

COLLEGECODE:9528

COLLEGENAME:SCAD COLLEGE OF ENGINEERING AND TECHNOLOGY

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Completed the project named as:

Phase 5

TECHNOLOGYPROJECTNAME:

E-Commerce Product Page

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Project Demonstration & Documentation

Project Demonstration&Documentation

1.Demo Summary:

The E-Commerce Product Page allows users to:

- View product details (name, image, price, description, and ratings)
- Add products to the cart or wishlist
- Filter and sort products by category, price, or rating
- Responsive UI for desktop and mobile
- Checkout link or redirect to cart page

Tools Used:

Frontend: HTML,CSS, JavaScript (or React if applicable)

Backend (optional): Node.js / Firebase / JSON Server

Database: Firebase / MongoDB / Local JSON data

Version Control: GitHub Deployment: GitHub Pages /

Netlify / Vercel

Walkthrough Steps:

- 1. Open Homepage
- 2. Browse the list of products displayed in a structured grid layout. Users can click on any product to see its detailed view.
- 3. View Product Details:

2. Project Report Objective:

To design and develop a responsive e-commerce product page that displays product information and allows basic cart interactions, improving user shopping experience.

Features:

Product listing with image, title, price, and "Add to Cart" button

Search and filter options

Product detail popup or separate page

Responsive and visually appealing layout

Local storage-based cart management (optional)

Technologies Used:

| Category | Tools / Frameworks |
|-----------------|-----------------------------------|
| Frontend | HTML, CSS, JavaScript |
| Backend | (optional) Node.js or JSON Server |
| Database | JSON / Firebase |
| Hosting | GitHub Pages / Netlify |
| Version Control | Git & GitHub |

3. Screenshots / API Documentation:

Screenshots:

Include the following (with captions):

- Homepage view
- Product detail view
- Add to Cart action
- Cart page
- Responsive mobile view

API Documentation (if API used):

GET /api/products — Fetch all products
 GET /api/products/:id — Fetch single product details
 POST /api/cart — Add item to cart
 DELETE /api/cart/:id — Remove item from cart

Example Response:

```
"id": 101,
"name": "Wireless Headphones",
"price": 2499, "category":
"Electronics", "rating": 4.5, "image":
"img/headphones.jpg" }
```

4.Challenges & Solutions:

| Challenge | Solution Implemented |
|---------------------------------------------------|----------------------------------------------------------|
| Designing responsive layouts for all screen sizes | Used Flexbox and media queries |
| Managing dynamic cart updates | Implemented JavaScript event listeners and local storage |
| Product filtering performance | Optimized DOM rendering using search and filter logic |
| Deployment issues | Used Netlify for easy CI/CD deployment |

5. GitHub README & Setup Guide:

README Content Overview:

- Project Title and Description
- Demo Screenshot / Live Link
- Features List

- Tech Stack
- Installation Guide
- Folder Structure
- API Endpoints (if any)
- Contributions

Setup Instructions:

Clone the repository

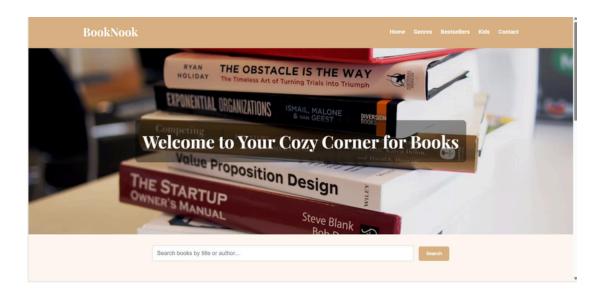
git clone https://github.com/yourusername/ecommerce-product-page.git

Navigate to project folder

cd ecommerce-product-page

Open index.html (for frontend only) # or run server if

backend is included npm install npm start



6. Final Submission:

GitHub Repository Link:

https://github.com/suganyaug23cs-dot/Project-.git

The E-Commerce Product Page marks the completion of Phase 5, representing a fully functional, responsive, and user-friendly shopping interface built using modern web technologies. The final version of this project integrates HTML, CSS, and JavaScript for the frontend, with optional backend connectivity through Firebase or Node.js.