

Mobile App Development



Assignment 1

Name:

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Registration #:

SP22-BSE-055

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Title:

E-commerce Cart implementation

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Introduction:

The objective of this assignment was to implement a JavaScript-based shopping cart feature using ES6 syntax, focusing on array manipulation methods like map, filter, and reduce, along with object handling. The cart supports adding, updating, and removing items, calculating total cost, and applying discounts dynamically.

Code Explanation:

1. **addToCart:** Adds products to the cart array. Each product is an object with productId, productName, quantity, and price. The cart is updated after adding each product.
2. **removeFromCart:** Removes an item based on productId. It finds the index of the product and removes it using splice.
3. **updateQuantity:** Updates the quantity of a specific item by mapping over the cart array and updating the quantity for the matching product.
4. **calculateTotalCost:** Uses the reduce method to sum up the total cost by multiplying each product's price by its quantity.
5. **applyDiscount:** Calculates the total price with a discount applied based on a given discount code.
6. **displayCart:** Dynamically generates the cart items and total cost in the HTML, updating the cart view each time a change is made.

Screenshots:

Include screenshot showing:

Cart Page

Product #	Product Description	Price	Remove Item
1	Abaya	\$20	⊗
2	Shoes	\$50	⊗
3	Jeans	\$90	⊗

Total: \$160

10% Discount: \$144.00

CheckOut

- Cart displaying added items.
- Items being removed.
- Total and discounted price updating dynamically.

Conclusion:

This assignment enhanced my understanding of ES6 syntax, array methods, and how to manipulate objects dynamically. The primary challenge was ensuring the cart updates were correctly reflected in the DOM after each operation, but this was resolved using a structured approach to refreshing the cart view.

Thanks