



# Mini Project 1 – Shopping Cart

## Task Overview

In this project, students will build a simplified e-commerce application using HTML, CSS, JavaScript, and the DOM. This app will simulate an online store with a list of items, a search functionality, and a shopping cart. This task integrates fundamental front-end skills like UI design, DOM manipulation, event handling, and dynamic content updates.

## Detailed Requirements

### A) Main Page

The main page will display a list of items for sale and include a search bar for filtering through the items.

Features:

#### 1) Item Display:

- A grid or list layout showing items, each with:
- Name
- Price
- Image
- "Add to Cart" button

#### 2) Search Box:

- A text input field to search for items dynamically by name (real-time filtering using JavaScript).

HTML Requirements:

- Use a container (<div>) to display all items.
- Each item should be structured as a card.

CSS Requirements:

- Style the grid/list layout using flexbox or CSS grid.
- Ensure responsive design.

JavaScript Requirements:

- Dynamically render items.
- Filter items in real time based on the input text in the search box.

## B) Shopping Cart

When a user clicks "Add to Cart," the item is added to a shopping cart that updates dynamically.

Features:

### 1) Cart Display:

- Show selected items in the cart, including:
- Name
- Price
- Quantity
- Total price for the item (price × quantity)

### 2) Add/Remove Functionality:

- Users can:
- Increase/decrease item quantity.
- Remove an item from the cart.

### 3) Cart Summary:

- Show total items and total price of the cart.

HTML Requirements:

- A shopping cart section (can be a modal or a fixed sidebar).
- Buttons for increasing/decreasing item quantities and removing items.

CSS Requirements:

- Style the cart as a sidebar, modal, or dropdown.
- Add hover and click effects for buttons.

JavaScript Requirements:

- Use arrays/objects to manage cart data.
- Dynamically render the cart's content.
- Update cart totals and quantities in real time.

### C) Filters

Add category-based or price-based filters to allow users to refine their search.

Features:

- 1) Checkboxes or dropdowns to filter by:
  - Price range (e.g., < \$50, \$50-\$100, > \$100)
  - Categories (e.g., electronics, clothing, books)

HTML Requirements:

- Use checkboxes or dropdown menus for filtering options.

JavaScript Requirements:

- Implement filter logic that works alongside the search bar.

**Thank You**  
**Edges For Training Team**