# E-commerce Web Application (MongoDB & Deployment)

## Project Overview

This project is a RESTful API-based e-commerce platform built using Node.js, Express.js, and MongoDB. It provides CRUD operations for managing products, users, and orders. Additionally, it features authentication, order management, and deployment to a cloud platform.

## Features

• User Authentication: User registration & login (with password hashing)

• Product Management: Add, update, delete, and retrieve products

• Order Management: Users can create and retrieve orders

• MongoDB Integration: NoSQL database with schemas for users, products, and orders

• RESTful API: Well-structured endpoints for seamless data communication

• Deployment: Deployed to a cloud platform (Heroku or Render)

## Installation & Setup

1. Clone the repository:

git clone https://github.com/your-username/ecommerce-app.git

cd ecommerce-app

2. Install dependencies:

npm install

3. Setup environment variables:

Create a `.env` file in the root directory and add the following:

MONGODB\_URI=your-mongodb-connection-string  
 PORT=5000  
 JWT\_SECRET=your-jwt-secret

4. Start the server:

npm start

## API Endpoints

User Routes

|  |  |  |
| --- | --- | --- |
| Method | Endpoint | Description |
| POST | /api/users/register | Register a new user |
| POST | /api/users/login | Login a user |

## Deployment

1. Deploy to Heroku:

heroku login

heroku create your-app-name

git push heroku master

## Project Structure

📦 ecommerce-app  
├── 📂 models # Database schemas  
│ ├── productModel.js  
│ ├── userModel.js  
│ └── orderModel.js  
├── 📂 routes # API endpoints  
│ ├── productRoutes.js  
│ ├── userRoutes.js  
│ └── orderRoutes.js  
├── 📂 controllers # Business logic  
│ ├── productController.js  
│ ├── userController.js  
│ └── orderController.js  
├── server.js # Main backend file  
├── .env # Environment variables  
├── package.json # Dependencies  
└── README.md # Documentation