

# 1. System Architecture Overview

## Frontend Development:

- **Adaptive Design:** Ensuring a seamless experience across mobile, tablet, and desktop devices.
- **Cutting-Edge Technologies:** Built using **Next.js** and **Tailwind CSS** for performance and flexibility.
- **Intuitive User Experience:** Optimized navigation and interactive elements to boost user engagement.

## Key Pages:

1. **Homepage:** Showcases trending furniture, latest collections, and promotional highlights.
2. **Shop Section:** Offers a categorized display of furniture items with advanced filtering and sorting features.
3. **Product Details Page:** Provides in-depth information on each item, including color options, material specifications, and pricing.
4. **Shopping Cart:** A streamlined page allowing users to modify item quantities, view total costs, and apply discounts.
5. **Checkout Process:** Secure multi-step checkout supporting diverse payment methods and address selection.
6. **User Authentication:** Login and signup functionalities, including social login integrations.
7. **Contact Us:** A dedicated page for customer inquiries, support requests, and feedback submissions.
8. **Blog Hub:** A content-rich section featuring articles on furniture styling, industry news, and expert tips.
9. **User Dashboard:** A personalized area where customers can manage profiles, track orders, and save favorite products.
10. **Career Opportunities:** A gateway for professionals to join the marketplace and explore income-generating opportunities.

## **2. Content Management System (CMS):**

**Sanity CMS** serves as the backbone for managing product listings, customer records, and transaction data. It facilitates:

- **Product Catalog Management:** Handling inventory, pricing, categories, and product modifications.
- **Blog Content Administration:** Overseeing blog articles, images, metadata, and tagging.
- **User Data Storage:** Organizing customer details, addresses, and purchase history.
- **Order Tracking:** Delivering real-time insights into order processing and fulfillment stages.

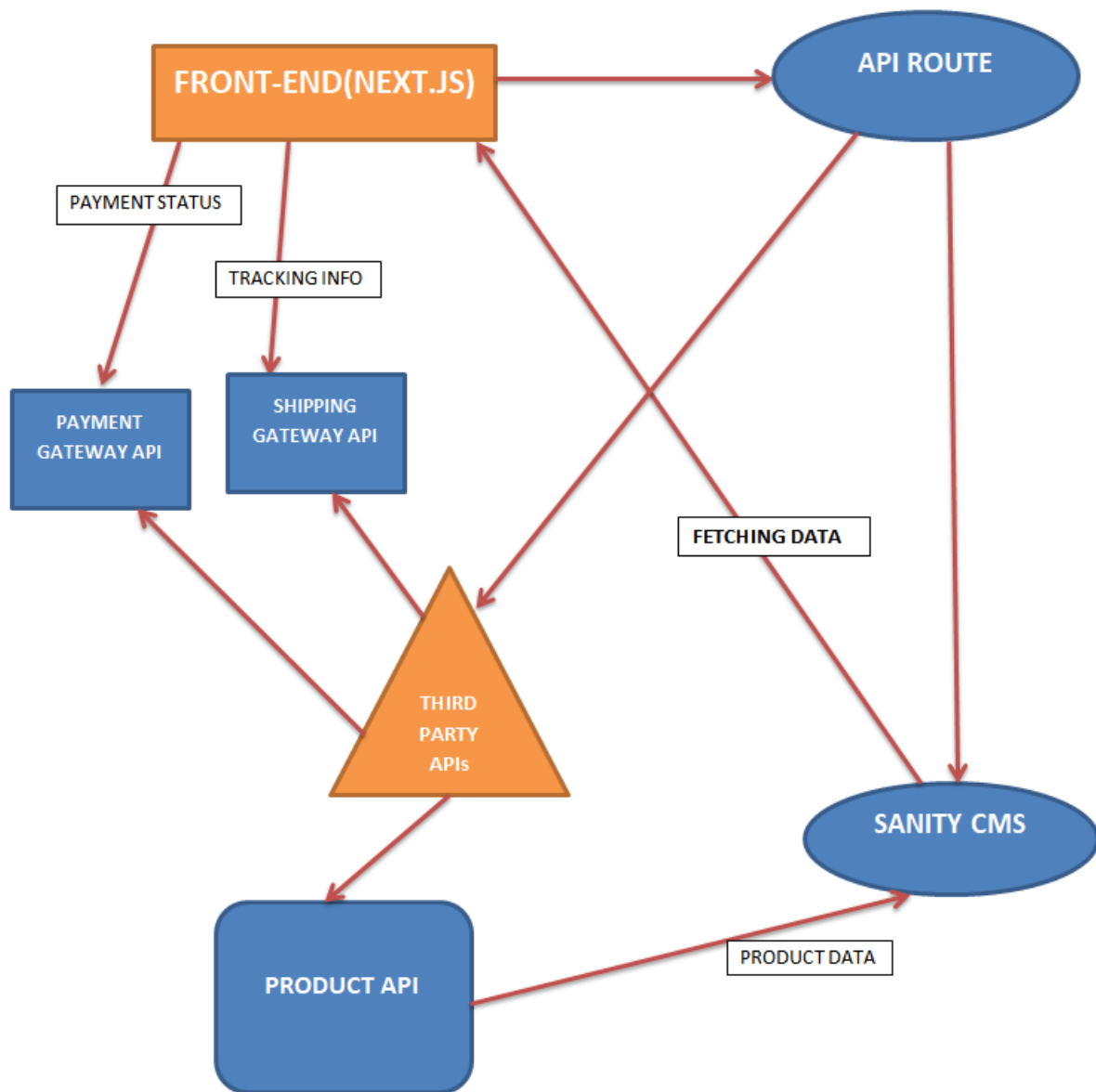
## **3. API & Third-Party Integrations:**

To optimize functionality and user experience, the platform incorporates multiple external services:

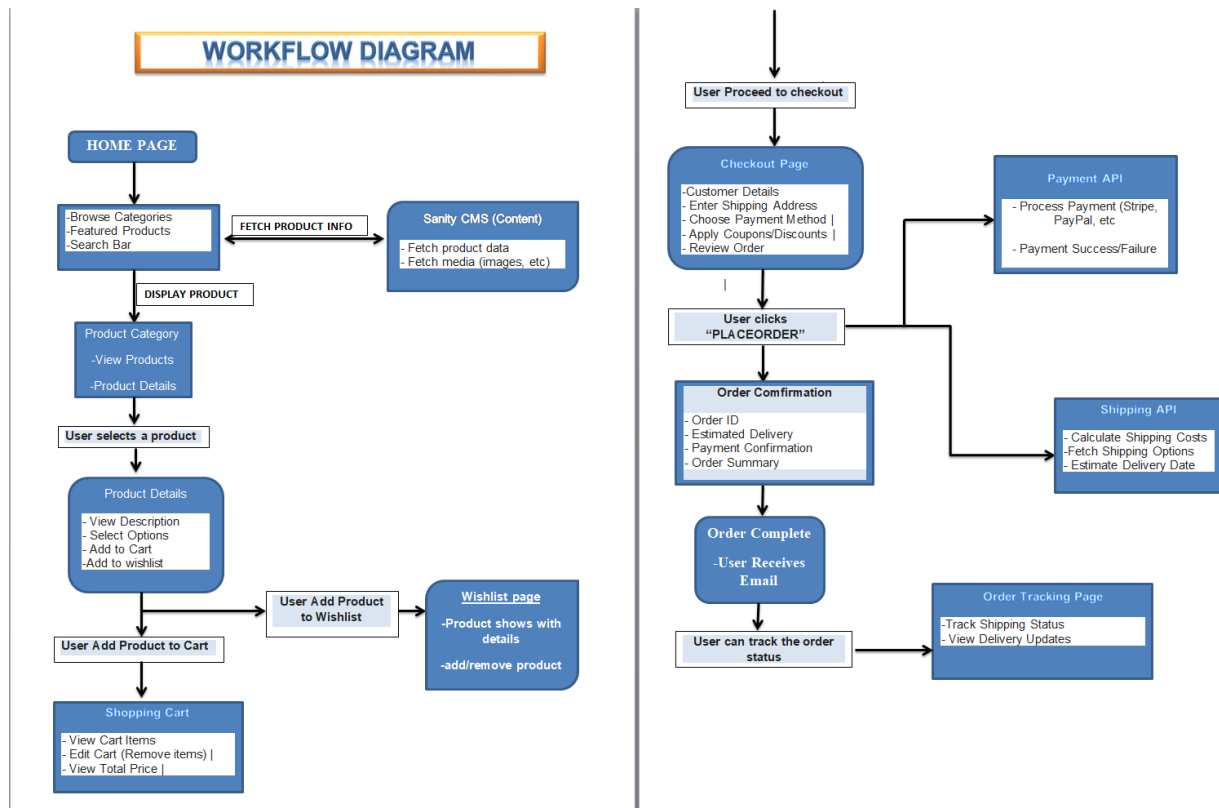
- **Secure Payments:** Seamless transactions powered by gateways like **Stripe** and **PayPal**.
- **Shipping & Logistics:** Direct integration with delivery partners for real-time order tracking and efficient shipping.
- **User Authentication:** Enhanced security with OAuth-based sign-in options (Google, Facebook, etc.).
- **Live Order Monitoring:** Enabling customers to track their purchases and receive timely delivery updates.

# System Architecture Diagram

## System Architecture Diagram



# Workflow Diagram



# API Endpoints

A	B	C	D	E	F	G	H	I	J
Endpoint	Method	Description	Payload	Response					
/api/auth/	POST	User registration	{ 'name': 'John Doe', 'email': 'john@example.com' }	{ 'userId': '12345', 'message': 'Signup successful' }					
/api/auth/	POST	User login	{ 'email': 'john@example.com', 'password': '123456' }	{ 'token': 'abc123', 'userId': '12345' }					
/api/products/	GET	Fetch all products	None	{ 'products': [{ 'id': '001', 'name': 'Chair', 'price': 100 }] }					
/api/products/	GET	Fetch product details	None	{ 'id': '001', 'name': 'Chair', 'price': 100, 'stock': 50 }					
/api/cart/	POST	Add item to cart	{ 'userId': '12345', 'productId': '001', 'quantity': 1 }	{ 'message': 'Item added to cart', 'cartId': '98765' }					
/api/cart/	GET	Fetch user cart	None	{ 'cart': [{ 'productId': '001', 'quantity': 1 }] }					
/api/checkout/	POST	Process checkout	{ 'userId': '12345', 'paymentId': 'pay123' }	{ 'orderId': '55555', 'status': 'Processing' }					
/api/orders/	GET	Fetch order details	None	{ 'orderId': '55555', 'status': 'Shipped', 'trackingId': 'XYZ123' }					
/api/payments/	POST	Process payment	{ 'userId': '12345', 'amount': 100 }	{ 'paymentId': 'pay123', 'status': 'Success' }					