

Marketplace Technical Foundation;

Furniture Website

Introduction

This document provides a comprehensive technical overview of the foundation for a Marketplace application (Furniture Website) developed using **Next.js**, **Tailwind CSS**, and **Sanity**. It outlines the architecture, core features, and integrations to manage product details, order details, and third-party APIs for shipment tracking and payment.

1. Project Overview

The Marketplace application serves as an online platform connecting buyers and sellers. The key functionalities include:

- Displaying products with details like images, descriptions, and pricing.
- Managing user orders.
- Integrating third-party services for shipment tracking and payment processing.

2. Technology Stack

Frontend:

- **Next.js**: For server-side rendering (SSR) and a seamless user experience.
- **Tailwind CSS**: For rapid and consistent UI development.

Backend:

- **Sanity**: A headless CMS to manage product and order data.
- **Third-party APIs**: For external integrations (e.g., Stripe for payments, Shippo for shipment tracking).

3. Data Flow:

1. **Product Management:**
 - Admin adds product data in Sanity.
 - Frontend fetches product data via Sanity's API.
2. **Order Management:**
 - Orders are created and stored in Sanity.
 - Payment and shipping statuses are updated via API integrations.

4. Key Features

Product Catalog:

- Dynamic product listings with pagination.

Order Management:

- User-friendly order placement flow.
- Real-time status updates for payment and shipping.

Third-party Integrations:

- Secure payments via Stripe.
- Real-time shipment tracking via Shippo.

Responsive Design:

- Tailwind CSS ensures responsiveness across devices.

4. API Requirements

Endpoint	Method	Description
/products	GET	Fetch product details
/orders	POST	Create a new order
/shipment	GET	Fetch shipment status
/payment	POST	Process payment
/track	GET	Track order shipment

5. Schemas:

- **Product Schema:**
 - Fields: Name, Description, Price, Images, Categories.
- **Order Schema:**
 - Fields: User ID, Product ID, Quantity, Payment Status, Shipment Status.

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