

System Architecture: Marketplace Technical Foundation

Overview:

The system is designed for an online marketplace where users can browse products, make orders, and track shipments. The architecture is composed of three primary components: Frontend, Backend, and Third-Party Integrations.

Frontend:

- Built using Next.js for dynamic rendering and responsive UI.
- Pages: Home, Product Listing, Product Details, Cart, Checkout, Order Confirmation.

Backend:

- Sanity CMS is used for managing product data, customer data, and orders.
- Sanity schemas are designed to align with business goals.

Third-Party APIs:

- APIs for payment processing and shipment tracking are integrated.

Key Workflows:

1. User Registration: User signs up and data is saved in Sanity CMS. A confirmation is sent to the user.
2. Product Browsing: Users browse the homepage, and the frontend fetches data from Sanity CMS to display products.
3. Order Placement: Users add items to the cart, proceed to checkout, and the order is saved in Sanity CMS.
4. Shipment Tracking: Shipment status is fetched using third-party APIs, and status updates are shown to users.