

## Frontend Architecture – ShopSmart (React)

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### □ Component-Based Structure

- UI built with modular, reusable components.
- Organized into folders like:

/components → Reusable UI (Navbar, ProductCard)

/pages → Page views (Home, Cart, Checkout)

/layouts → Common layouts per role

/services → API calls (Axios)

/contexts → Global state (Context API / Redux)

/hooks → Custom hooks (useAuth, useCart)

/assets → Images & styles

App.js → Main component

index.js → App entry point

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### □ State Management

- **Local state** via useState or useReducer
  - **Global state** via:
    - **Context API** (lightweight apps)
    - **Redux/Zustand** (large-scale apps)
  - Example: Cart, Auth, Orders
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### API Communication

- **Axios** or **Fetch** to call Express backend
- Services folder handles all API logic