ShoppyGlobe API Documentation

This documentation outlines the backend API for the **ShoppyGlobe** e-commerce application. Built using **Node.js**, **Express.js**, **MongoDB**, and **JWT Authentication**, this RESTful API enables user authentication, product browsing, and cart management.

Technologies Used

- Node.js
- Express.js
- MongoDB & Mongoose
- JWT for Authentication
- ThunderClient for API Testing

Project Structure

Authentication Routes

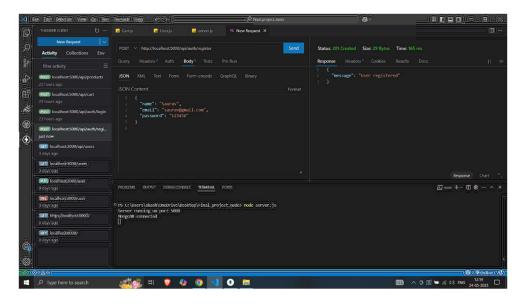
Register a User

- POST /api/auth/register
- Body:

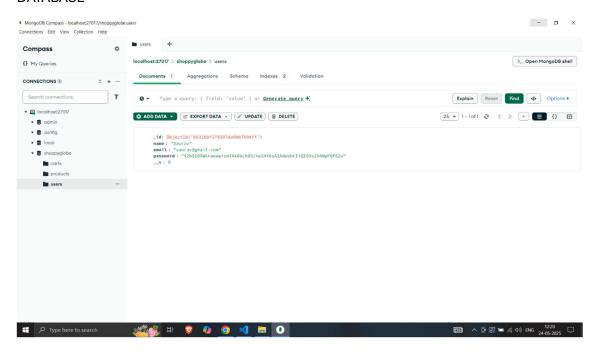
```
{
  "name": "Saurav",
  "email": "saurav@example.com",
  "password": "123456"
}
```

• Response: User registered message

Screenshot



DATABASE



✓ Login a User

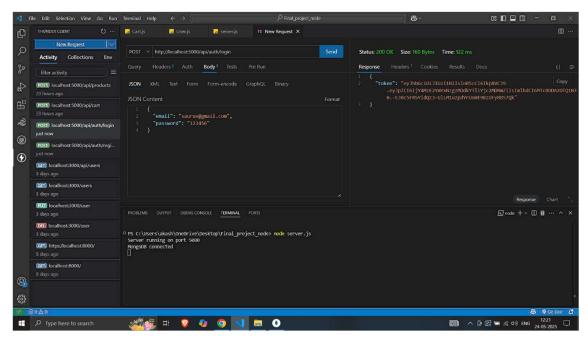
- POST /api/auth/login
- Body:

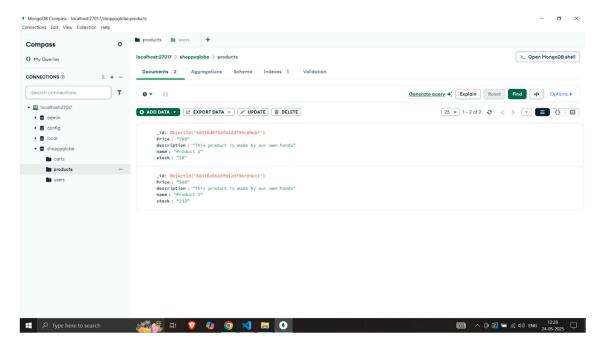
{

```
"email": "saurav@example.com",
"password": "123456"
}
```

Response: JWT token

Screenshot





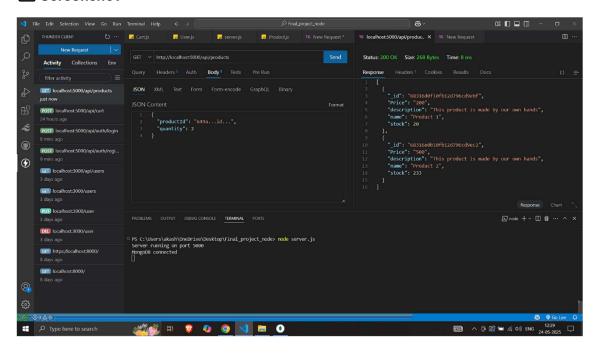
Product Routes

✓ Get All Products

GET /api/products

• Response: List of all products

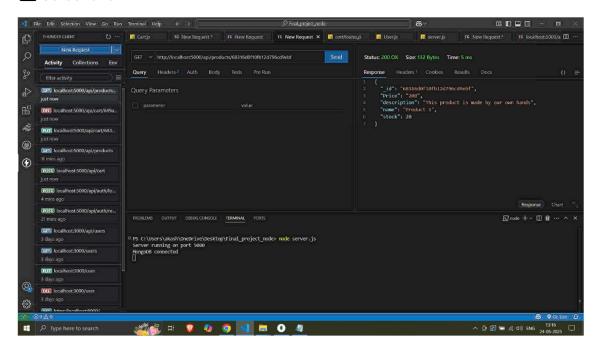
Screenshot



Get Product by ID

- GET /api/products/:id
- Response: Single product object

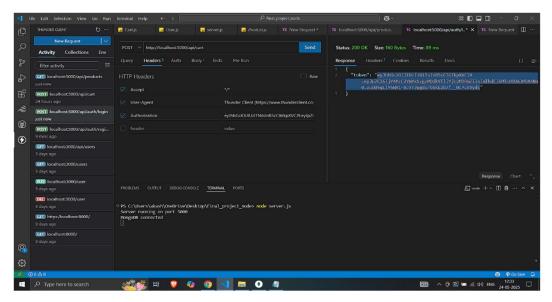
Screenshot



Cart Routes (Protected — Requires JWT)

Header Required:

Authorization: <your-jwt-token>



Add Product to Cart

- POST /api/cart
- Body:

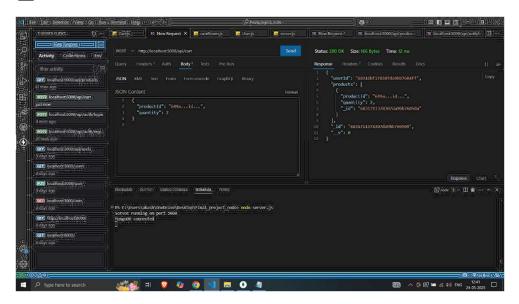
{

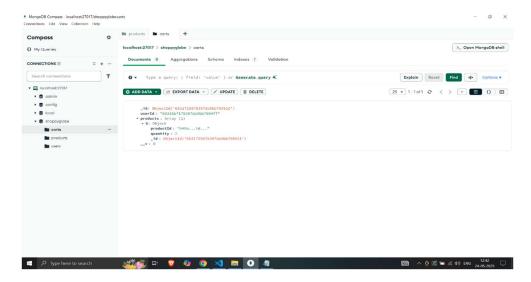
"productId": "product_object_id",

"quantity": 2

}

Screenshot





✓ Update Cart Item Quantity

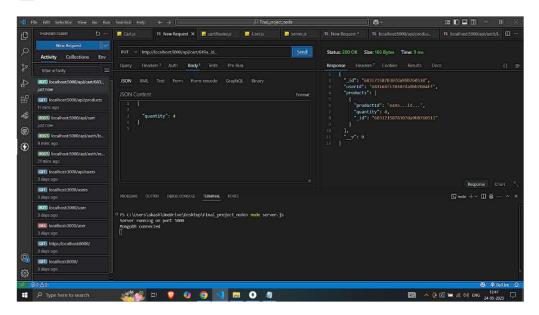
- PUT /api/cart/:id
- Body:

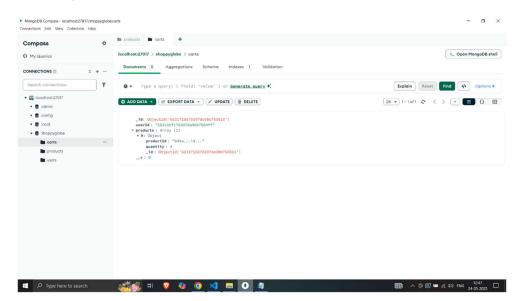
{

"quantity": 4

}

Screenshot

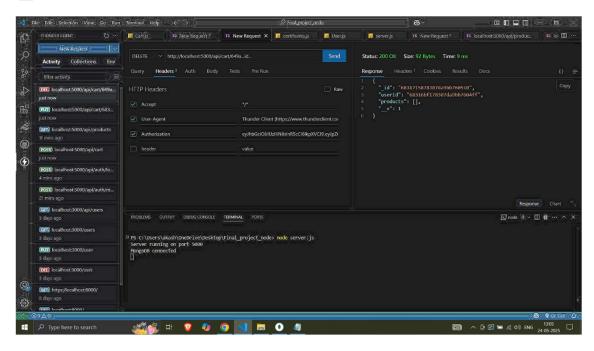


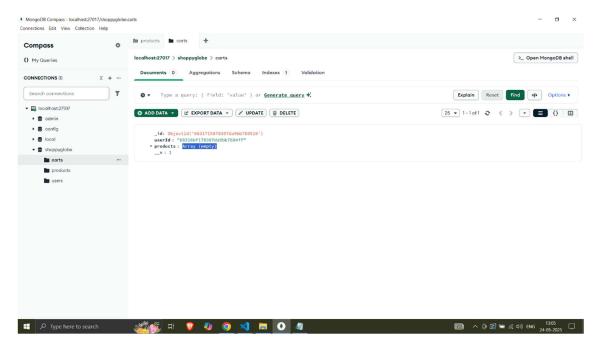


Remove Product from Cart

DELETE /api/cart/:id

Screenshot



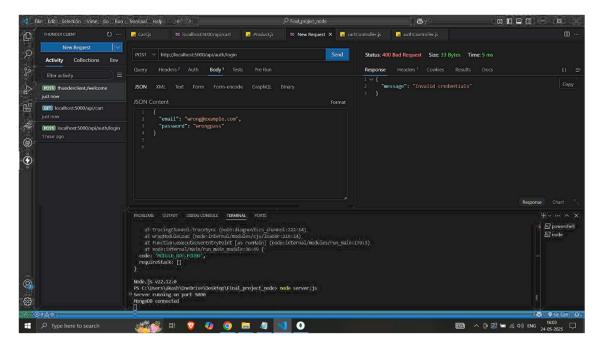


♠ Error Handling

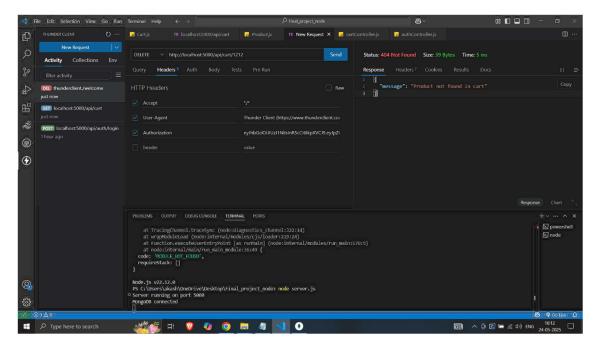
- All routes include try/catch blocks.
- Invalid credentials or tokens return 401 Unauthorized
- Missing product returns 404 Not Found

Screenshot of error response

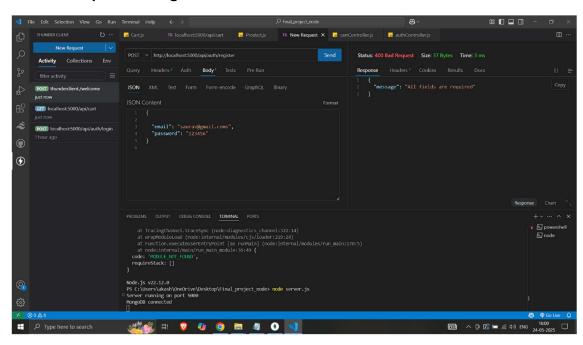
Invalid Credentials



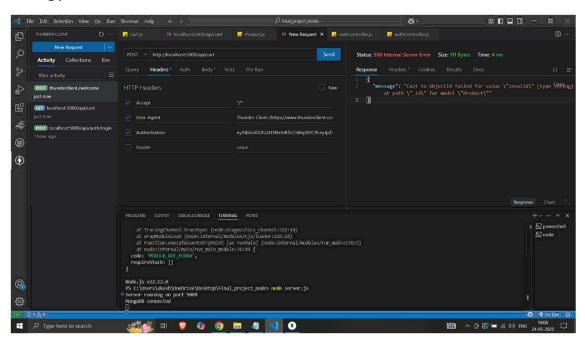
Product not found



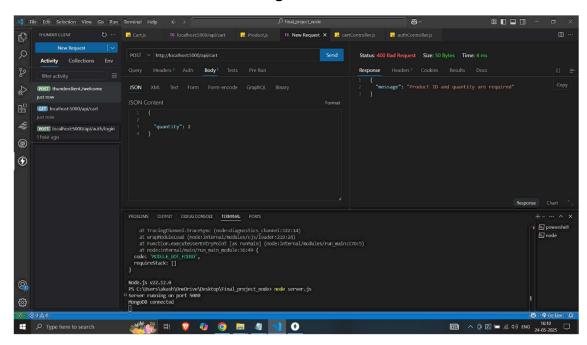
ALL field required for registration



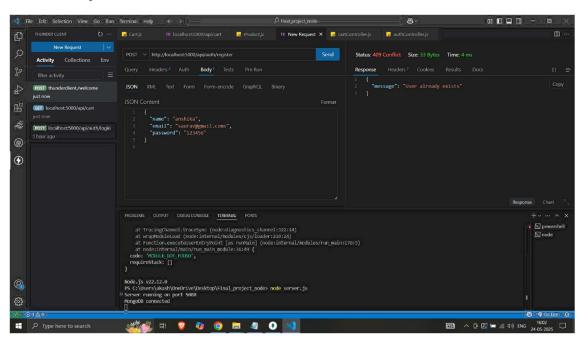
Wrong product id addition



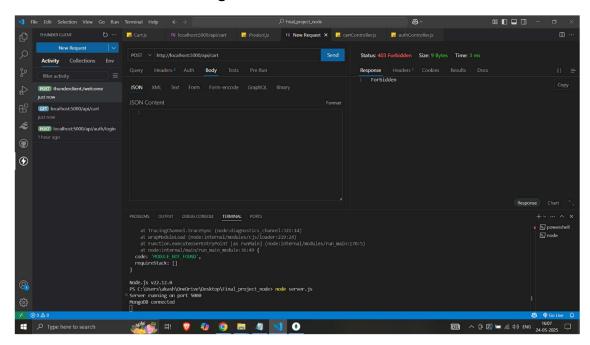
ADD Product to Cart Credential missing



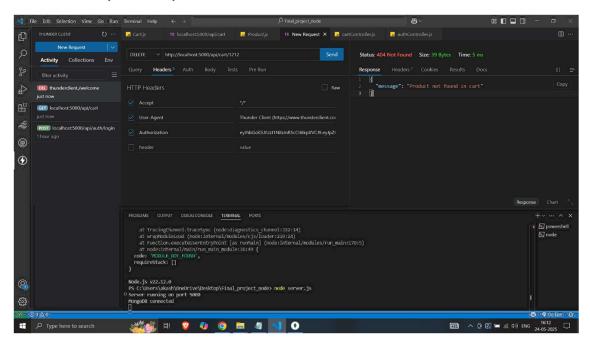
User already Exist



Forbidden error dew to missing JWT



Cart deletion (invalid id)

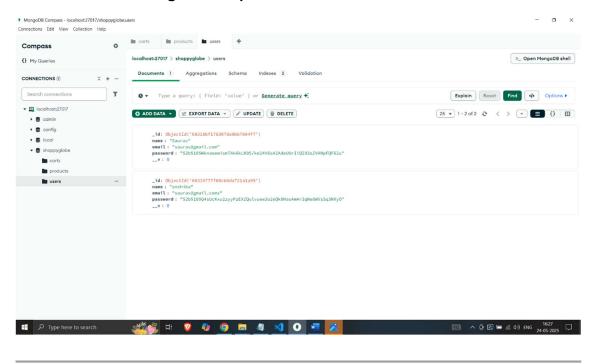


MongoDB Structure

```
Product Schema:
name: String,
 price: Number,
description: String,
 stock: Number
}
Cart Schema:
userld: String,
 products: [
 {
  productld: String,
  quantity: Number
 }
User Schema:
 name: String,
 email: String,
 password: String
```

}

Screenshot of MongoDB Compass collections here



Environment Setup

Create a .env file:

MONGO_URI=mongodb://localhost:27017/shoppyglobe

JWT_SECRET=your_secret_key

PORT=5000

Run the server:

npm install

node server.js



- All APIs working in ThunderClient
- MongoDB configured
- Error handling implemented
- Authentication protected routes
- GitHub repo created
- Screenshots attached

Project by Saurav for ShoppyGlobe API Assignment