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ROLL NO: 962323104001
DATE: 12-09-2025

COMPLETED THE PROJECT NAMED AS PHASE 1

TECHNOLOGY PROJECT NAME:

E-Commerce Product Page

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Problem Statement:

Introduction

Modern online shoppers demand fast, intuitive, and engaging product pages that make it easy to evaluate a product and make a purchase decision. Many e-commerce websites suffer from cluttered layouts, missing key details, slow load times, and poor mobile optimization, which leads to higher bounce rates and abandoned carts.

The problem is to design and develop a well-structured, responsive, and conversion-focused product page that provides clear product information, high-quality visuals, social proof (reviews), and an effortless checkout experience ultimately increasing sales conversion rates and user satisfaction

Users & Stakeholders:

Users:

• - Shoppers (End Customers): Browse, compare, and purchase products.

• - Guest Visitors: Explore products without login.

• - Registered Customers: Have wishlists, saved carts, and order history.

Stakeholders:

• - Business Owners: Want conversion and revenue growth.

• - Marketing Team: Requires analytics, promotions, and tracking.

• - Product Managers: Define features & roadmap.

• - Developers/Designers: Build and maintain page performance.

• - Customer Support Team: Handle queries, returns, complaints.

User Stories:

• As a shopper, I want to view product details (images, price, description, reviews) so that I can make an informed decision.

• As a shopper, I want to add a product to the cart/wishlist so I can purchase later.

• As a guest, I want to check product availability and delivery options without logging in.

• As a registered user, I want to see related/suggested products so I can discover more.

• As a business owner, I want to track product performance (views, clicks, conversions) to optimize sales.

Prioritized Goals:

Enable customers to quickly understand the product

Encourage confident purchase decisions

Make actions frictionless

Deliver fast performance

MVP Features:

• **Product title, price, images, and detailed description.**

• **Add to Cart / Buy Now buttons.**

• **Product ratings & reviews.**

• **Stock availability & delivery/pincode check.**

• **Wishlist / Save for Later.**

• **Suggested/Related products**

Wireframes / API Endpoint List:

Wireframes (Conceptual):

• - Top Section: Product images + title + price + CTA.

• - Middle Section: Product description + specifications.

• - Bottom Section: Reviews + related products.

API Endpoints (Sample):

• - GET /api/products/{id} → Get product details.

- - POST /api/cart/add → Add product to cart.
- - POST /api/wishlist/add → Add to wishlist.
- - GET /api/products/{id}/reviews → Fetch product reviews.
- - GET /api/products/{id}/related → Fetch related products.
- - POST /api/order/create → Place order.

Acceptance Criteria:

- A user can view product details including name, price, description, stock, reviews, images.
- A product can be added to cart and the cart should update instantly.
- The wishlist should work for logged-in users.
- Guest users can browse without login but require login for checkout.
- Page loads within 2 seconds on standard network conditions.
- Product information updates dynamically via API.