

JavaScript E-commerce Cart CRUD Assignment

This assignment involves building a basic e-commerce shopping cart application using Javascript and arrays to manage product data. It will implement CRUD (Create, Read, Update, Delete) operations for the cart.

Objective:

Develop a JavaScript application that simulates a shopping cart for an e-commerce website. The app should allow users to:

- ❖ **Browse products:** Define an array of products with details like name, price, and quantity available.
- ❖ **Add items to cart:** Users can add products to their shopping cart, specifying the desired quantity.
- ❖ **Update cart quantities:** Users can adjust the quantity of a specific product in the cart.
- ❖ **Remove items from cart:** Users can remove unwanted products from the cart.
- ❖ **View cart summary:** Display the list of items in the cart along with their quantity, price, and subtotal.

Requirements:

Use two separate arrays:

- ❖ **products:** An array to store product information with properties like id, name, price, and quantity (available stock).
- ❖ **cart:** An array to store cart items with properties like productId (referencing the product in products), quantity (desired quantity in the cart).

Implement functions to:

- ❖ Add a product to the cart, checking if the desired quantity is available in stock.
- ❖ Update the quantity of a product already in the cart.
- ❖ Remove a product from the cart.
- ❖ Display the cart contents, including product details, quantity, and subtotal for each item.
- ❖ Calculate the total cart amount by summing up the subtotals of all items.
- ❖ Implement a user interface (UI) using HTML and CSS to add Products, display products and the shopping cart.

- ❖ Add functionalities like displaying product images, applying discounts, and handling checkout processes (simulated).

Consider using local storage to persist cart data between sessions(optional).