

E-Commerce Platform

(Flipkart Clone)

SDE Intern Fullstack Assignment

Description

Build a functional e-commerce web application that closely replicates Flipkart's design and user experience. The application should include product browsing, cart management, and order placement functionality. Your implementation should visually resemble Flipkart's UI patterns, layout structure, and interaction design.

AI Tools Usage

You are **allowed and encouraged** to use AI tools such as ChatGPT, Claude, GitHub Copilot, Cursor, or any other AI assistants for development. However, you **must understand every line of code** you submit and be prepared to explain your implementation decisions during the evaluation interview.

Technical Stack

- **Frontend:** React.js or Next.js (Single Page Application)
- **Backend:** Node.js with Express.js OR Python with FastAPI/Django
- **Database:** PostgreSQL or MySQL (design your own schema)

Core Features (Must Have)

1. Product Listing Page

- Display products in a grid layout matching Flipkart's design
- Product cards should replicate Flipkart's card design
- Search functionality to find products by name
- Filter products by category

2. Product Detail Page

- Image carousel displaying multiple product images
- Product description and specifications
- Price and stock availability status
- Add to Cart button
- Buy Now button

3. Shopping Cart

- View all items added to cart
- Update product quantity
- Remove items from cart
- Display cart summary with subtotal and total amount

4. Order Placement

- Checkout page with shipping address form
- Order summary review before placing order
- Place order functionality
- Order confirmation page displaying the order ID

Good to Have (Bonus)

- Responsive design (mobile, tablet, desktop)
- User authentication (Login/Signup)
- Order history - view past orders
- Wishlist functionality
- Email notification on order placement

Important Notes

- **UI Design:** Your application should closely resemble Flipkart's design, including navigation, product cards, detail page layout, and cart page. Study Flipkart's UI carefully before starting.
- **No Login Required:** Assume a default user is logged in. Focus on the e-commerce functionality rather than authentication.
- **Sample Data:** Seed your database with sample products across multiple categories.
- **Database Design:** Design your own database schema. This will be evaluated.
- **README File:** Include setup instructions, tech stack used, and any assumptions made.
- **Original Work:** Plagiarism from existing repositories will result in immediate disqualification.

Submission

- Upload your code to GitHub and ensure the repository is **public**
- Deploy your application (Vercel, Netlify, Render, Railway, or any cloud service)
- Submit both the GitHub repository link and the deployed application link

Evaluation Criteria

Criteria	What We Look For
Functionality	All core features working correctly
UI/UX	Visual similarity to Flipkart's design and UX patterns
Database Design	Well-structured schema with proper relationships
Code Quality	Clean, readable, and well-organized code
Code Modularity	Proper separation of concerns, reusable components
Code Understanding	Ability to explain your code during evaluation

Timeline

Submission Deadline: 2 days from the date of receiving this assignment

Good luck!