

Capstone Project: React Web Application

Project Title: SmartShop - A Minimal E-commerce Web App

Objective:

Design and build a simple e-commerce web application using React. This app should allow users to view a list of products, add them to a shopping cart, and proceed to checkout.

Features to Implement:

1. Homepage:

- Welcome message
- Navigation bar (Home, Products, Cart, Checkout)

2. Product Page:

- Display a list of products (image, title, price, short description)
- Add to cart functionality

3. Cart Page:

- List of selected products with quantities
- Remove item from cart
- Total cost calculation

4. Checkout Page:

- Form to input name, email, address, and payment method
- Simple form validation
- Order summary and submission button

5. Styling:

- Responsive design using Tailwind CSS or CSS modules

6. State Management:

- Use React Context or Redux for managing cart state

7. Optional Enhancements:

- User authentication (Firebase/Auth0)
- Backend integration (e.g., Firebase, Express.js)
- Search or filter products

Technical Requirements:

- React (with hooks)
- Component-based architecture
- Functional components preferred
- LocalStorage for persisting cart data (if no

backend) Rubric (Total: 100 Points):

Criteria	Points
Functional Homepage	10
Product Listing Implementation	15
Working Cart Functionality	15
Checkout Process & Validation	15
Code Structure & Readability	10
Styling & Responsive Design	10

| State Management (Context/Redux) | 15 | |

Extra Features / Creativity | 10 |

Submission Guidelines:

- GitHub repository link
- Live demo URL (Netlify, Vercel, etc.)
- 1-page project summary PDF
- Submit via the course platform by 26th May
- Github Readme Documentation

Evaluation Notes:

- Focus on user experience and functionality.
- Clean, modular code is essential.
- Bonus points for creativity and effort beyond core features.
- Mobile First Design Approach

- Strengths:
- Suggestions for Improvement:
- Final Comments: