

MARKETPLACE TECHNICAL FOUNDATION
COMFORTY ECOMMERCE WEBSITE

1. System Architecture Overview

DAY-02: TRANSITIONING TO TECHNICAL PLANNING

Frontend:-

- Comfortly a well furnished furniture website.
 - Comfortly provides an easy-to-use and user-friendly interface, ensuring a seamless browsing experience for its customers.
 - Comfortly offers a responsive design, ensuring an optimal user experience across mobile devices, tablets and desktops.
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- #### Essential Pages:-
- ⇒ Home Page: Highlighting featured, top-categories products and promotions.
 - ⇒ Product Listing: Browseable catalog with filters and sorting options.
 - ⇒ Product Details: Detailed view of product with specifications, images and reviews.
 - ⇒ Cart:- Summary of selected products with options for modifications.
 - ⇒ Checkout: Secure and efficient checkout process.
 - ⇒ Order Confirmation:- Displaying order details and next steps post purchase.

Sanity CMS as Backend:-

Sanity CMS will serve as the backend for Comfooty, providing a centralized platform to manage key data and streamline operations.

1. Manage Core Data:-

- Product Data:-
product_id, name, description, category, price, stock-quantity, ^{and} image.

2. Customer Details:-

first_name, last_name, phone_number, address, email.

• Order Records:

order_items, quantity, status, customer_id, order_id

• Shipment Records:

order_id, status

Benefits of Using Sanity CMS:-

- Flexibility:- Sanity's customizable schemas allow us to tailor the backend to Comfooty's unique needs.
- Real-Time Updates:- Any changes in products instantly reflected on frontend.
- Scalability:- Sanity supports growing data requirements as Comfooty expands globally.
- Integration Friendly:- Sanity seamlessly integrates with the frontend framework.

Schema Design in Sanity.

- Product Schema; ~~name~~
name, category, description, price, stock-quantity, image, rating
- Category Schemas
Classification of products into categories such as sofas, chairs, stools etc.
- Customer Schema:
name, phone-number, email, address.
- Order Schema:
order-id, payment status
- Review Schema:
ratings, comments

Third-Party APIs Integration:-

To enhance Comfooty's functionality and provide a seamless user experience, third party APIs will be integrated in to the backend. These APIs will handle key services such as shipment tracking, ^{and} payment processing.

1) Shipment Tracking API:

- Enable real-time tracking of orders for customers.
- Provide shipping updates.
- Customers track their orders directly through the Comfooty website.
- Improves transparency and builds customer trust.

2) Payment Gateway API:

- Securely process customer payments.
- Ensure a smooth checkout process with reliable and secure transactions.

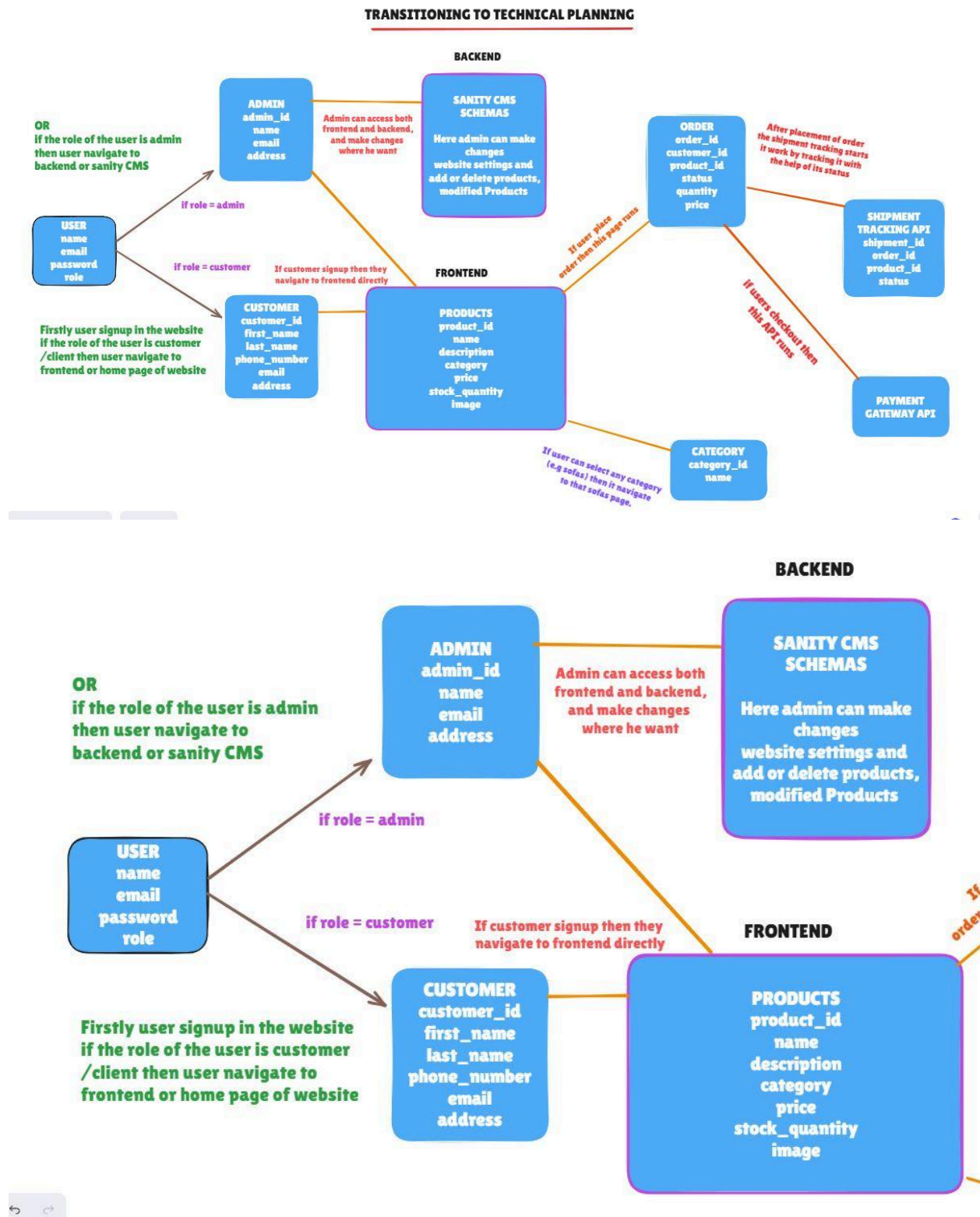
3) Frontend Support:

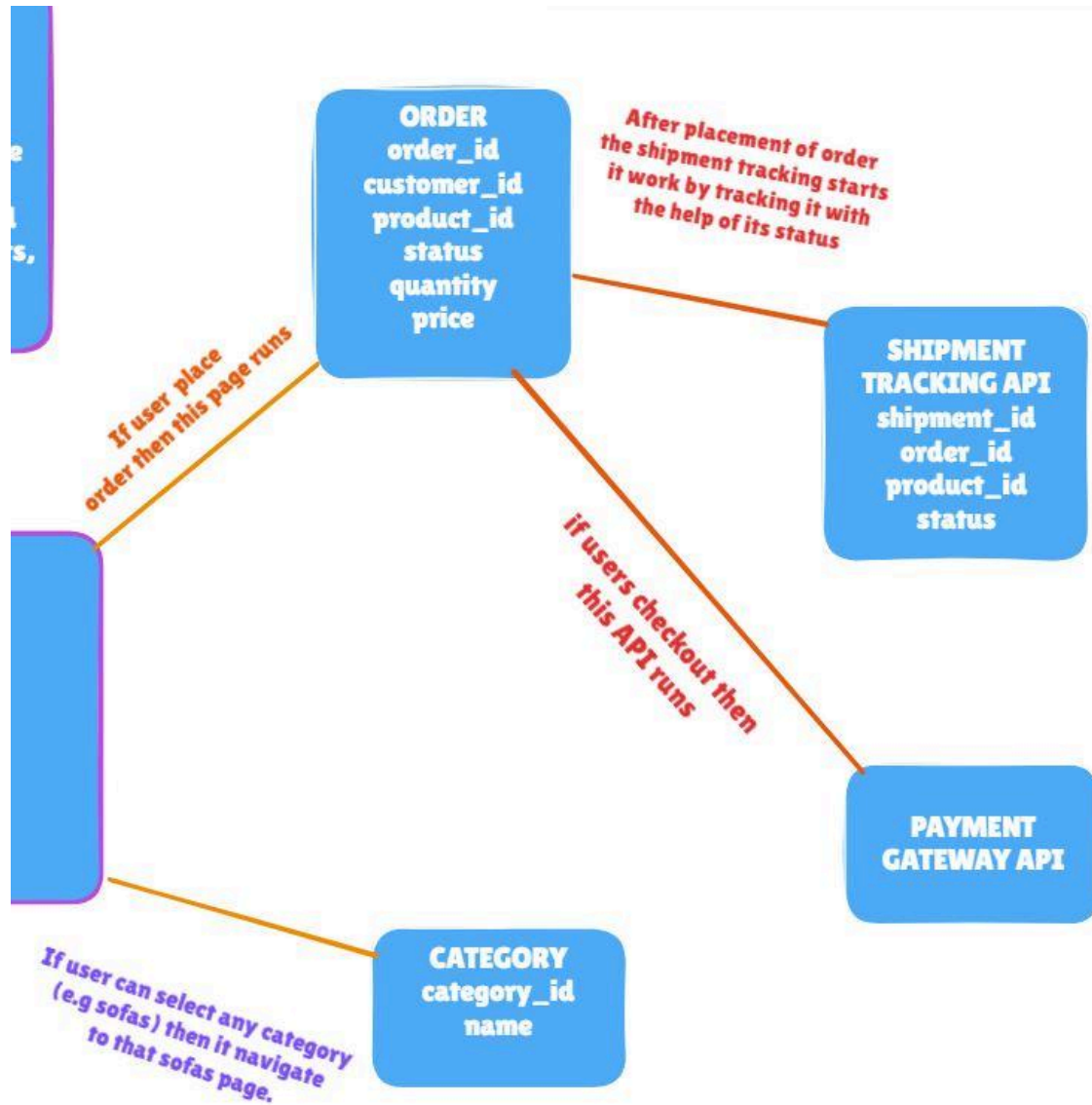
- Display shipment tracking updates in real-time.
- Validate and process payments securely.

2. Design System Architecture



3. Key Workflows





Sanity CMS Schema

Products

```
export default {
  name: 'product',
  type: 'document',
  fields: [
    { name: 'name', type: 'string', title: 'Product Name' },
    { name: 'price', type: 'number', title: 'Price' },
    { name: 'stock', type: 'number', title: 'Stock Level' }
  ]
};
```

4. Plan API Requirements

Endpoint	Method	Purpose	Payload	Responses
/products	GET	Fetch all product details	N/A	{ "id": 66, name: "stool", "price": 89 }
/cart	POST	Add item to cart	{ "product-Id": 5, "quantity": 10 }	{ "cart-Id": 58, "status": "added" }
/checkout	POST	Process checkout	{ "cart-Id": 58, "payment-Info": { ... } }	{ "order-Id": 88, "status": "confirmed" }
/shipment	GET	Get shipment tracking information	{ "orderId": 88 }	{ "tracking-Id": 542, "status": "pending" }

5. Technical Documentation

Login and Signup:

- Firstly user signups then navigate to frontend.
- Details are authenticated and stored in sanity CMS

Cart Management:

- Items added to cart and track by cart endpoints.

Order Confirmation:

- User checkouts and the order stores in sanity CMS with payment status.