

Planning The Technical Foundation.

1. Define Technical Requirements

⇒ Frontend Requirements:

To ensure a seamless user experience the frontend of website will be designed with the following considerations:

* Framework Selections:

- The frontend will be built using Next.js, a React-based framework renowned for its ability to render pages efficiently.
- Server side rendering ensure dynamic pages load quickly by generating HTML on server.
 - Static site generation boost performance for pages like the Home and about pages by pre generating content during the build process.
 - API Routes provide built-in API routing capabilities simplifying the integration of backend services.

⇒ User Friendly Interface:

- The website have a clean, intuitive and accessible layout to enhance your engagement.
- The Navigations will be simple and structured, allowing user to find desire section and perform action effortlessly..

⇒ Responsiveness:

- The design will be fully responsive, ensuring optional functionalities and appearance on both desktop and mobile devices.

- Tailwind Css will be used to implement responsive utilities efficiently, supporting multiple screen size and resolutions.

⇒ Pages And Features:

Home Page:

A visually appealing landing page showcasing the Marketplace's value proposition, and Highlight featured products, promotions or categories.

About page:

Information about the business, its mission, and value to build trust with users.

Product pages:

Display all products categorized for easy browsing.

Include filter (e.g price, category, Rating) and strong option for a better shopping experience.

Product Detail Page:

Show detailed information about a selected product, including images, Price description, review, size and availability.

Cart Page:

Display products added to cart with options to update quantities or remove item. Show a summary of the total cart, including taxes or shipping amount and discounts. If applicable.

Wishlist page:

Allow users to save product references for future or purchase.

Order Completed Page:

Confirm successful order placement with a summary of order detail and tracking information.

Contact Page:

Include a page for users to send inquiries, feedback or support requests.

Login / Sign up Pages:

provide secure user authentication for account creation and login offer a smooth onboarding experience with option for password reset and social media login.

⇒ Technology Stack:

By meeting these requirements, the frontend will deliver a well structured, responsive and engaging user experience, ensuring users can easily navigate, explore

and interact with the website across all devices.

Sanity CMS as Backend:

The backend for market place will be powered by Sanity CMS, a headless content management system that will act as the data base to manage and served structured data. This ensure a scalable and flexible backend infrastructure to support the market place's need.

⇒ Core Functions Of Sanity CMS:

- Product Data Management:

Store and manage product details, including names, descriptions, price stock levels, categories and images. Enable dynamic updates to product listing without redeploying the frontend.

• Customers Data Management:

Maintain customers record including account details, shipping address and order histories.

• Order Record:

Store order information, such as product details, customer data, payment status and order time ship facilitate seamless order tracking and management.

⇒ Sanity CMS As Database:

• Structured Content:

Define custom schemas for products customers and orders to align with the Market place's data requirements.

• Real Time Update:

Sanity's real time API ensure that changes in the backend are immediately reflected on the frontend.

• Scalability:

Flexible Schema definition allow for future expansion (e.g adding new fields for promotions, review or shipment tracking)

