

Problem Statement: Shop-Site JavaScript To-Do Challenge

You are given a simple **e-commerce website** with the following files:

- `index.html` – Shows product categories (Fruits, Electronics, Clothing).
 - `products.html` – Displays products of the chosen category, includes sorting, filtering, and a shopping cart section.
 - `styles.css` – Provides styles for the layout (⚠️ do not modify).
 - `products.js` – Contains product data (⚠️ do not modify).
 - `app.js` – Contains the JavaScript logic for rendering products, sorting, filtering, and managing the cart (👉 this is where you will work).
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Your Task

Modify and complete the **JavaScript code** in `app.js` to implement the following features:

1. Category Navigation

- Clicking a category on the home page should take the user to the products page for that category.
- The products page title should show the selected category name.

2. Product Display

- The products of the selected category must be displayed as **cards** with image, name, brand, price, and an **"Add to Cart"** button.
- Each card must allow interaction through its button (not by clicking the whole card).

3. Shopping Cart

- Clicking **"Add to Cart"** should:
 - Add the product to the cart if it's not already present.
 - Increase the quantity if it's already in the cart.
- The cart table must show product image, name, brand, price, quantity, and total cost per product.

4. Sorting

- Provide sorting options:
 - By Name (A–Z)
 - By Price (Low to High)
 - By Price (High to Low)
- Sorting must update the order of product cards displayed.

5. Filtering

- Provide a filter by **Brand** dropdown.
- Selecting a brand should display only products from that brand within the current category.
- Selecting **"All Brands"** should reset the list to show all products in the category.

Rules

- You should **not modify HTML, CSS, or product data**.
- All work must be done inside `app.js`.
- You may add new functions, adjust existing ones, or refactor as needed.
- Keep the DOM structure consistent (`.category` , `.item` , `button` , `#cart-items`) so the interface works as expected.