

Full Stack E-Commerce Website Project (React + Node.js + MongoDB + Stripe)

This document contains a ready-to-run fullstack e-commerce project scaffold with:

Frontend: React (Vite) — product browsing, filtering, cart, checkout UI

Backend: Node.js + Express — auth (JWT), products API, cart, orders, Stripe integration

Database: MongoDB (Atlas recommended)

Payment: Stripe (test keys)

File Structure Overview:

backend/

- server.js
- models (User, Product, Order)
- routes (auth, products, orders)
- middleware (JWT auth)

frontend/

- App.jsx
- pages (Home, Product, Cart, Checkout)
- API configuration
- Stripe integration

Core Features:

- User authentication (register/login)
 - Product listing & filtering
 - Cart system
 - Secure checkout using Stripe
 - Orders stored in MongoDB
 - JWT based authentication
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Run Instructions:

1. Backend:

- cd backend
- create .env file
- npm install
- npm run dev

2. Frontend:

- cd frontend
 - npm install
 - npm run dev
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Deployment:

Frontend → Netlify, GitHub Pages

Backend → Render, Railway, Heroku

Database → MongoDB Atlas

GitLab Deployment:

1. git init
 2. git remote add origin
 3. git add .
 4. git commit -m "Initial commit"
 5. git push -u origin main
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Enhancements:

- Admin panel
- Pagination
- Cloudinary for image uploads

- Order tracking
- Webhooks for Stripe

Prepared & Converted for PDF Download.