iNeuron

Architecture Diagram

"E-Commerce Application Clone"

Document Version Control

Version	Date	Description	Author
• 1.0	• 20-Oct-2024	• Architecture Diagram	• Rajan Kumar

1. Architecture Diagram
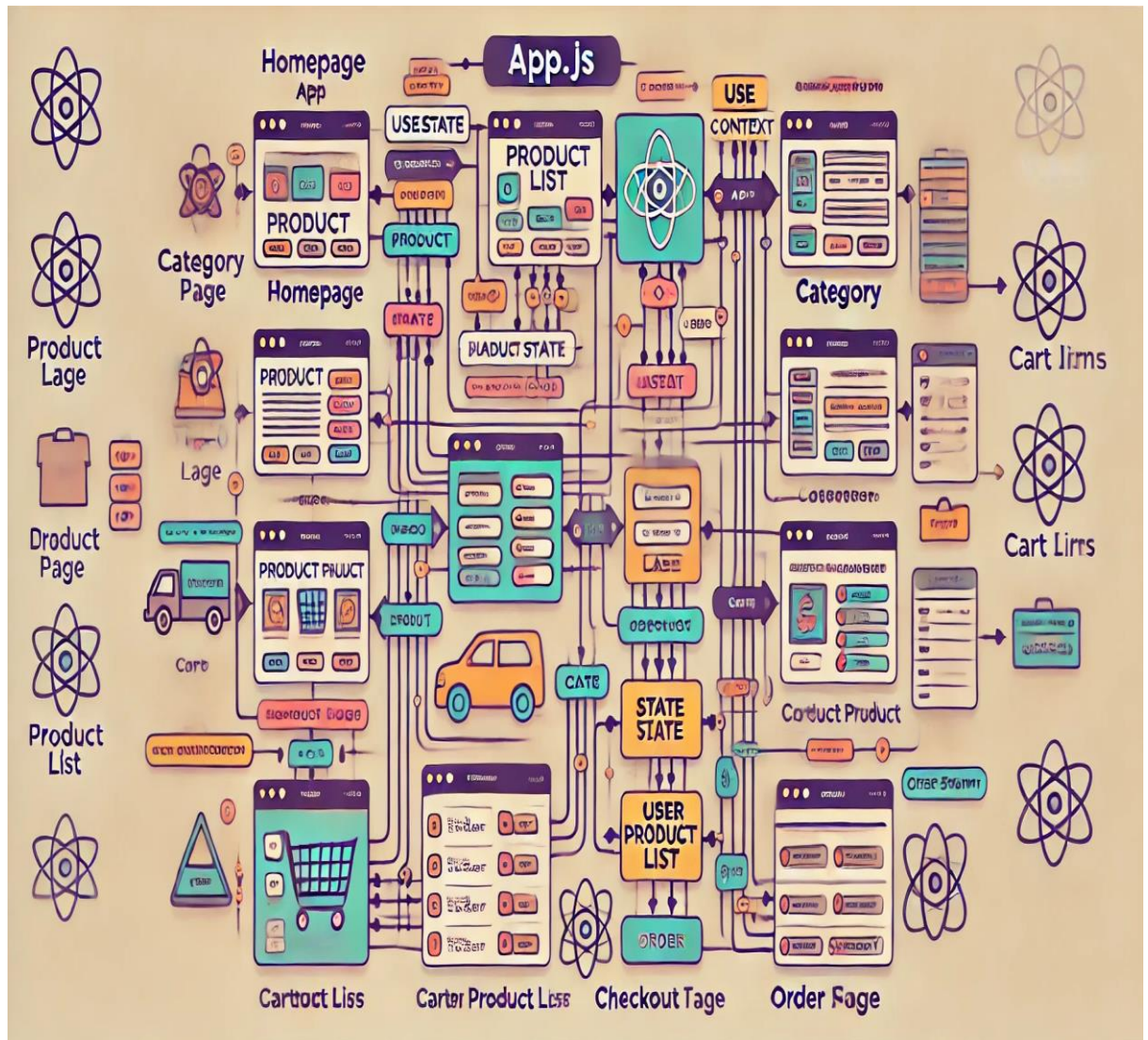
Detailed Explanation of the Architecture:

1. **App.js:**

   - The main entry point of the React application.

   - Handles the routing using **React Router**, directing users to different pages like Homepage, Category Page, Cart Page, and Checkout Page.

2. **Navbar Component:**

   - Contains navigation links to different sections of the application, such as the Home, Category, Cart, and Checkout pages.

   - Also displays the cart count dynamically based on the number of items in the cart.

3. **Routes:**

   - Implements the routing for different pages using **React Router**. It maps URLs like /, /category/:id, /cart, and /checkout to the respective components.

4. **Homepage (Product List):**

   - Displays a list of available products by fetching data.

   - Each product is represented by a **ProductCard** that shows the product image, name, price, and an "Add to Cart" button.

5. **Category Page (Filtered Product List):**

   - Displays products filtered by category. Similar in structure to the Homepage, but shows products only within the selected category.

   - Navigated to via dynamic routing (/category/:id).

6. **Product Card:**

   - A reusable component that represents individual products both on the Homepage and Category page.

   - Contains an "Add to Cart" button, which allows users to add items to the cart.

7. **Product Details Page:**

   - Displays detailed information about a selected product, including the product description, reviews, price, and images.

   - Provides an option to add the product to the cart from the Product Details page.

8. **Cart Page:**

   - Displays the items added to the cart.

- Users can modify the quantity or remove products from the cart.

- Also calculates and displays the total price of the cart items.

9. **Cart Item Card:**

   - A reusable component that represents each item in the cart.

   - Shows the product image, name, price, quantity, and allows users to modify the quantity or remove the item.

10. **Checkout Page:**

    - Contains a form where users can enter their shipping and payment details.

    - Confirms the order and shows a summary of the cart items, including the total price and shipping information.

11. **Footer Component:**

    - Simple footer containing links to static pages such as Contact Us, Privacy Policy, etc.