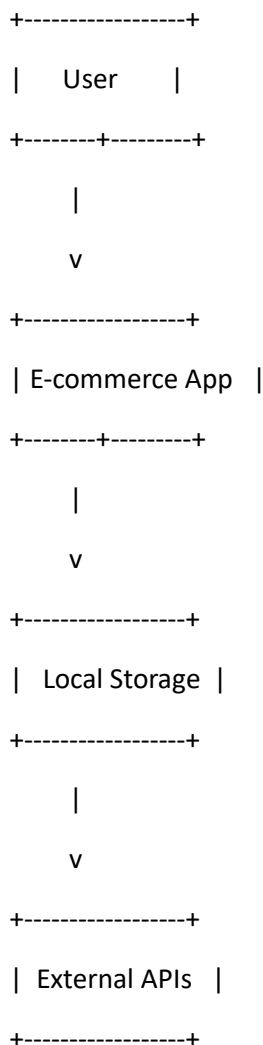


## Level 0: Context Diagram

At this level, we show the interaction between the **User**, **E-commerce System**, and **External Services (e.g., Email API for notifications)**.

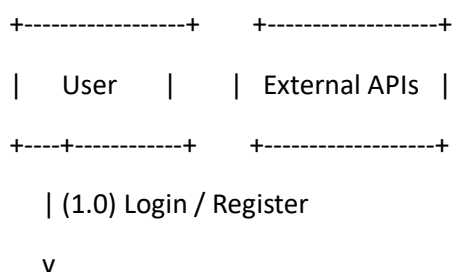


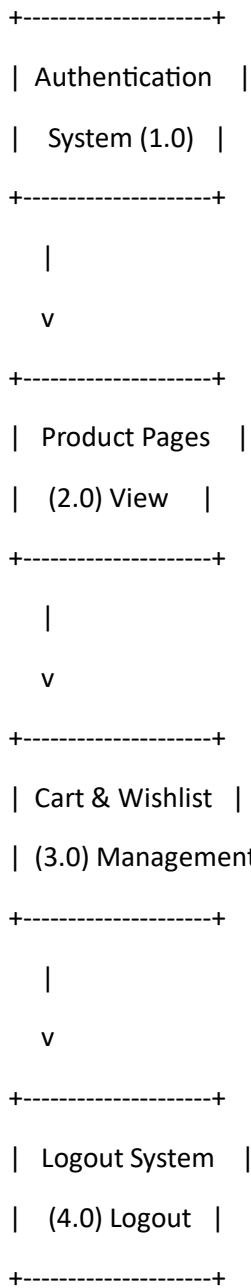
### Explanation:

- The **User** interacts with the **E-commerce App**.
- The **E-commerce App** manages **user authentication**, **product catalogue**, and **cart/wishlist**.
- **Local Storage** stores user session data (like login status & cart items).
- **External APIs** (like EmailJS) handle external notifications.

## Level 1: Breakdown of Components

Now, we break down the app into **key processes**:





## Key Features in DFD

### 1. Authentication System (1.0)

- User logs in → **AuthContext** checks credentials.
- User session is **stored in localStorage**.
- Redirects user to **Product Catalogue**.

### 2. Product Catalogue (2.0)

- User **browses products**.
- Can **add items to cart/wishlist**.

### 3. Cart & Wishlist Management (3.0)

- Items added to cart are **stored in localStorage**.
- Wishlist items persist across sessions.

#### 4. Logout System (4.0)

- Clears user session (`localStorage.removeItem()`).
- Redirects user to **Login page**.