Marketplace Technical Foundation Of Furniro Furniro Website

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Marketplace Technical Foundation of Furniro

Overview

Furniro is a modern furniture marketplace that simplifies shopping with an intuitive platform for discovering, customizing, and purchasing furniture. The app delivers a seamless user experience with live search, advanced filtering, and a responsive design.

Features

- Dynamic Search & Filters: Quickly find furniture by category, price, and material.
- Responsive Design: Optimized for desktops, tablets, and mobile devices.
- Custom Options: Personalize furniture with size, color, and material choices.
- Cart Management: Real-time cart updates and price calculations.

Third-Party Integrations

- Secure payments via Stripe/PayPal.
- Real-time shipping estimates with shipment APIs.
- Admin Dashboard: Manage products, orders, and users effectively.

Problems Solved

- Centralized platform for efficient furniture discovery.
- Enhanced customization for personalized purchases.
- Simplified checkout with integrated payments and shipping.

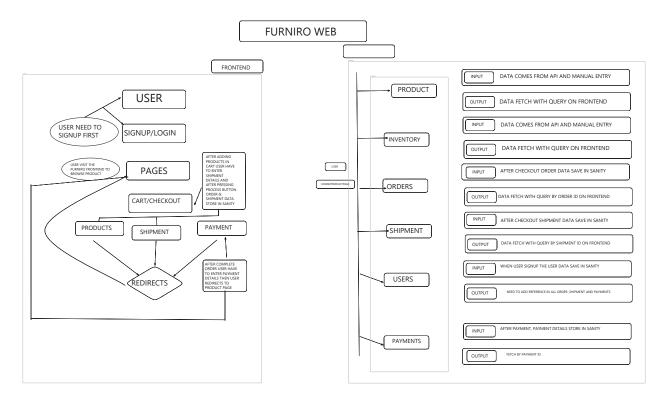
Benefits

- Convenience: Browse, customize, and shop from anywhere.
- Transparency: Detailed product information and live shipment tracking.
- Scalability: Designed to grow with new features and categories.

Furniro aims to redefine furniture shopping by offering a streamlined, user-friendly experience.

Pages

- Home Page
- Contact Page
- Login/Signup Page
- Blog Page
- Shop Page
- Dynamic Product Page
- Cart Page
- Account Page
- Wishlist Page
- Checkout Page



Technical Architecture

Frontend (Next.js)

The frontend of the Furniro marketplace focuses on delivering a seamless user experience through a responsive and user-friendly interface.

• Essential Features:

- o Home Page: Showcase featured products and categories.
- Product Listing: Display all available products with search and filter options.
- Product Details: Detailed view with customization options (color, size, etc.).
- o Cart Page: Real-time cart management with price calculations.
- Checkout Page: Collect user details and integrate payment options.
- Order Confirmation: Display order summary and tracking details.

Additional Features:

- o Live Search and Filters: Allow users to search and filter products dynamically.
- Fully Responsive Design: Ensures compatibility across mobile, tablet, and desktop devices.
- o Interactive UI/UX: Modern, engaging design with intuitive navigation.

Backend

The backend of the Furniro marketplace is powered by Sanity CMS and additional tools to handle data efficiently and provide secure services.

Sanity CMS:

- Manage product data, including titles, descriptions, prices, images, and categories.
- Store customer details such as names, addresses, and contact information.
- o Record and manage order details, including products, quantities, and statuses.

• Backend Functionalities:

- o User Authentication: Secure login and registration for customers.
- o Payment Handling: Process transactions securely through integrated APIs.
- o Order Tracking: Manage order statuses and provide tracking details.

Third-Party API Integrations

To enhance the functionality and provide a smooth shopping experience, the Furniro marketplace integrates the following APIs:

1. Payment Gateway APIs:

- o **Stripe**: For secure and reliable payment processing.
- Features: Accept multiple payment methods, handle refunds, and provide transaction receipts.

2. Shipment APIs:

- o Real-time shipment tracking and delivery status updates.
- Features: Calculate shipping costs based on user location and delivery speed.

3. Product APIs:

- Use external APIs for populating product data dynamically in Sanity
- o Features: Fetch and display product details and categories efficiently from Sanity.

Tools and Technologies

• Frontend:

Framework: Next.js

Language: TypeScript

Styling: Tailwind CSS

State Management: Context API

Responsive Design: Flexbox, Grid Layout

• Backend:

o CMS: Sanity CMS

o APIs: RESTful APIs for dynamic content management

o Security: Clerk for user authentication

Testing & Deployment

Test the website for responsiveness and functionality.

Deploy using platforms like Vercel.

Final Deliverable

A fully functional, user-friendly furniture website with dynamic features and integrated APIs.

API Endpoints Documentation

Endpoint Name	Method	Description	Payload	Response Example
/products	GET	Fetch all available products.	N/A	[{ "id": 1, "name": "Wooden Chair", "price": 500, "stock": 20, "image": "url", "category": "Furniture " }]
/product/:id	GET	Fetch details of a specific product by ID.	N/A	{ "id": 1, "name": "Wooden Chair", "price": 500, "stock": 20, "image": "url", "category": "Furniture " }
/orders	POST	Create a new order.	{ "customerInfo": { "name": "John", "email": "john@example.com", "phone": "1234567890" }, "orderDetails": [{ "productId": 1, "quantity": 2 }], "paymentStatus": "Paid" }	{ "orderId": 101, "status": "Success", "message": "Order created successfully" }

/order/:id	GET	Fetch status and details of an order by ID.	N/A	{ "orderId": 101, "status": "In Transit", "expectedDeliveryDate": "2025-01-20", "items": [] }
/categories	GET	Fetch all product categories.	N/A	[{ "id": 1, "name": "Furniture" }, { "id": 2, "name": "Chairs" }]
/shipment	GET	Track the status of an order using a third-party API.	{ "shipmentId": 201, "orderId": 101 }	{ "status": "In Transit", "ETA": "15 mins" }
/checkout	POST	Process payment and finalize the order.	{ "cartId": 123, "paymentMethod": "Credit Card", "paymentDetails": { "cardNumber": "xxxx", "expiryDate": "xx/xx" } }	{ "status": "Success", "orderld": 101, "message": "Payment processed and order placed successfully." }