Project Status by User Persona

This document outlines the current functionality of the e-commerce backend, broken down by user role. At this stage, all core features outlined in the initial requirements are **complete**.

Admin (Alex)

- ✅ **User Management:** Can create staff accounts (Product Manager, Order Manager, etc.) and change any user's role.
- ✅ **Approval Authority:** Can review and approve/deny coupons submitted by the Product Manager.
- ✅ **Platform Analytics:** The dashboard for viewing total sales, total orders, and top-selling products is now built.

Product Manager (Priya)

- ✅ **Product Catalog Management:** Can create, read, update, and deactivate products.
- ✅ **Promotions:** Can create coupons, which are then correctly sent to an Admin for approval.

Order Manager (Omar)

- ✅ **Order Tracking:** Can view a list of all orders in the system and see detailed information for any specific order.
- ✅ **Order Fulfillment:** Can update an order's status through its lifecycle (`Processing`, `Dispatched`, `Delivered`).
- ✅ **Returns & Exchanges:** Can raise a refund ticket for the finance team after a customer has returned an order.

Finance Manager (Fiona)

- ✅ **Refund Management:** Can view a queue of refund request tickets and process them (Approve/Deny). Approved refunds update the order status to "Refunded".
- ✅ **Financial Analysis:** The dashboard for viewing sales, revenue, etc., is now built.

Customer (Chris)

- ✅ **Account Management:** Can register, log in, log out, view their profile, add shipping/billing addresses, and view their list of addresses.
- ✅ **Shopping:** Can view the list of all products and see details for a single product.

- ✅ **Purchasing:** Can place a complete order with products and an optional coupon.
- ✅ **Order History:** Can view a complete history of all past orders.
- ✅ **Returns:** Can request a return for an order that has the "Delivered" status.

Backend API Documentation

Here is the documentation for all currently working API endpoints.

Authentication Endpoints

Method & Endpoint	Description	Access
`POST /auth/register`	Registers a new user as a **Customer**.	Public
`POST /auth/login`	Logs in any user to get an access token.	Public
`POST /auth/logout`	Logs out an authenticated user.	Any authenticated user

User & Profile Management Endpoints

Method & Endpoint	Description	Access
`POST /users`	(Admin) Creates a new user with a specified role.	**Admin**
`PATCH /users/:id/role`	(Admin) Updates the role of an existing user.	**Admin**
`GET /users/me`	(Customer) Gets the profile of the logged-in user.	Any authenticated user
`POST /users/me/addresses`	(Customer) Adds a new address for the logged-in user.	Any authenticated user
`GET /users/me/addresses`	(Customer) Gets all addresses for the logged-in user.	Any authenticated user

Product Management Endpoints

Method & Endpoint	Description	Access
`GET /products`	Retrieves a list of all active products.	Public
`GET /products/:id`	Retrieves a single product by its ID.	Public
`POST /products`	Creates a new product.	**Admin**, **Product Manager**

Method & Endpoint	Description	Access
`PATCH /products/:id`	Updates an existing product's details.	**Admin**, **Product Manager**
`DELETE /products/:id`	Deactivates a product (soft delete).	**Admin**

Order & Return Workflow Endpoints

Method & Endpoint	Description	Access
`POST /orders`	**(Customer)** Creates a new order.	Any authenticated user
`GET /orders`	**(Customer)** Gets the logged-in user's order history.	Any authenticated user
`POST /orders/:id/return-request`	**(Customer)** Requests a return for a delivered order.	Any authenticated user
`GET /orders/all`	**(Manager)** Gets a list of all orders in the system.	**Admin**, **Order Manager**
`GET /orders/:id/details`	**(Manager)** Gets detailed info for a single order.	**Admin**, **Order Manager**
`PATCH /orders/:id/status`	**(Manager)** Updates the status of an order.	**Admin**, **Order Manager**
`POST /orders/:id/raise-refund`	**(Manager)** Raises a refund ticket for a returned order.	**Admin**, **Order Manager**

Coupon, Ticket & Refund Workflow Endpoints

Method & Endpoint	Description	Access
`POST /coupons`	**(Manager)** Creates a new coupon and a ticket for approval.	**Admin**, **Product Manager**
`GET /tickets`	**(Admin)** Retrieves all open tickets of any type.	**Admin**
`PATCH /tickets/coupon/:ticketId`	**(Admin)** Approves or denies a coupon approval ticket.	**Admin**
`GET /tickets/refunds`	**(Finance)** Retrieves a list of open refund request tickets.	**Admin**, **Finance Manager**
`PATCH /tickets/refund/:ticketId`	**(Finance)** Approves or denies a refund request ticket.	**Admin**, **Finance Manager**

Analytics Endpoints

Method & Endpoint	Description	Access
`GET /analytics/dashboard`	**(Admin/Finance)** Gets key dashboard analytics.	**Admin**, **Finance Manager**