

Marketplace Technical Foundation – FurnitureMart.pk

Technical Requirements:

1. Frontend Requirements:

- First, we need to focus on a **Responsive** and **user-friendly UI** for the Customers using Next.js, TypeScript, and Tailwind CSS with **easy navigation** and **clear CTA**.
- **Pages We Need:**
 1. **Home Page:** To Showcase categories and featured furniture.
 2. **Product Listing Page:** To Display furniture items with filters.
 3. **Product Details Page:** For Detailed information with customization options.
 4. **Seller/Showroom Page:** To Display all products from a specific seller or showroom.
 5. **Cart Page:** To View selected items and proceed to checkout.
 6. **Checkout Page:** To Collect order and payment details.
 7. **Order Confirmation Page:** To Display order details After payment.
 8. **Customer Dashboard Page:** This will allow users to view past orders, tracking information, and other details.
 9. **Order Tracking Page:** User Can use this Page to track their orders with Provided Tracking ID.

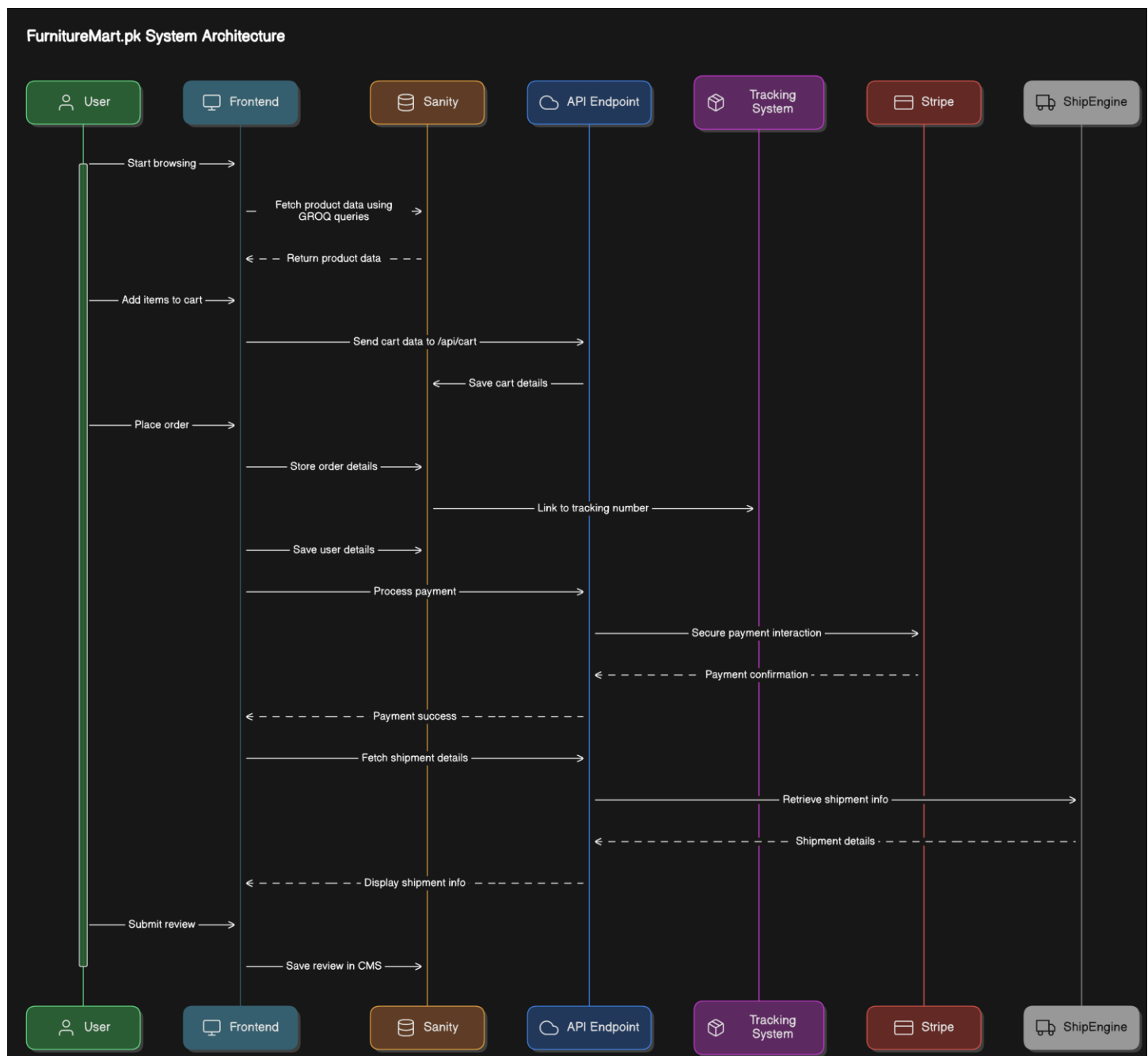
2. Backend Requirements

- Use **Sanity** for:
 - **Managing product data:** Name, price, stock, customization options, images, seller/showroom ID.
 - **Storing order details:** Customer information, product Details, Status, Order ID, Date/Time.
 - **Storing Customer Data:** Customer ID, Name, Contact Info, Address, Order history.
 - **Managing showroom/Seller data:** Seller ID, Name, Contact info, product listings.
 - **Storing and managing reviews for products:** Review ID, Customer ID, Product ID, Rating, Comment.
 - **Managing cart data:** Cart ID, customer ID, product details, quantity.

- **External APIs:**

- **ShipEngine API** for shipment tracking.
- **Stripe API** for secure payment processing.
- *In future we can add more payment methods, and AR Feature in this.*

Design System Architecture



System Workflow

1. Product Browsing:

- User visits the marketplace.
- Frontend fetches product data from Sanity.
- Products are displayed

2. Cart Management:

- User adds items to the cart.
- Frontend sends cart data to `/api/cart`.
- Cart details are saved in Sanity.

3. Order Placement:

- User adds items to the cart and proceeds to checkout.
- User's Data is Saved in Sanity.

4. Payment Details:

- Frontend sends payment details to `/api/payment`.
- Upon payment success, order details are saved in Sanity.
- Tracking number is generated and linked to the user's order.

5. Shipment Tracking:

- User views the order details page.
- Frontend calls `/api/shipment` with the order's tracking number.
- Shipment status is fetched from ShipEngine and displayed to the user.

6. Review Submission:

- User submits a review for a purchased product.
- Frontend sends the review data to `/api/review`.
- Review is stored in Sanity and linked to the product with Customer ID.
- Reviews are displayed on the product details page.

API Endpoints

ApiEndpoints	Method	Description
/api/shipment	GET	Fetch shipment and tracking information from ShipEngine API.
/api/payment	POST	Process payment via Stripe API.
/api/cart	POST/GET/PATCH/DELETE	Store and manage cart data from frontend in sanity.
/api/user	POST	Add a new user to Sanity.
/api/order	POST	Submit a new order to Sanity
/api/review	POST/GET/PATCH/DELETE	Store and manage the reviews from frontend in sanity.