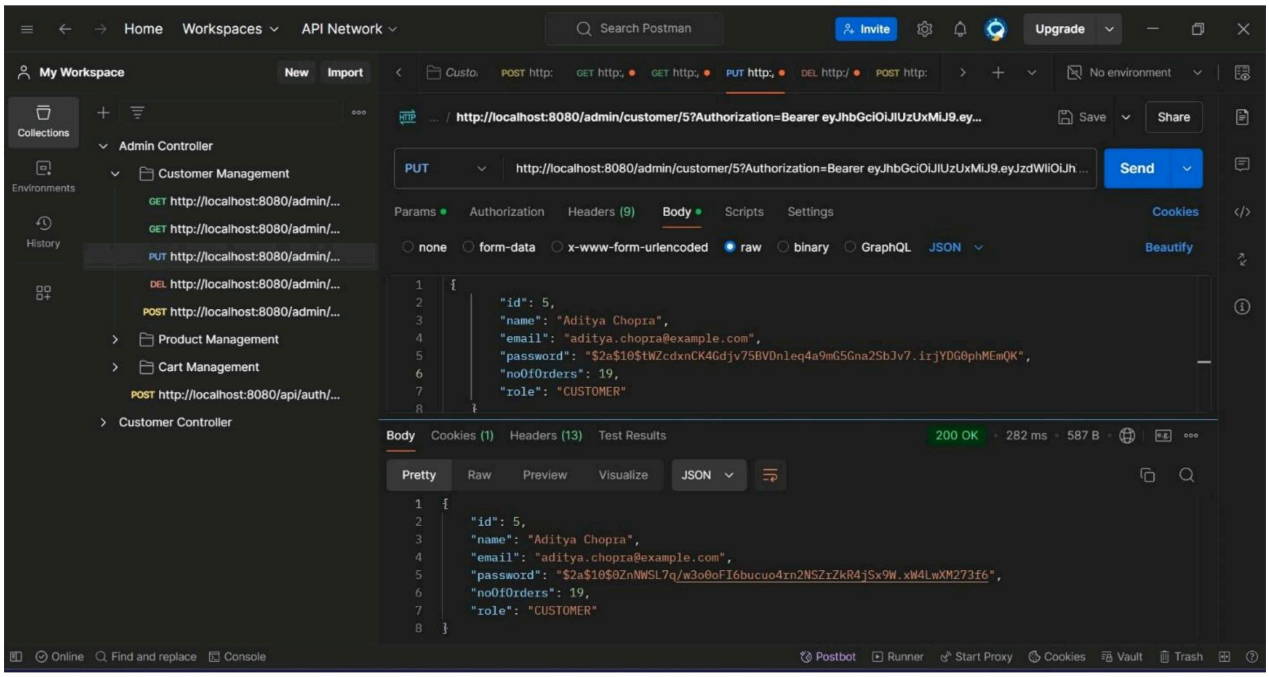
- Admin is able to login with the predefined credentials and generate jwt token successfully.



Admin can retrieve, add, update, and delete customer records.




Home
Workspaces
API Network
Search Postman
Invite
Upgrade
My Workspace
New
Import
Collections
Environments
History
Admin Controller
Customer Management
GET http://localhost:8080/admin/...
GET http://localhost:8080/admin/...
PUT http://localhost:8080/admin/...
DEL http://localhost:8080/admin/...
POST http://localhost:8080/admin/...
Product Management
Cart Management
POST http://localhost:8080/api/auth/...
Customer Controller
No environment
http://localhost:8080/admin/customer?Authorization=Bearer eyJhbGciOiJIUzUxMiJ9.eyJz...
Save
Share
POST
http://localhost:8080/admin/customer?Authorization=Bearer eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJhZ...
Send
Params
Authorization
Headers (9)
Body
Scripts
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
"id": 9,
"name": "Shyam Patel",
"email": "shyam.patel@example.com",
"password": "$2a$12$xwMBbp9kzPSCs4tk8kTbqubKqKfB71e36x.HFO0Bxf8p0ww4j0vIC",
"noOfOrders": 17,
Body
Cookies (1)
Headers (13)
Test Results
200 OK
136 ms
583 B
Pretty
Raw
Preview
Visualize
JSON
{
"id": 9,
"name": "Shyam Patel",
"email": "shyam.patel@example.com",
"password": "$2a$10$YyW3q.OKb5V02WvPJh.MReyoOqUpyD.DYORX1OLYNLisi5s3/MI5a",
"noOfOrders": 17,
"role": "CUSTOMER"
}
Online
Find and replace
Console
Postbot
Runner
Start Proxy
Cookies
Vault
Trash


Home
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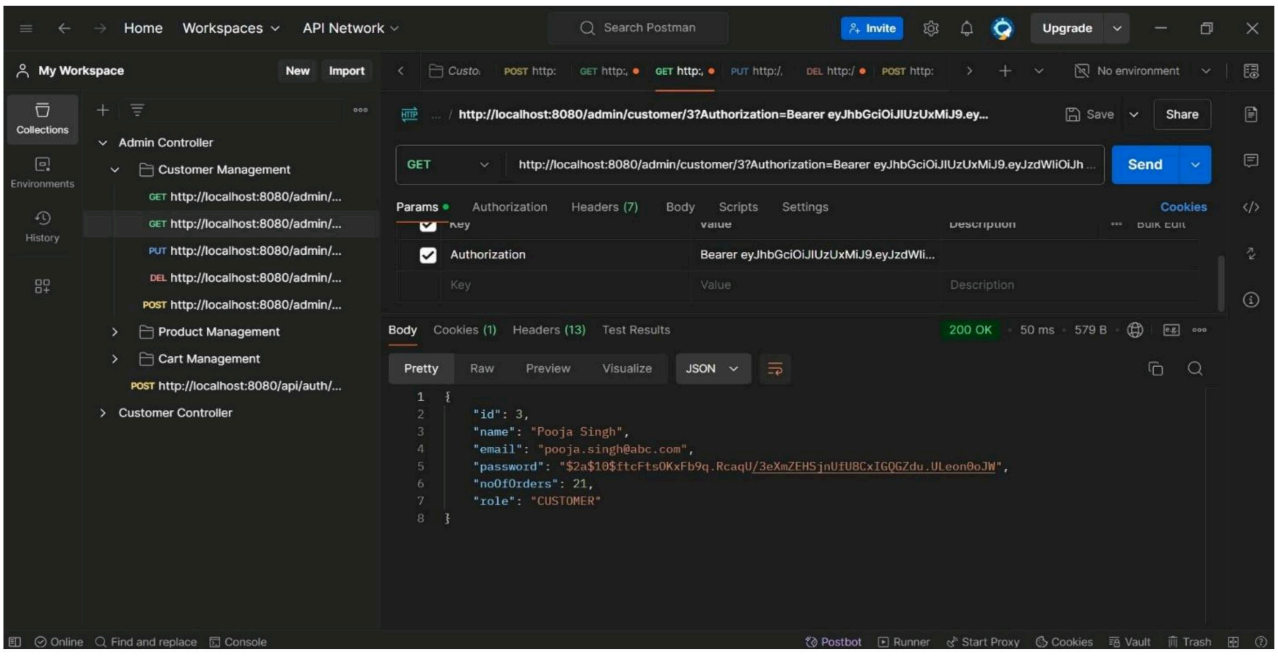
DEL http://localhost:8080/admin/...
POST http://localhost:8080/admin/...
Product Management
Cart Management
POST http://localhost:8080/api/auth/...
Customer Controller
No environment
http://localhost:8080/admin/customer/5?Authorization=Bearer eyJhbGciOiJIUzUxMiJ9.ey...
Save
Share
PUT
http://localhost:8080/admin/customer/5?Authorization=Bearer eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJh...
Send
Params
Authorization
Headers (9)
Body
Scripts
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"id": 5,
"name": "Aditya Chopra",
"email": "aditya.chopra@example.com",
"password": "$2a$10$tWZcdxnCK4Gdjv75BVDnleq4a9mG5Gna2SbJv7.irjYDG0phMEmQK",
"noOfOrders": 19,
"role": "CUSTOMER"
}
Body
Cookies (1)
Headers (13)
Test Results
200 OK
282 ms
587 B
Pretty
Raw
Preview
Visualize
JSON
{
"id": 5,
"name": "Aditya Chopra",
"email": "aditya.chopra@example.com",
"password": "$2a$10$0ZnNWSL7q/w3o0oFI6bucuo4rn2NSZrZkR4jSx9W.xW4LwXM273f6",
"noOfOrders": 19,
"role": "CUSTOMER"
}
Online
Find and replace
Console
Postbot
Runner
Start Proxy
Cookies
Vault
Trash


Home
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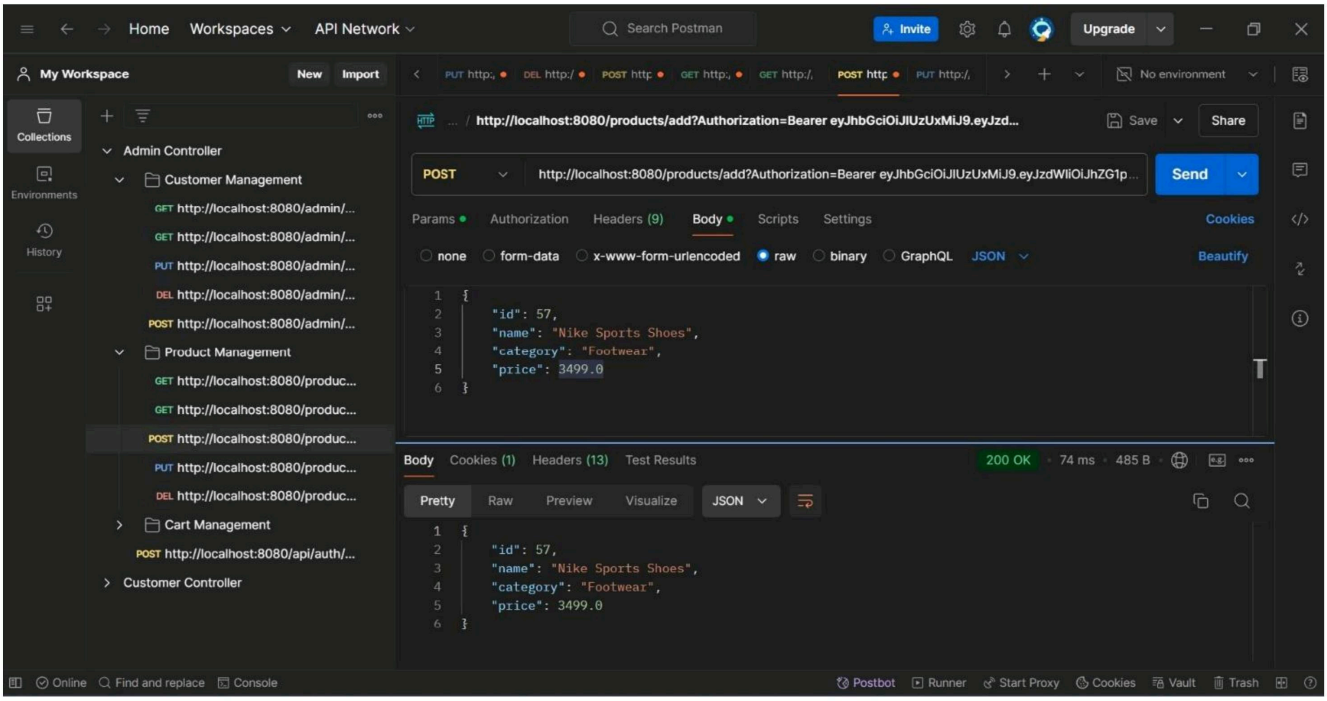
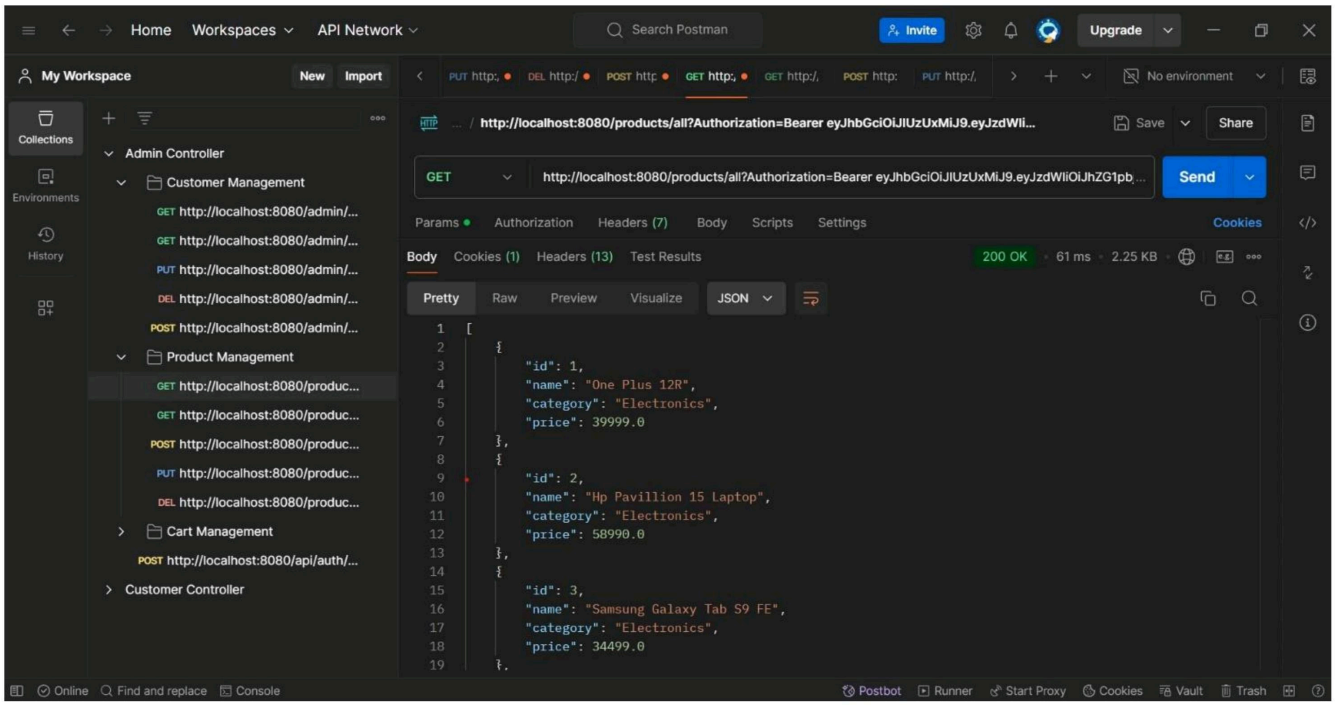
DEL http://localhost:8080/admin/...
POST http://localhost:8080/admin/...
Product Management
Cart Management
POST http://localhost:8080/api/auth/...
Customer Controller
No environment
http://localhost:8080/admin/customer/3?Authorization=Bearer eyJhbGciOiJIUzUxMiJ9.ey...
Save
Share
GET
http://localhost:8080/admin/customer/3?Authorization=Bearer eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJh...
Send
Params
Authorization
Headers (7)
Body
Scripts
Settings
Cookies
Authorization
Bearer eyJhbGciOiJIUzUxMiJ9.eyJzdWIi...
Key
Value
Description
Body
Cookies (1)
Headers (13)
Test Results
200 OK
50 ms
579 B
Pretty
Raw
Preview
Visualize
JSON
{
"id": 3,
"name": "Pooja Singh",
"email": "pooja.singh@abc.com",
"password": "$2a$10$ftcFtsOKxFb9q.RcaqU/3eXmZEHSjnUfU8CxIGQGZdu.ULeon0oJW",
"noOfOrders": 21,
"role": "CUSTOMER"
}
Online
Find and replace
Console
Postbot
Runner
Start Proxy
Cookies
Vault
Trash

Similarly, Admin can also retrieve, add, update, and delete a product

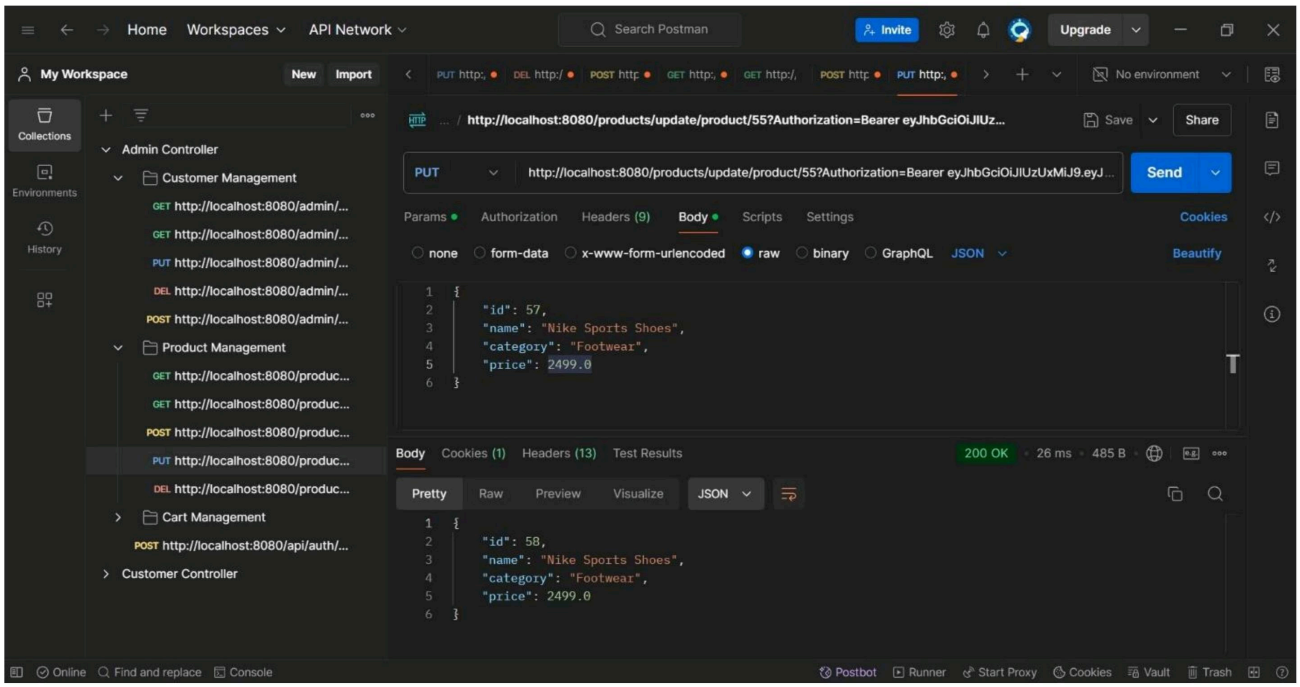
Add Product



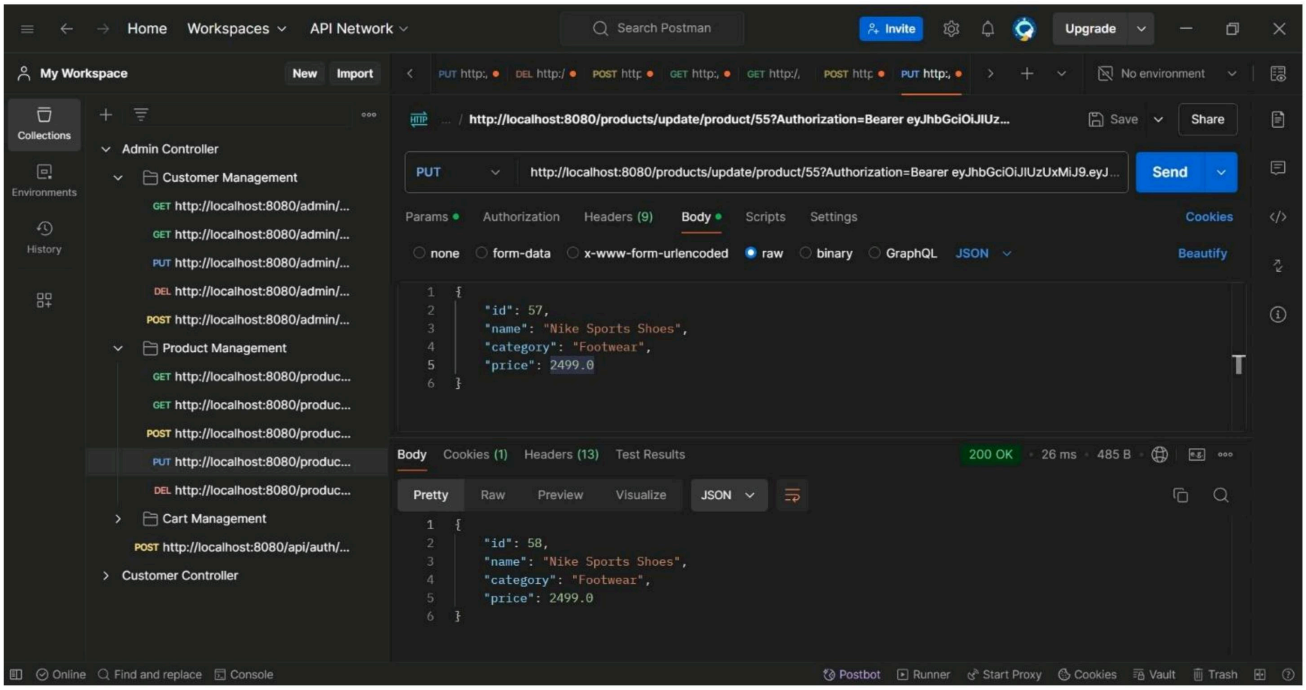
Retrieve Product



Update Product

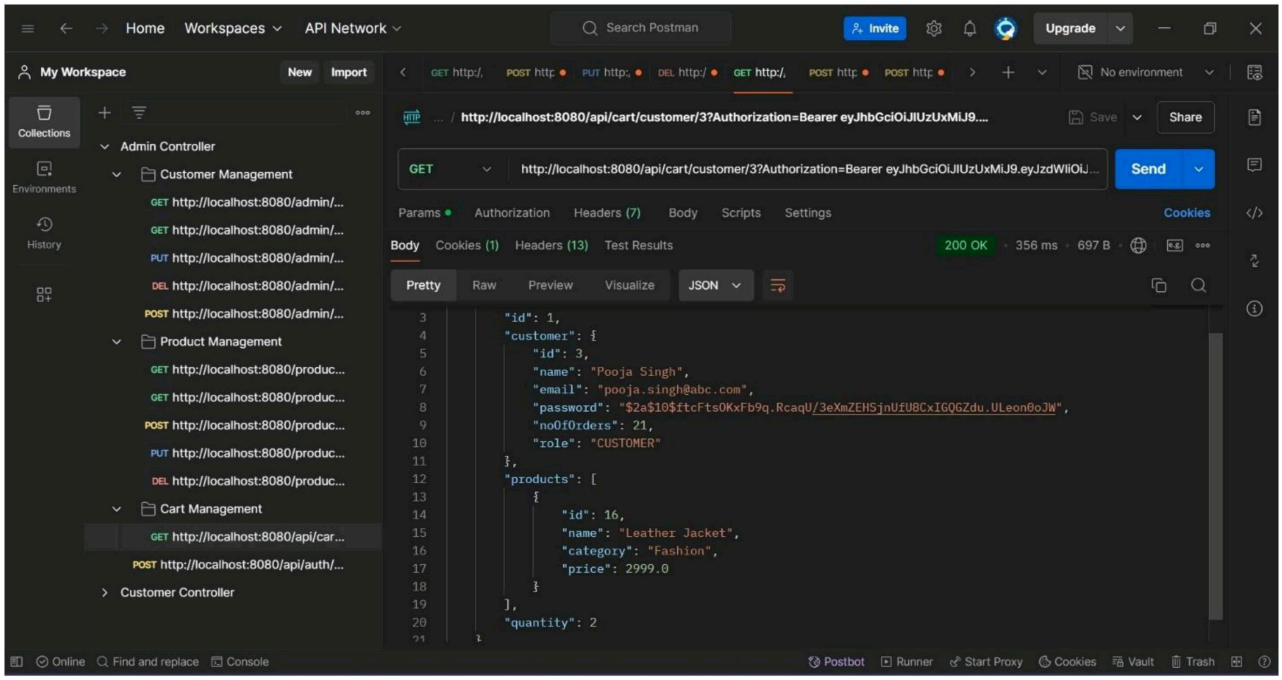


Delete Product



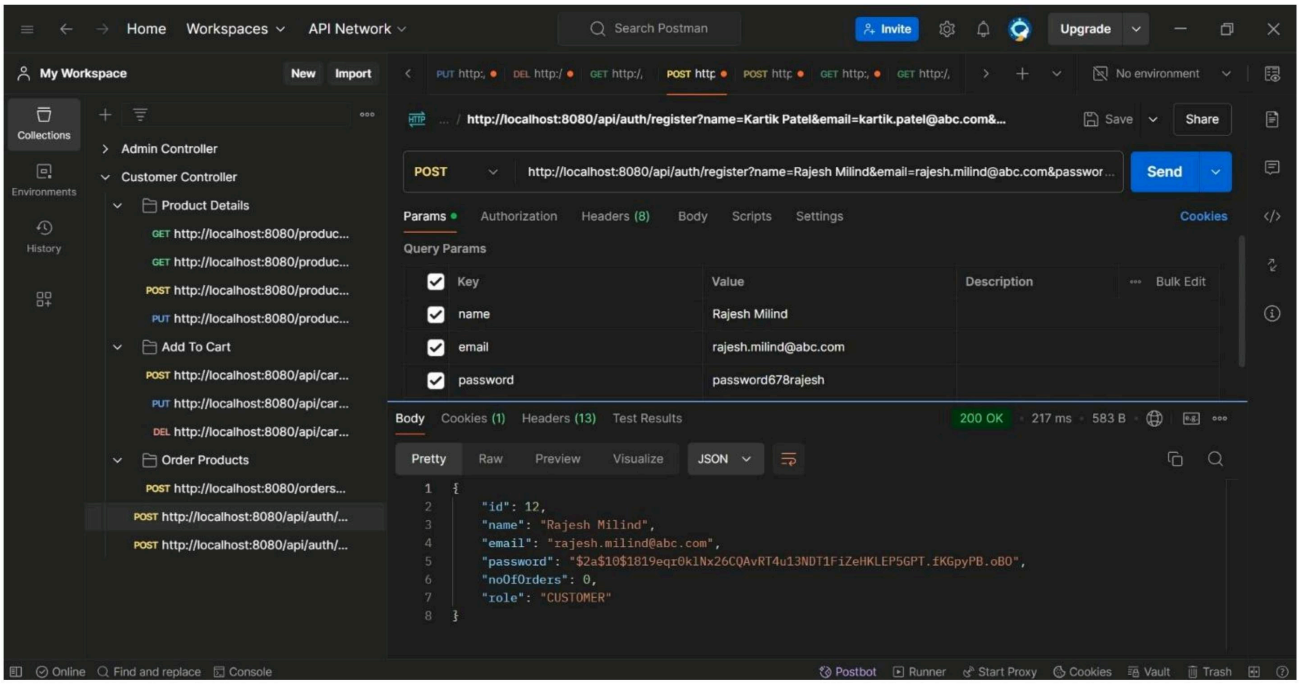
View Cart

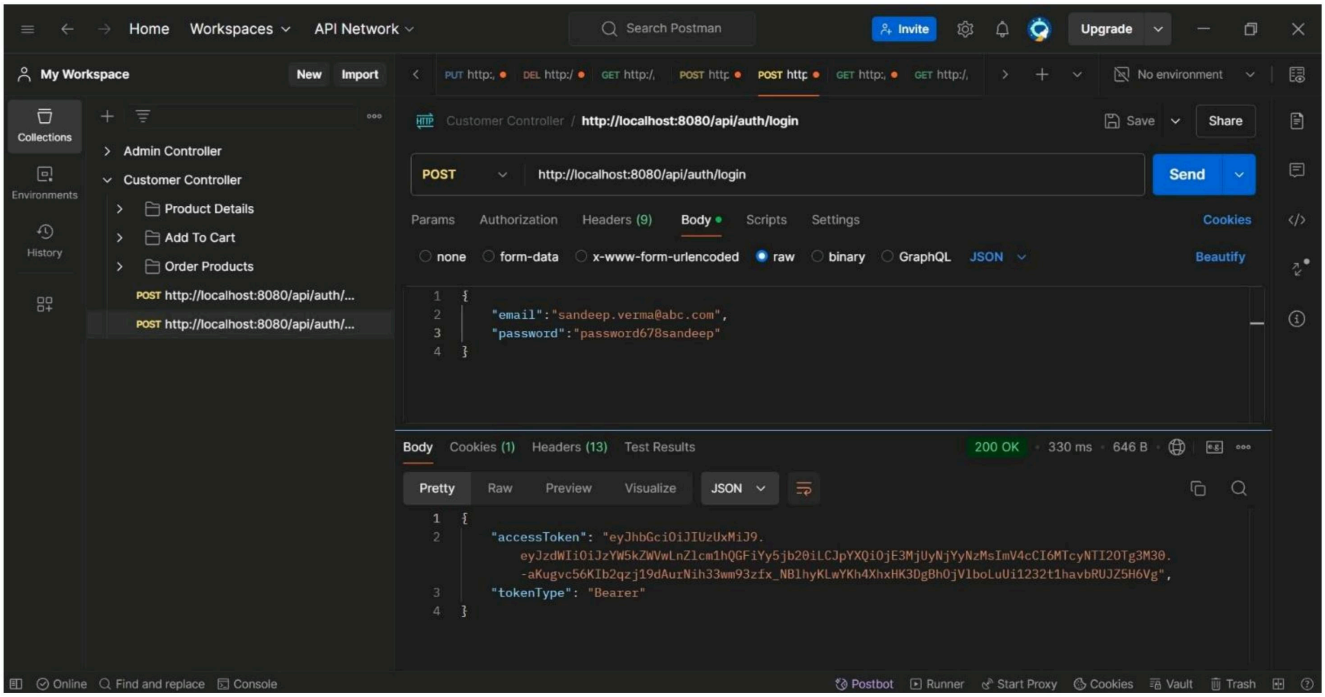
Admin can also view cart details in which the cart id, customer details, product details, quantity is displayed.



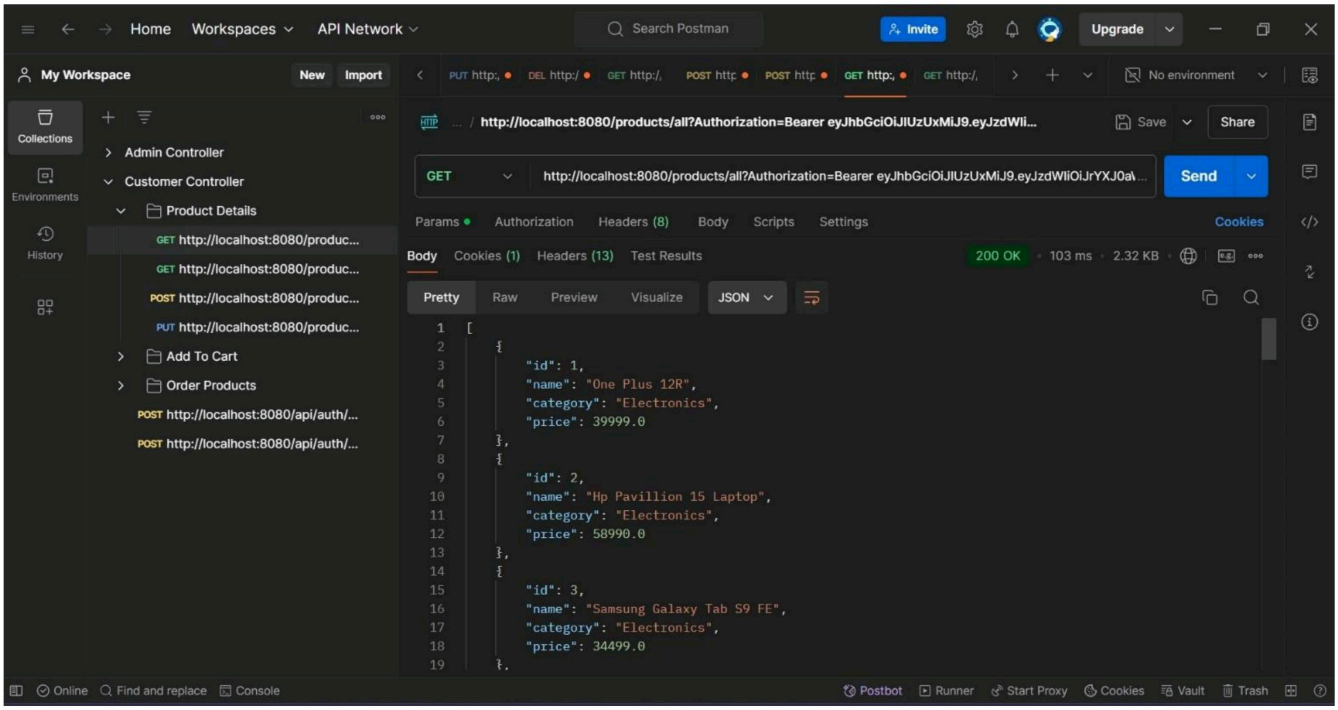
Customer Registration/Login

- Customer can register themselves as well as login and generate the jwt token successfully

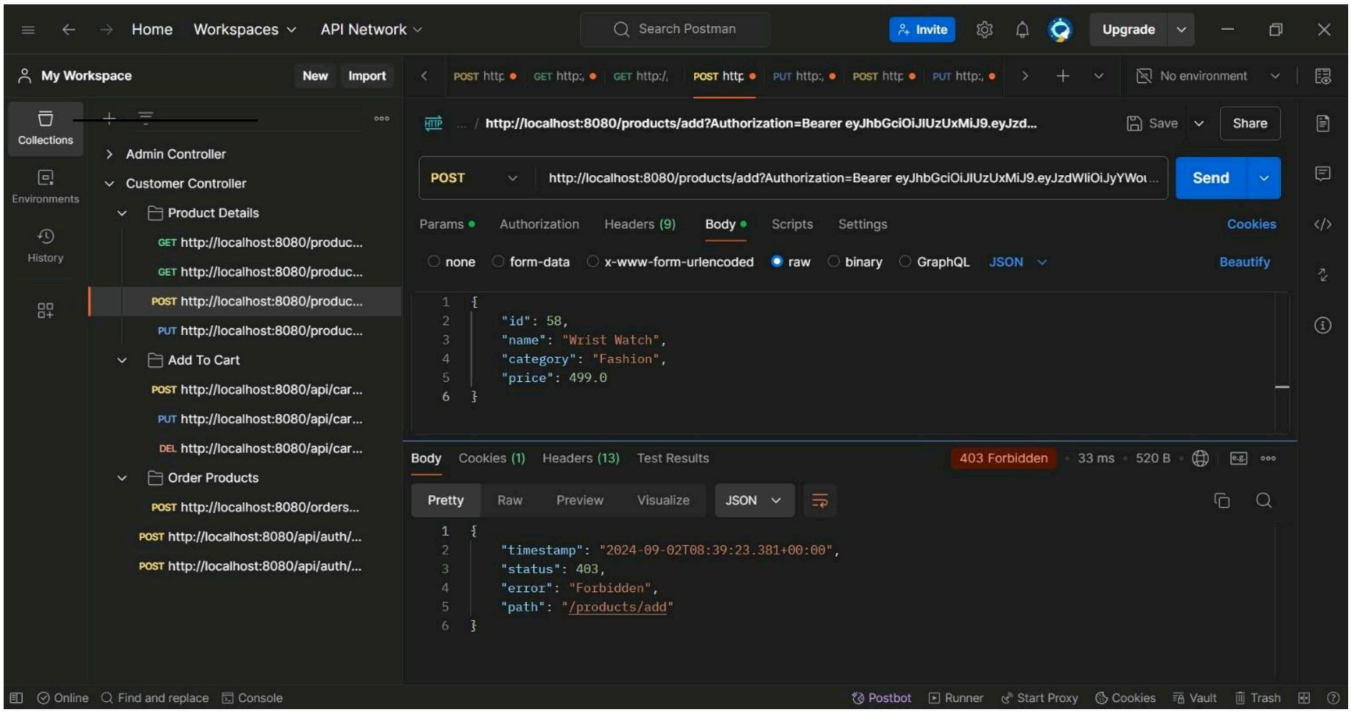


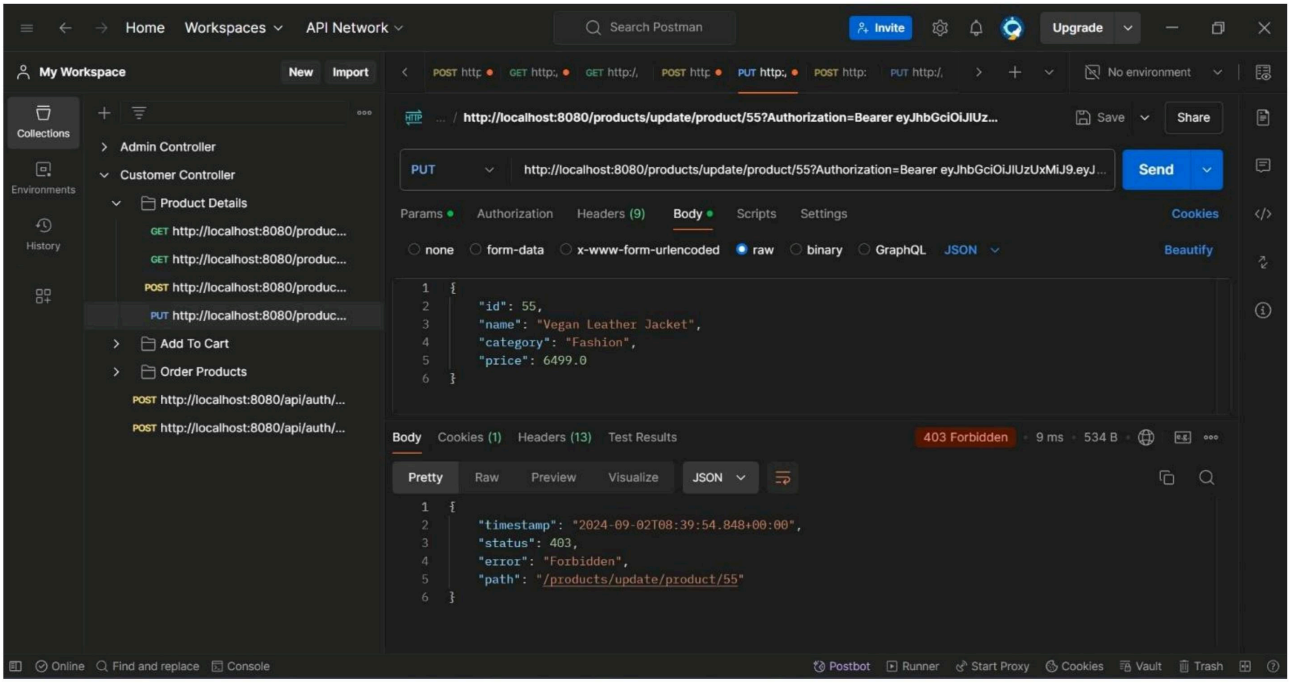


Customers can view all the products.



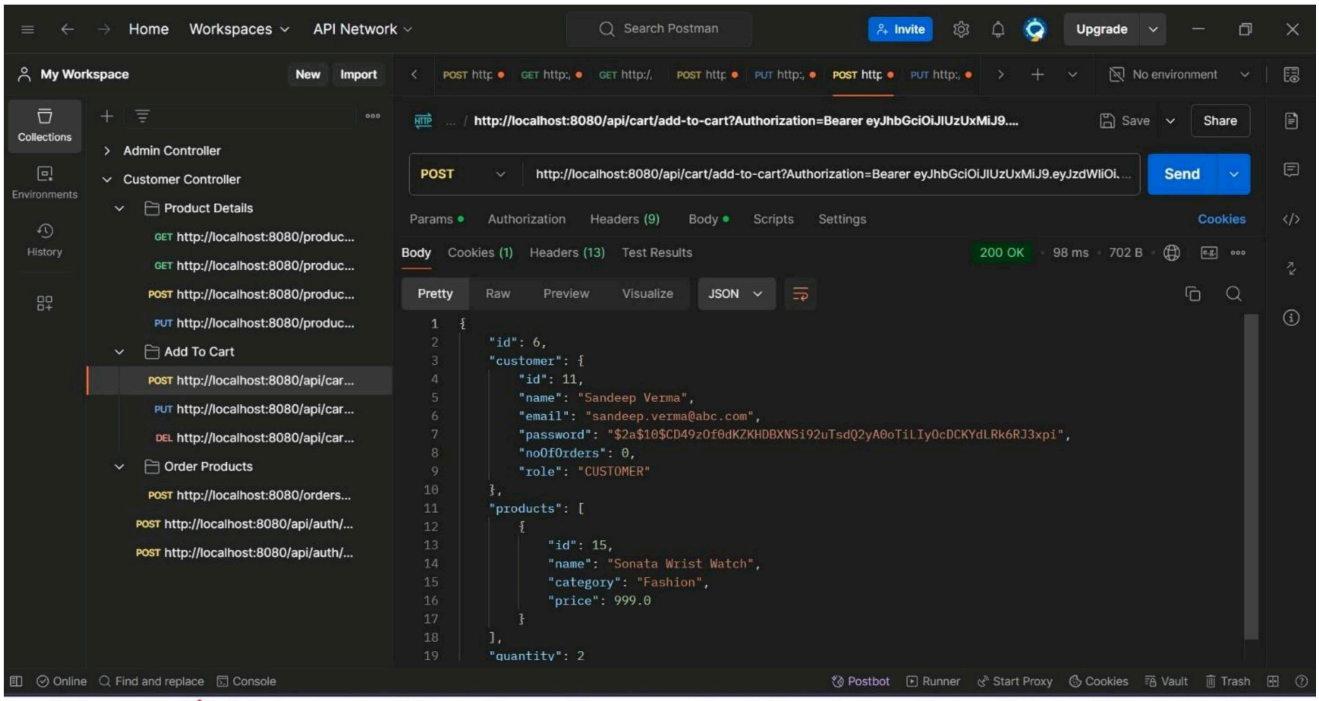
Customers cannot add, update or delete product. These operations can be only done by the admin. So, when customer tries to perform this operation, they get a “403 forbidden error”





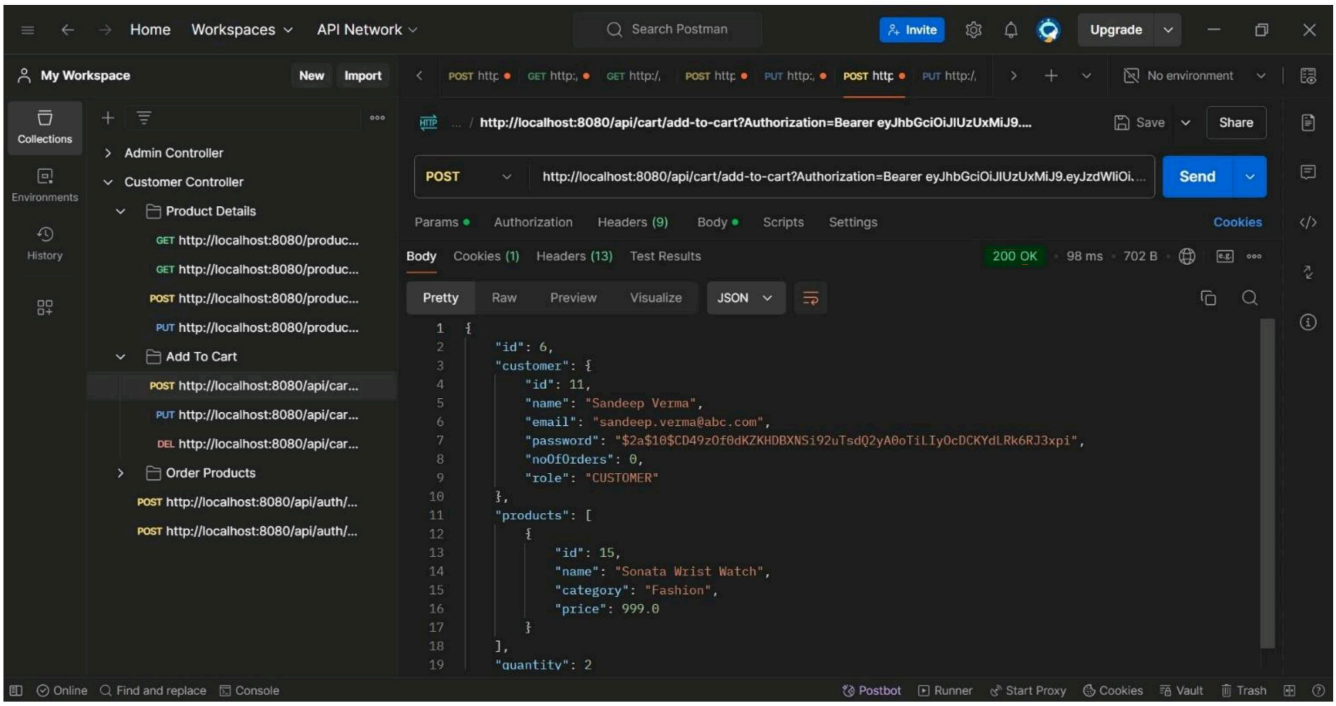
Add product to cart:

Customers can add product to cart, and when they do they can see the cart id, customer details, and product details along with the quantity.

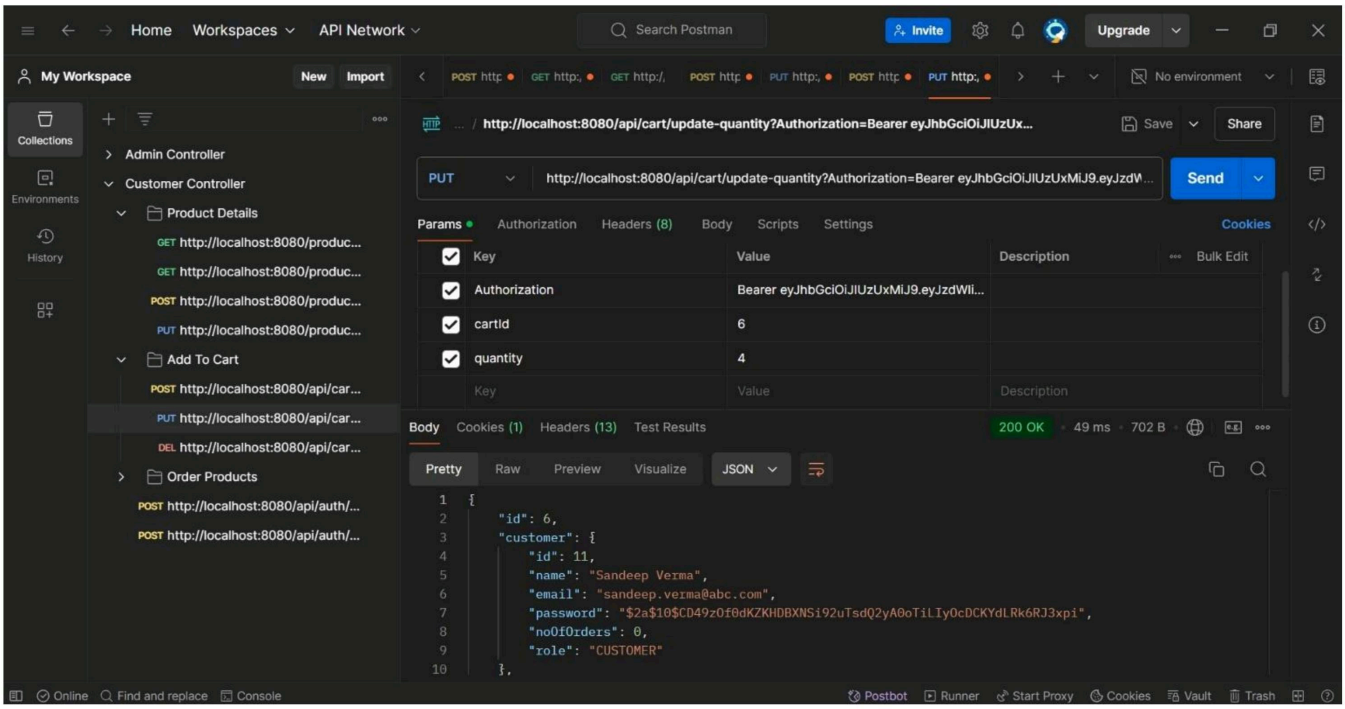


Update Quantity

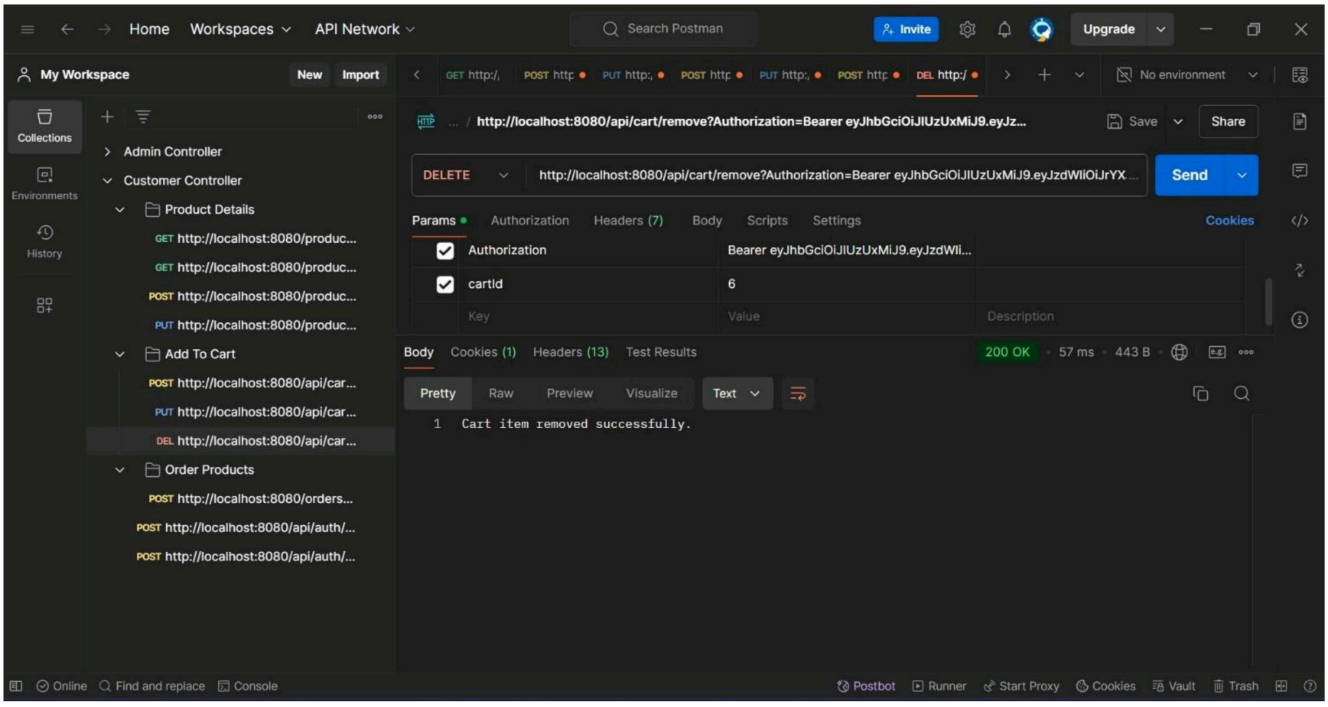
Customers can update the quantity of products as well



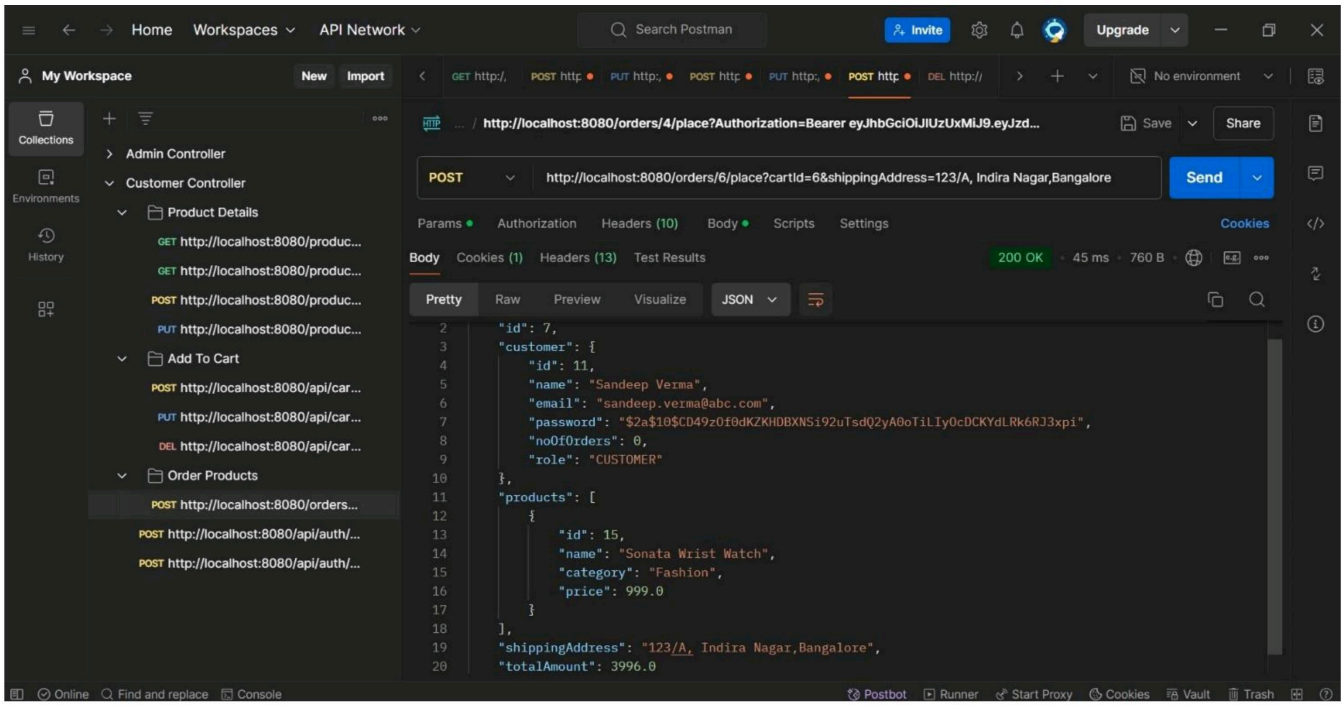
In the above image the product quantity was initially 2 which is then updated to 4 in the below image



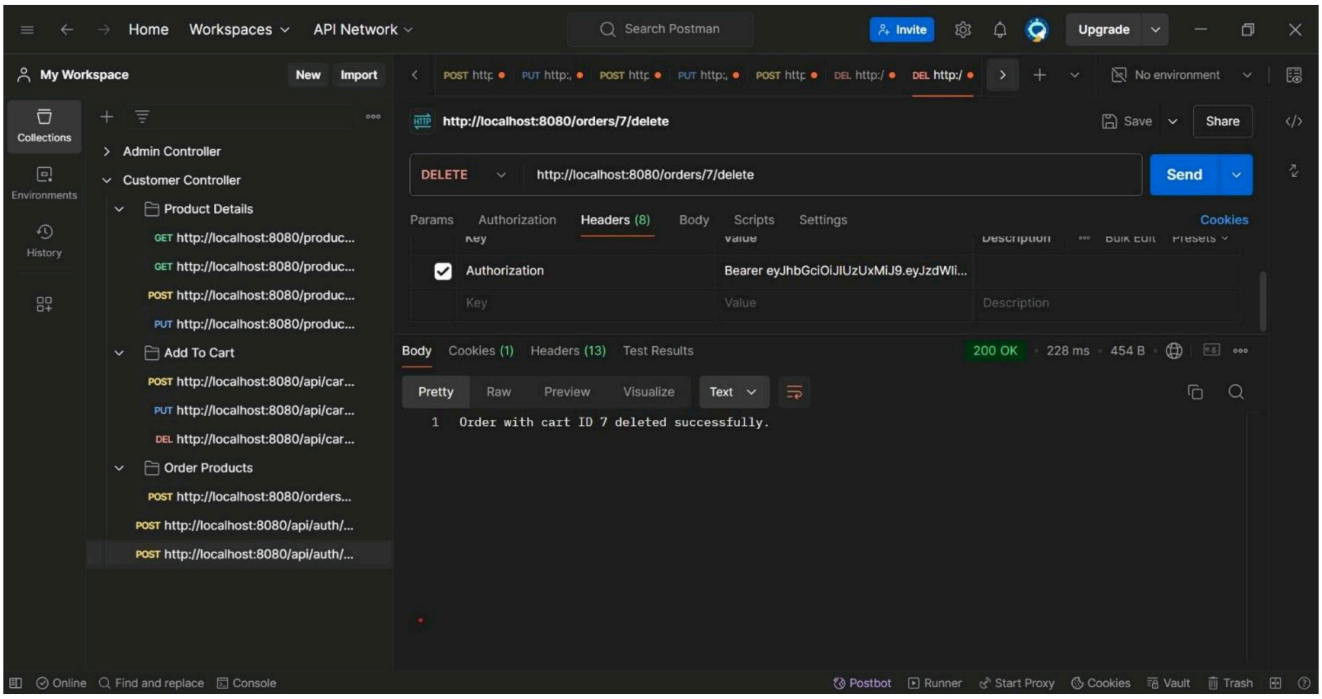
Delete a cart



Using the cart id, customers can place order. Below we can see that when the order is placed, in the output we get the customer details, product details, shipping address and the total amount depending on the quantity.

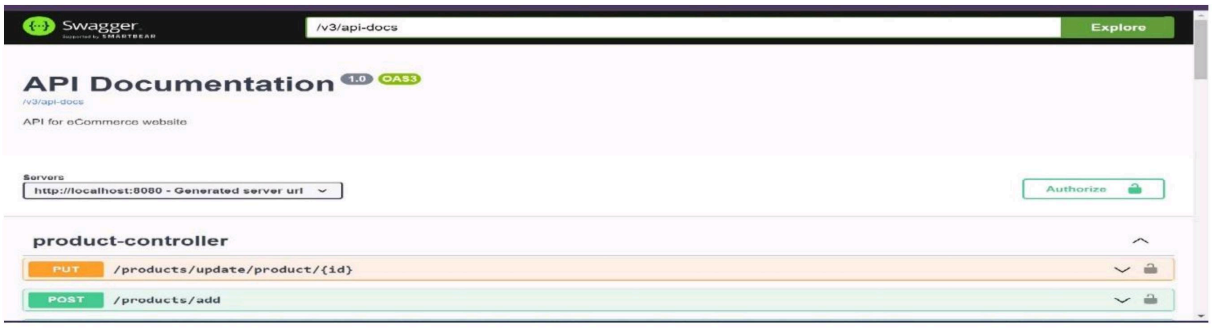


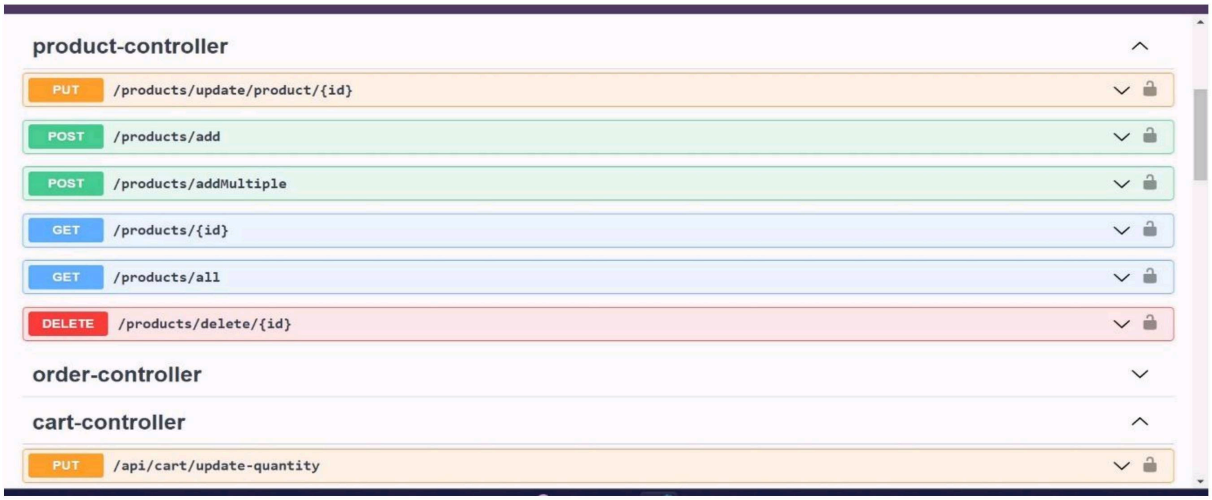
Deleting an order:

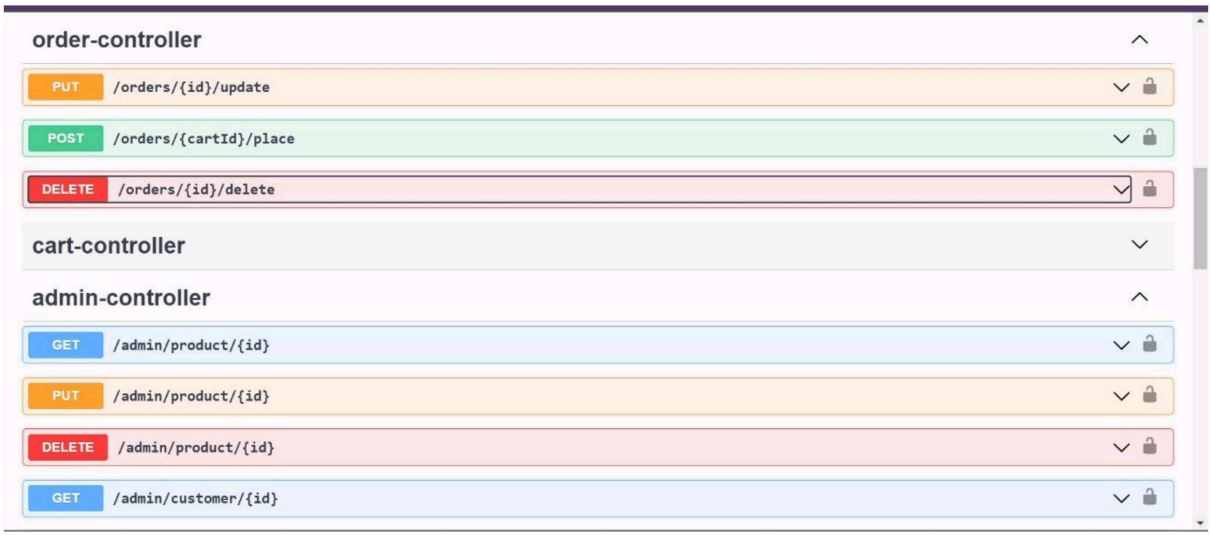


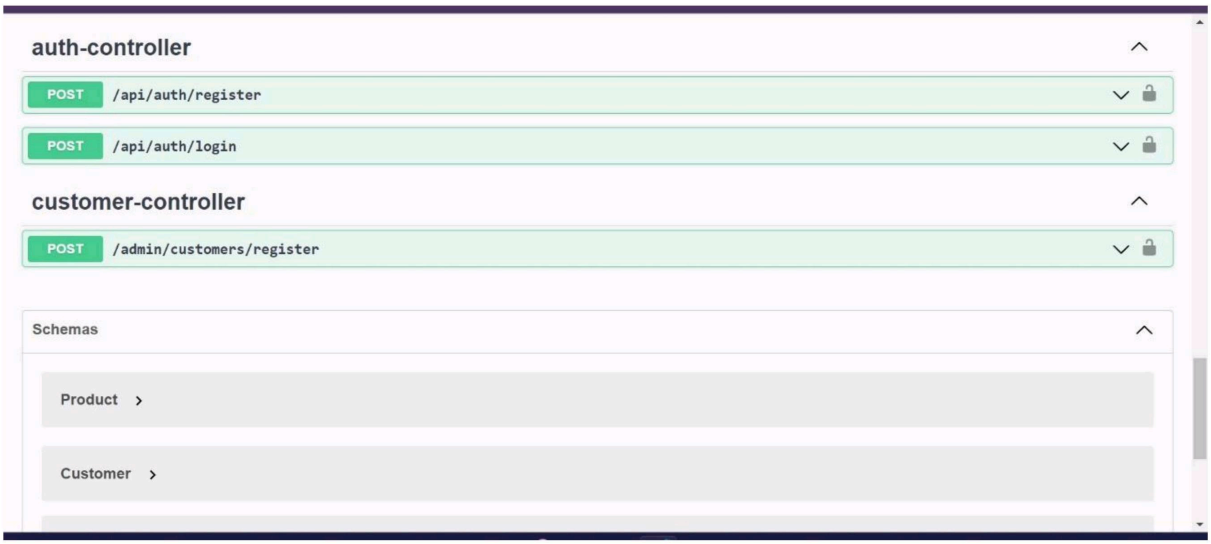
Swagger :

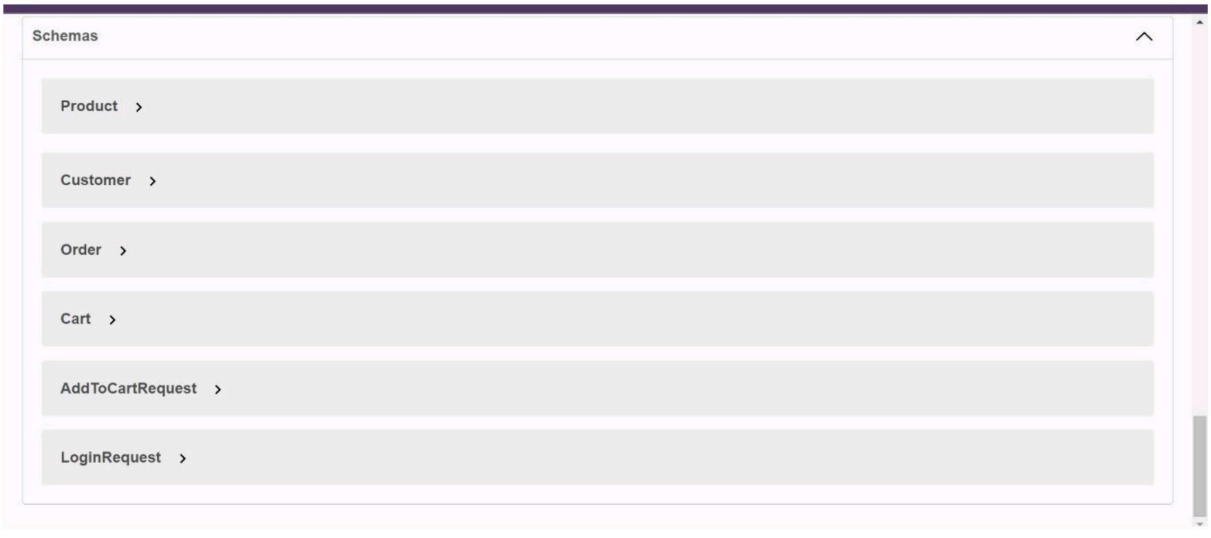
All of the endpoints are successfully working in swagger.





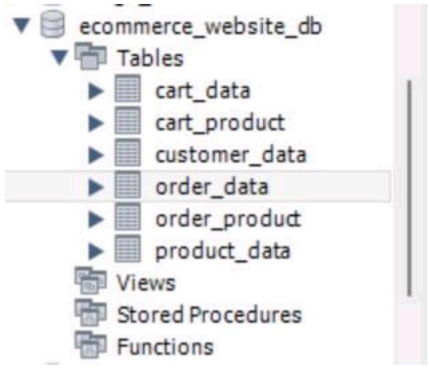

order-controller
PUT /orders/{id}/update
POST /orders/{cartId}/place
DELETE /orders/{id}/delete
cart-controller
admin-controller
GET /admin/product/{id}
PUT /admin/product/{id}
DELETE /admin/product/{id}
GET /admin/customer/{id}


auth-controller
POST /api/auth/register
POST /api/auth/login
customer-controller
POST /admin/customers/register
Schemas
Product
Customer


Schemas
Product
Customer
Order
Cart
AddToCartRequest
LoginRequest

MySQL Database

Schema



Customer Table

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

id	email	name	no_of_orders	password	role
1	mihir.jain@xyz.com	Mihir Jain	45	$2a$10$SCNo/0CFuWKUy0Kkvjs49.RIFSocY2sf...	CUSTOMER
2	sahil.patel@example.com	Sahil Patel	65	$2a$10$Jfr2swCPAaXWa2yyEzrjEuJIb6t/VD/Hd...	CUSTOMER
3	pooja.singh@abc.com	Pooja Singh	21	$2a$10$ftcFtsOKxFb9q.RcaqU/3eXmZEHSjnUf...	CUSTOMER
4	anjali.sharma@abc.com	Anjali Sharma	13	$2a$10$bV.JicdHnRAd.wXG9/C1h.CDjpG8KbiUL...	CUSTOMER
5	aditya.chopra@example.com	Aditya Chopra	19	$2a$10$0ZnNWSL7q/w3o0oFI6bucuo4rn2NSZr...	CUSTOMER
7	sanjay.roy@example.com	Sanjay Roy	17	$2a$10$tFPao6pb9H/QG2wezERgT.H2PVunMPr...	CUSTOMER
8	kartik.patel@abc.com	Kartik Patel	0	$2a$10$7S9vZtbzKwtvkwFwMDQtpukxrYnAgKK...	CUSTOMER
9	raj.sri@xyz.com	Raj Srivastav	0	$2a$10$HQF/7FDZjO7p267zYd0G4O3ck.yJpHh...	CUSTOMER
NULL	NULL	NULL	NULL	NULL	NULL

Product Table

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

id	category	name	price
1	Electronics	One Plus 12R	39999
2	Electronics	Hp Pavillion 15 Laptop	58990
3	Electronics	Samsung Galaxy Tab S9 FE	34499
4	Electronics	Nothing Watch Pro 2	5499
5	Electronics	Boat Bluetooth Speaker Stone 14W	3199
6	Electronics	Google Pixel 7	32299
7	Footwear	Nike Men Running Shoes	4149
8	Footwear	Red Tape Sneakers	1539
9	Footwear	Mast & Harbour Sneakers	1099
10	Footwear	Crocs	3297

39999

product_data 1 ×

Apply | Revert

Cart table for product

Result Grid | Filter Rows:

cart_id	product_id
1	16
3	2
3	2
5	16

Cart table for customer details

Result Grid | Filter Rows:

id	quantity	customer_id
1	2	3
3	3	5
5	2	7
NULL	NULL	NULL

Order table with product id

Result Grid | Filter Rows:

order_id	product_id
3	2
4	12
5	16
NULL	NULL

Order table with customer and shipping address details

Result Grid | Filter Rows: | Edit:

id	shipping_address	total_amount	customer_id
1	123/C, Nehru Chowk, Delhi	5998	3
2	123/Y, Gandhi Chowk, Ahmedabad	54990	5
3	123/Y, Gandhi Chowk, Ahmedabad	329940	5
4	123/z, Bangalore	11892	8
5	123/A,Delhi	5998	7
NULL	NULL	NULL	NULL

order_data 1