

"Marketplace Technical Foundation - [CraftNest]"

1. Define Technical Requirements

Frontend Requirements:

1. Homepage Design:

- a. The homepage should look attractive and professional, with a clean layout. It will show featured DIY craft kits and handmade products.
- b. There will be sections for trending or seasonal items, as well as a spotlight for eco-friendly products.

2. Product Listings:

- a. Customers should be able to browse products in categories like DIY Kits and Handmade Crafts.
- b. Filters should be included for sorting items by price, popularity, and eco-friendliness.
- c. A search bar is essential so customers can easily find specific items.

3. Product Details Page:

- a. Each product page should include a big image of the product, a detailed description, price, and stock availability.
- b. If the product is customizable, there should be options for the user to choose colors, materials, etc.
- c. There will be an "Add to Cart" button for quick purchases.

4. Artisan Profiles:

- a. Each artisan (seller) will have their own page that shows their shop name, bio, and all the products they sell.
- b. Customers can also leave reviews and ratings for artisans.

5. Cart and Checkout Pages:

- a. The cart page will show all the items the customer wants to buy, along with quantities and the total price.
- b. The checkout page will allow the user to fill in their shipping and payment information easily.

6. Customer Accounts:

- a. Customers should be able to sign up or log in using their email or social accounts like Google or Facebook.
- b. Once logged in, they can see their past orders, save items they like, and edit their profile.

7. Community Section:

- a. A special section where people can share crafting tips, tutorials, or even their completed projects to inspire others.
- b. This will help in building a sense of community among users.

8. Contact Us and FAQ Pages:

- a. These pages will provide easy ways for customers to get support and answers to common questions.

9. Responsive Design:

- a. The website should work perfectly on all devices, including desktops, tablets, and smartphones.
- b. The layout should adjust automatically to give a smooth experience.

10. Interactive Features:

- a. When customers hover over a product, it should zoom in or highlight.

11. Animations:

- a. Add cool effects like smooth transitions between pages and hover animations on buttons and product cards to make the website fun to use.

12. Framework and Tools:

- a. Use **Next.js** for creating the website. It's fast and great for projects that need both dynamic and SEO-friendly pages.

Sanity CMS as Backend:

1. **Product Management:** Use of **Sanity CMS** for managing product data efficiently such as product names, descriptions, pricing, and images, allowing easy update and scale my marketplace inventory in real-time.
2. **Customer Data:** Leverage **Sanity CMS** to store and organize customer information, including personal details, order history, and shipping addresses, ensuring that customer data is easily accessible for order fulfillment and personalized marketing.
3. **Order Management:** With **Sanity CMS**, track order records, including products purchased, customer details, order status, and payment information, enabling smooth order processing and effective inventory management.

4. **Artisan Profiles:** Store detailed artisan profiles, including shop names, contact info, and product lists, on **Sanity CMS**. This allows artisans to manage their own storefronts and increase visibility within the marketplace.
5. **Flexible Content Modeling:** Sanity's flexible content modeling ensures that you can tailor the schema to fit your business needs, allowing you to manage product variations, DIY kit configurations, or personalized craft options.
6. **Real-Time Data Updates:** Sanity CMS enables real-time updates to the product catalog, customer orders, and payments, ensuring that your marketplace runs smoothly with up-to-date information for both customers and artisans.
7. **Scalable System:** As marketplace grows, **Sanity CMS** allow to scale by adding new schema types, creating new fields, and ensuring that backend supports a growing product catalog and customer base.
8. **Data Integrity:** By centralizing all product, customer, and order data in **Sanity CMS**, we can maintain data integrity and streamline operations across the entire marketplace, ensuring that it can efficiently track orders and customer preferences.
9. **Easy Integrations:** Sanity's integration capabilities with external tools (like payment gateways, shipping services, and email marketing platforms) will allow my marketplace to grow and adapt to new business requirements without the need for complex custom development.

Third-Party APIs:

If you're in Pakistan, you can integrate APIs like **Shippo** or **TCS** for shipment tracking, and **JazzCash** or **EasyPaisa** for payment gateways. Ensure these APIs provide the necessary data to manage shipments and transactions efficiently on your platform.

2. Design System Architecture

