

Project: E-Commerce Product Management Dashboard

Objective:

Develop a **Product Management Dashboard** where an admin can manage products, apply filters, and perform CRUD operations using ReactJS, Axios, JSON Server, and LocalStorage.

Features & Requirements

1 User Authentication

- Implement a fake login system (username & password stored in localStorage).
- If the user is not logged in, they should be redirected to the login page.
- Only authenticated users can access the product dashboard.

2 Product Management (CRUD)

- List all products from JSON Server.
- Add a new product (Fields: Name, Price, Category, Stock, Image URL).
- Edit an existing product (Modify name, price, category, stock).
- **Delete a product** (Remove from database).

3 Filtering & Sorting

- Search products by name.
- Filter products by category.
- Sort products by price (low-high, high-low).
- Filter by stock availability (In Stock / Out of Stock).

4 Pagination

- Display 10 products per page.
- Load more pages dynamically.

5 Dark Mode

- Implement a dark mode toggle.
- Store user theme preference in localStorage.



6 API Handling

- Use **Axios** for API communication.
- Handle error states for API failures.

X Tech Stack

- ReactJS (Hooks, Context API/Redux)
- Axios for API calls
- React Router for navigation
- JSON Server as a mock backend
- LocalStorage for session management
- TailwindCSS/SCSS or Bootstrap for styling