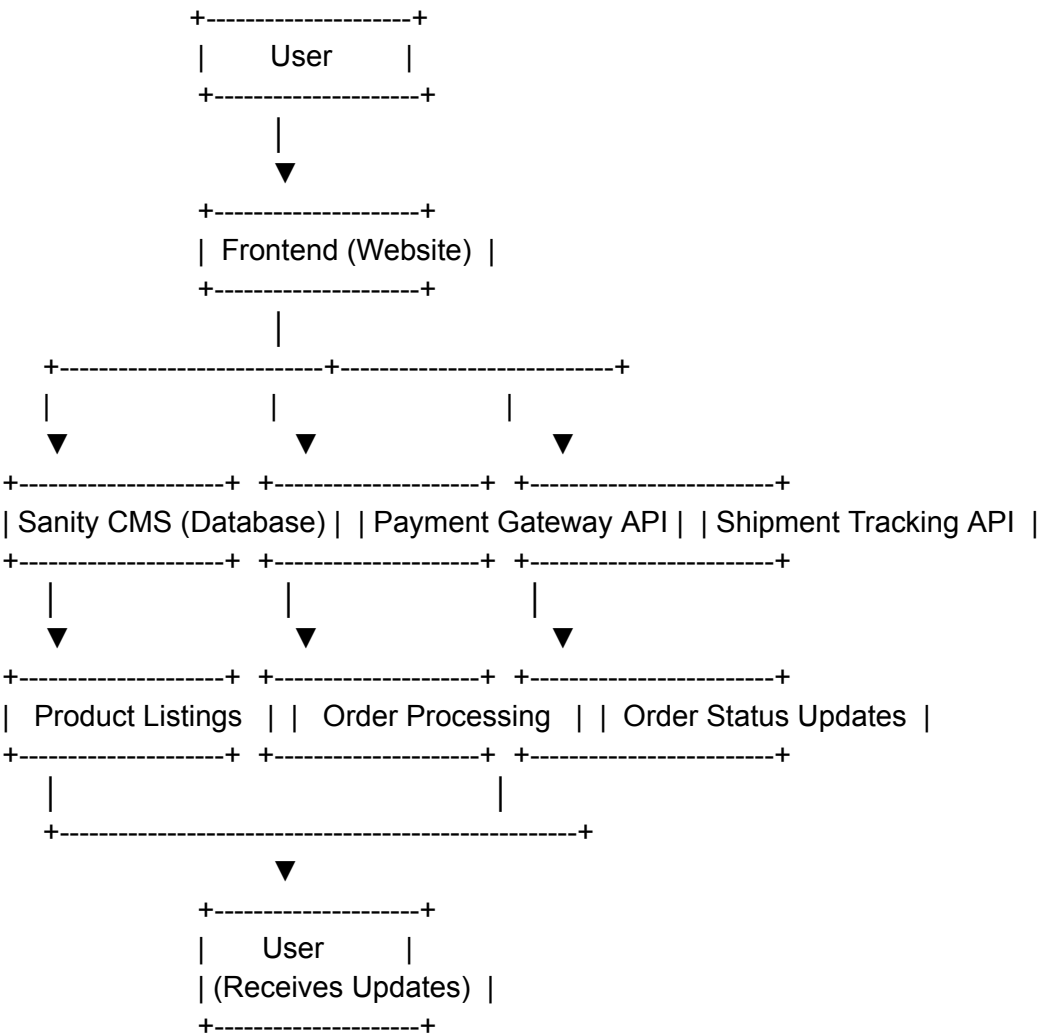


# Marketplace Technical Foundation - Premium Furniture Marketplace

## 1. System Architecture Overview

### Architecture Diagram (Text-Based)



### Component Descriptions:

- **Frontend (Website):** The user interface where buyers browse products and place orders.

- **Sanity CMS (Database):** Stores product listings, user data, and order details.
  - **Payment Gateway API:** Handles secure transactions for purchases.
  - **Shipment Tracking API:** Tracks order delivery status.
  - **Order Processing:** Manages order placements and inventory updates.
  - **Product Listings:** Stores product details and availability.
  - **User Interaction:** Users browse, purchase, and track their orders.
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## 2. Key Workflows

### Workflow 1: User Buys a Product

1. User **browses products** on the website.
2. Selects a **sofa/lamp/table** and adds it to the **cart**.
3. Proceeds to **checkout** and enters payment details.
4. Order is **saved in Sanity CMS** and forwarded to the **payment gateway**.
5. Payment **successfully processed**, and order status is updated.
6. Order details are **sent to Shipment API** for tracking.
7. User can **track shipment** and receive delivery updates.

### Workflow 2: Seller Adds a Product

1. Seller **logs in** to the marketplace.
  2. Clicks **"Add New Product"** and enters product details.
  3. Product is **saved in Sanity CMS**.
  4. Product appears in **frontend listing** for buyers.
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## 3. API Endpoints Documentation

Endpoint	Method	Purpose	Response Example
/products	GET	Fetch all available furniture	{ "id": 1, "name": "Luxury Sofa", "price": 500 }
/orders	POST	Save a new order	{ "orderId": 1001, "status": "Confirmed" }
/shipment	GET	Track order status	{ "orderId": 1001, "status": "Out for Delivery" }

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## 4. Data Schema Design (Sanity CMS Database Structure)

### Products Table

Field Name	Description	Example Value
ID	Unique product ID	101
Name	Product Name	Luxury Sofa
Price	Cost of the item	\$500
Stock	Available quantity	10

### Users Table

Field Name	Description	Example Value
User ID	Unique user ID	1001
Name	Full Name	Sarah Ali
Role	Buyer or Seller	Buyer

### Orders Table

Field Name	Description	Example Value
Order ID	Unique order number	5001
User ID	Buyer placing order	1001
Product ID	Ordered product	101

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## 5. Technical Roadmap (Project Milestones & Deliverables)

Phase	Task	Deadline
Phase 1	Define Business Goals (Day 1)	Completed
Phase 2	Plan System Architecture & APIs (Day 2)	Ongoing

<b>Phase 3</b>	Develop Initial Frontend & CMS Setup	Day 3
<b>Phase 4</b>	Integrate APIs & Payment System	Day 4-5
<b>Phase 5</b>	Test, Debug, and Finalize	Day 6-7

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