

<u>Short Overview of Your Furniture E-</u> <u>Commerce Website</u>

Our furniture e-commerce platform offers a wide range of stylish, high-quality, and customizable furniture for every room in the home. Customers can select from various furniture categories including living room, bedroom, dining, and office furniture, with options to personalize items based on size, material, color, and finish. Additionally, we provide virtual room planning tools, seamless online ordering, and reliable delivery and assembly services. Our platform focuses on delivering an excellent user experience, with eco-friendly products and competitive pricing to meet the needs of modern homeowners, renters, and interior designers.

<u>System Architecture Design</u>

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[Frontend (Next.js)]

[Sanity CMS] -----> [Product Data API]

[Third-Party API] ----> [Shipment Tracking API]

[Payment Gateway]
```

API Requirements

Method	End point	Main purpose
POST	/api/register	new user register
POST	/api/login	existing user auth
POST	/api/logout	user logout
GET	/api/products	all product fetching
GET	/api/products/[id]	products details fetching
POST	/api/cart	product add to cart
POST	/api/checkout	checkout process
POST	/api/shipment	deails of shipping
GET	/api/orders	get orders history
POST	/api/payment	payment

Overview of Architecture

- User Interaction: Users interact through a Next.js frontend.
- Frontend (Next.js): Central interface connecting APIs and services for a smooth user experience.
- Sanity CMS: Manages dynamic content.
- Product API: Supplies product data to the frontend.
- Order API: Handles order processing and updates.
- Order Data/History: Stores and retrieves order details.
- Notification Services: Sends order updates to users.
- Payment Gateway: Enables secure transactions.
- Shipment API: Tracks shipping information.
- Third-party API: Adds extra functionalities.

Key Points

- Integration: Combines APIs and services for a robust e-commerce solution.
- Dynamic Content: Sanity CMS simplifies content management.
- User Experience: Next.js provides an interactive UI.
- Order Management: Manages and updates orders efficiently.
 - Secure Transactions: Ensures safe payments.
 - Scalability: APIs enable easy expansion.

<u>Summary</u>

This architecture features a Next.js frontend integrated with APIs for product data, order processing, shipping, and secure payments, enhanced by Sanity CMS and a notification system for a dynamic and user-friendly ecommerce experience