MARKETPLACE TECHNICAL FOUNDATION (Furniture)

Technical Requirement for Furniture Website

System Architecture Overview:

Backend: Sanity CMS

Sanity CMS will serve as the backend, handling the following:

- **Product Management:** Store product data (name, price, description, images, category) and design schemas in Sanity aligned with business goals.
- **Customer Data:** Securely manage user profiles and their order history.
- **Order Records:** Keep track of orders, their statuses, and shipment details.

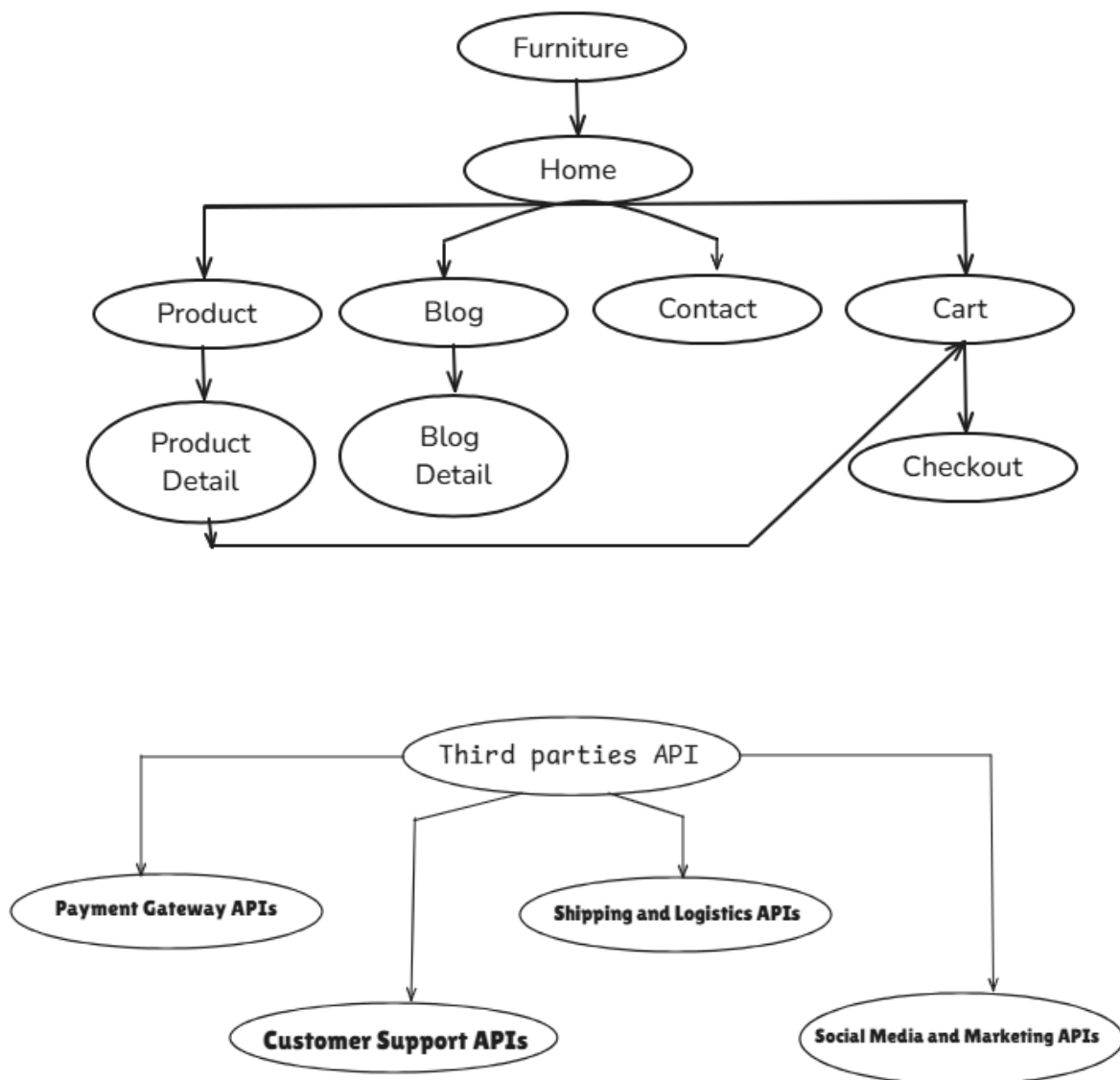**Frontend Design (As per the Diagram)**

Core Pages:

1. **Home Page**
   - Show featured products and furniture categories.
   - Preview the blog section for user engagement.
2. **Product Listing Page**
   - Allow users to filter and sort products (by price, category, popularity).
3. **Product Detail Page**
   - Display product descriptions, dimensions, reviews, and an "Add to Cart" button.
4. **Blog Page**
   - Showcase articles and tips related to furniture.
   - Include links to the **Blog Detail Page** for detailed content.
5. **Contact Page**
   - Include a contact form for queries and a map to show store locations.
6. **Cart Page**
   - Display selected items with their total price and a "Proceed to Checkout" option.
7. **Checkout Page**
   - Collect secure shipping and payment details.
8. **Order Confirmation Page**
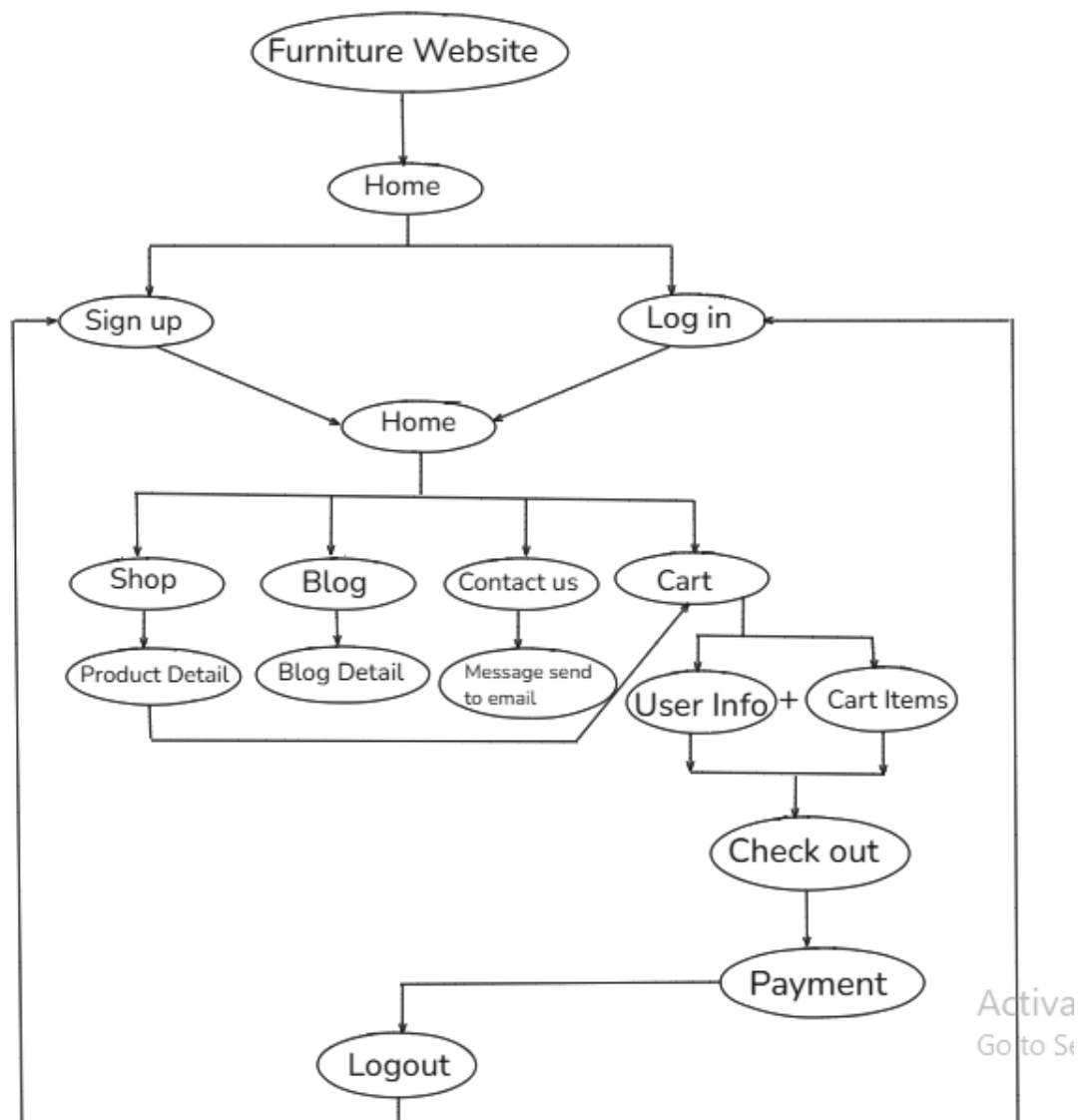   - Provide a summary of the order and tracking information.

Third-Party APIs (Integrations):

1. **Payment Gateway:**
   o Use APIs like Easypaisa or Jazzcash to handle secure payments.
2. **Shipment Tracking:**
   o Integrate with Ship Rocket or FedEx APIs to show real-time delivery updates.
3. **Customer Reviews:**
   o Use Trustpilot or Yotpo APIs to collect and display user reviews.
4. **Map API:**
   o Google Maps API for showing store locations and calculating delivery distances.
5. **Search API:**
   o Integrate Algolia for fast and efficient product search and filtering.

SYSTEM ARCHITECTURE OVERVIEW (DIAGRAM):

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Work Flow Diagram:

Technical Roadmap for the Furniture Website

1. Frontend Development

- **Framework:** Use React/Next.js for responsive and dynamic UI.
- **Pages to Develop:**
    - Home Page: Display featured products and categories.
    - Product Page: List all products with filtering and sorting.
    - Product Detail Page: Showcase detailed product info with "Add to Cart."
    - Blog Page: Display blog posts.
    - Blog Detail Page: Provide detailed view of individual posts.
    - Contact Page: Add a contact form with store location via Google Maps API.

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    o   Cart & Checkout Pages: Cart summary, secure payment, and confirmation.

2. Backend Setup

- **Sanity CMS:**
  - Design schemas for Products, Orders, Customers, and Blogs.
  - Use Sanity's APIs to fetch product and content data dynamically.

3. API Integrations

- **Payment Gateway:** Integrate Stripe/Razorpay for secure payments.
- **Shipping API:** Use FedEx or ShipRocket for tracking and delivery updates.
- **Google Maps API:** Enable location-based delivery and store mapping.
- **Search API:** Use Algolia for faster product search.

4. Database & Security

- Use Sanity as the database for all product and customer-related data.
- Implement HTTPS, secure tokens, and data encryption for user safety.

5. Testing & Deployment

- **Testing:** Perform unit tests for APIs and UI components, ensuring responsiveness.
- **Deployment:** Deploy the website on platforms like Vercel for speed and reliability

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