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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.