📌 API Endpoint Structure (Improved)

🌐 **Base URL:** `/api`

🧑‍💼 Auth & User Management

Method	Endpoint	Description	Access
POST	`/auth/register`	Register a new user	Public
POST	`/auth/login`	Login and receive access + refresh token	Public
POST	`/auth/refresh`	Refresh short-lived access token	Public (with refresh token)
POST	`/auth/logout`	Invalidate refresh token (logout)	Authenticated
GET	`/users/me`	Get current logged-in user's info	Authenticated
GET	`/users`	Get all users	Admin
GET	`/users/:id`	Get specific user details	Admin
DELETE	`/users/:id`	Delete a user	Admin

📦 Product Management

Method	Endpoint	Description	Access
GET	`/products`	Get all products	Public
GET	`/products/:id`	Get product details by ID	Public
POST	`/products`	Create a new product	Admin
PUT	`/products/:id`	Update product details	Admin
DELETE	`/products/:id`	Delete a product	Admin

🛒 Cart Management

Method	Endpoint	Description	Access
GET	`/cart`	Get current user's cart items	Authenticated
POST	`/cart`	Add an item to the cart	Authenticated
PUT	`/cart/:itemId`	Update cart item quantity	Authenticated
DELETE	`/cart/:itemId`	Remove specific item from cart	Authenticated
DELETE	`/cart/clear`	Clear entire cart	Authenticated

📬 Order Management

Method	Endpoint	Description	Access
GET	`/orders`	Get all orders	Admin
GET	`/orders/my`	Get logged-in user's own orders	Authenticated
GET	`/orders/:id`	Get specific order (Owner/Admin)	Owner/Admin
POST	`/orders`	Place a new order from cart	Authenticated
PUT	`/orders/:id/status`	Update order status	Admin
DELETE	`/orders/:id`	Cancel an order (if pending)	Owner/Admin

🔁 Return Management

Method	Endpoint	Description	Access
POST	`/returns`	Request a return	Authenticated (Owner)
GET	`/returns`	Get all return requests	Admin

Method	Endpoint	Description	Access
GET	`/returns/my`	Get return requests by current user	Authenticated
PUT	`/returns/:id`	Approve or reject return request	Admin

🧠 Token Handling

Token Type	Description
Access Token	Short-lived token for protected endpoints
Refresh Token	Long-lived token (HTTPOnly cookie / secure store) used to refresh access token

🔁 Status Workflow

Order Status Lifecycle:

```
pending → in-transit → delivered → cancelled → returned (after return approved)
```

Return Status Lifecycle:

```
requested → approved → processed → rejected
```

💡 Optional Endpoints (Enhancements)

Method	Endpoint	Description	Access
GET	`/products/search?q=pen`	Search products by keyword	Public
GET	`/products/category/:category`	Filter products by category	Public
POST	`/products/:id/review`	Add product review	Authenticated

Method	Endpoint	Description	Access
GET	`/admin/dashboard`	Admin dashboard: metrics & stats	Admin