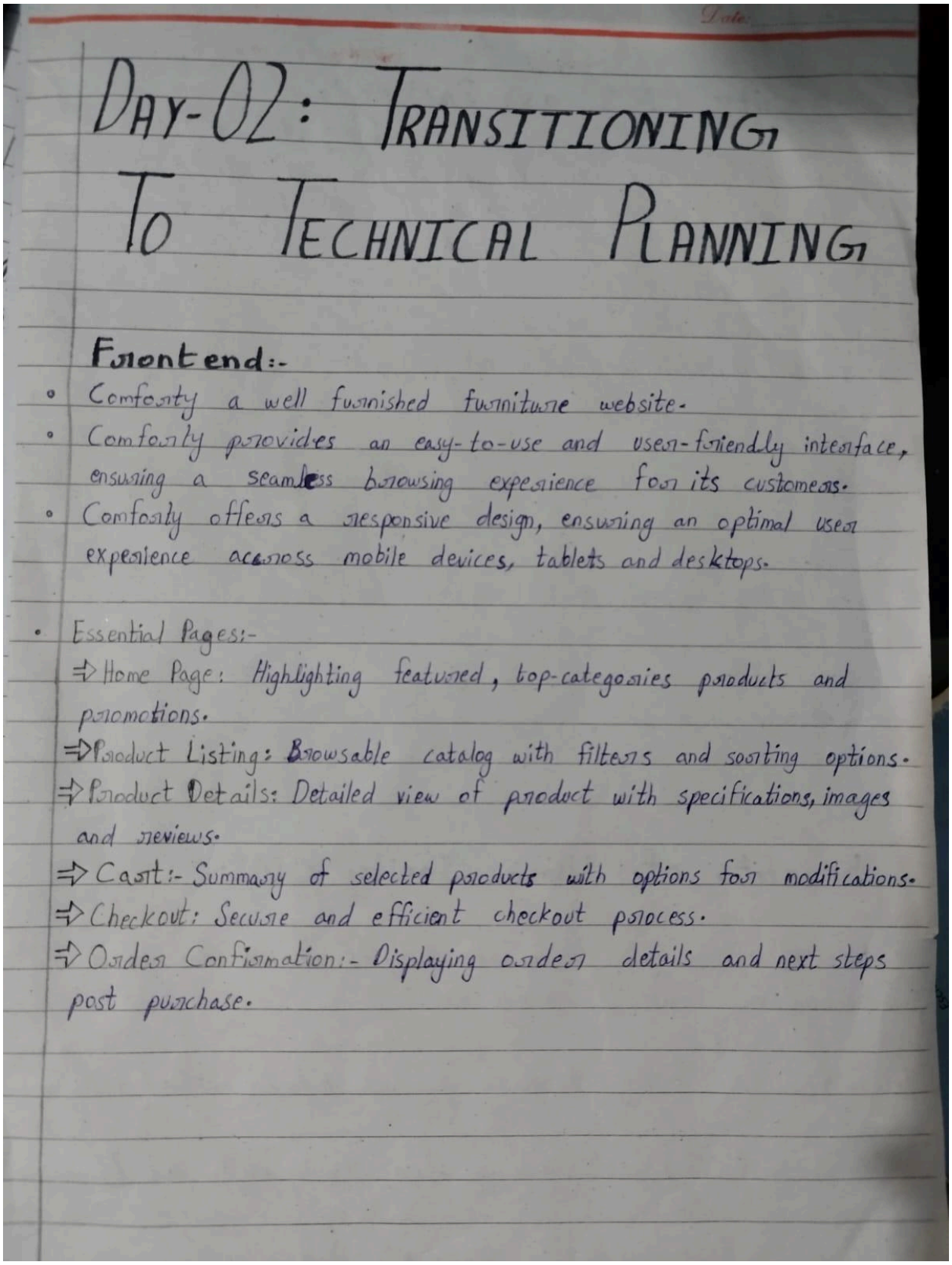
MARKETPLACE BUILDER

DAY-02

TRANSITIONING TO TECHNICAL PLANNING

System Architecture Overview



DAY-02: TRANSITIONING TO TECHNICAL PLANNING

Frontend:-

- Comfority a well furnished furniture website.
- Comfority provides an easy-to-use and user-friendly interface, ensuring a seamless browsing experience for its customers.
- Comfority offers a responsive design, ensuring an optimal user experience accross mobile devices, tablets and desktops.

- Essential Pages:-
  - ⇒ Home Page: Highlighting featured, top-categories products and promotions.
  - ⇒ Product Listing: Browsable 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 Comfority, 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 Comfority's unique needs.
- Real-Time Updates: Any changes in products instantly reflected on frontend.
- Scalability: Sanity supports growing data requirements as Comfority expands globally.
- Integration Friendly: Sanity seamlessly integrates with the frontend framework.

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Date:

Schema Design in Sanity:

- Product Schema; ~~Name~~
  name, categoory, description, price, stock_quantity, image, rating

- Categoory Schema:
  Classification of products in to categories such as sofas, chairs, stools etc.

- Customer Schema:
  name, phone_numbers, email, address.

- Order Schema:
  order_id, payment status

- Review Schema:
  ratings, comments

Date:

Third-Party APIs Integration:-

To enhance Comfonly'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.

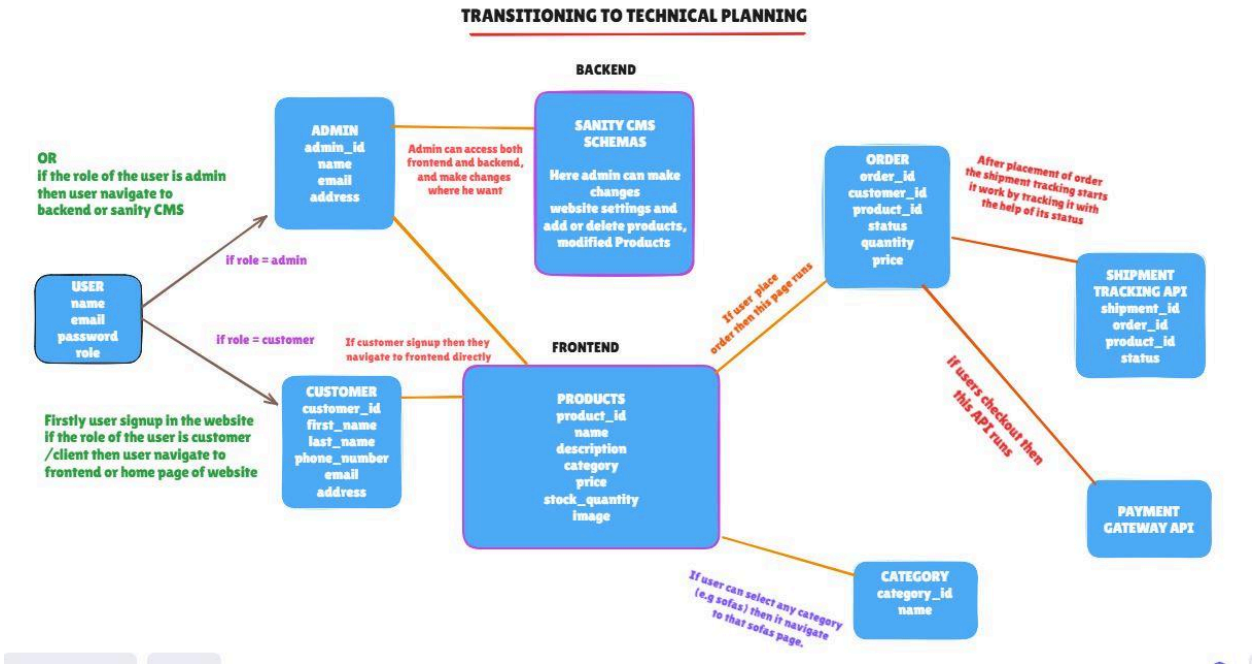
1 Shipment Tracking API:
- Enable real-time tracking of orders for customers.
- Provide shipping updates.
- Customers track their orders directly thorough the Comfonly website.
- Improves transparency and builds customer trust.

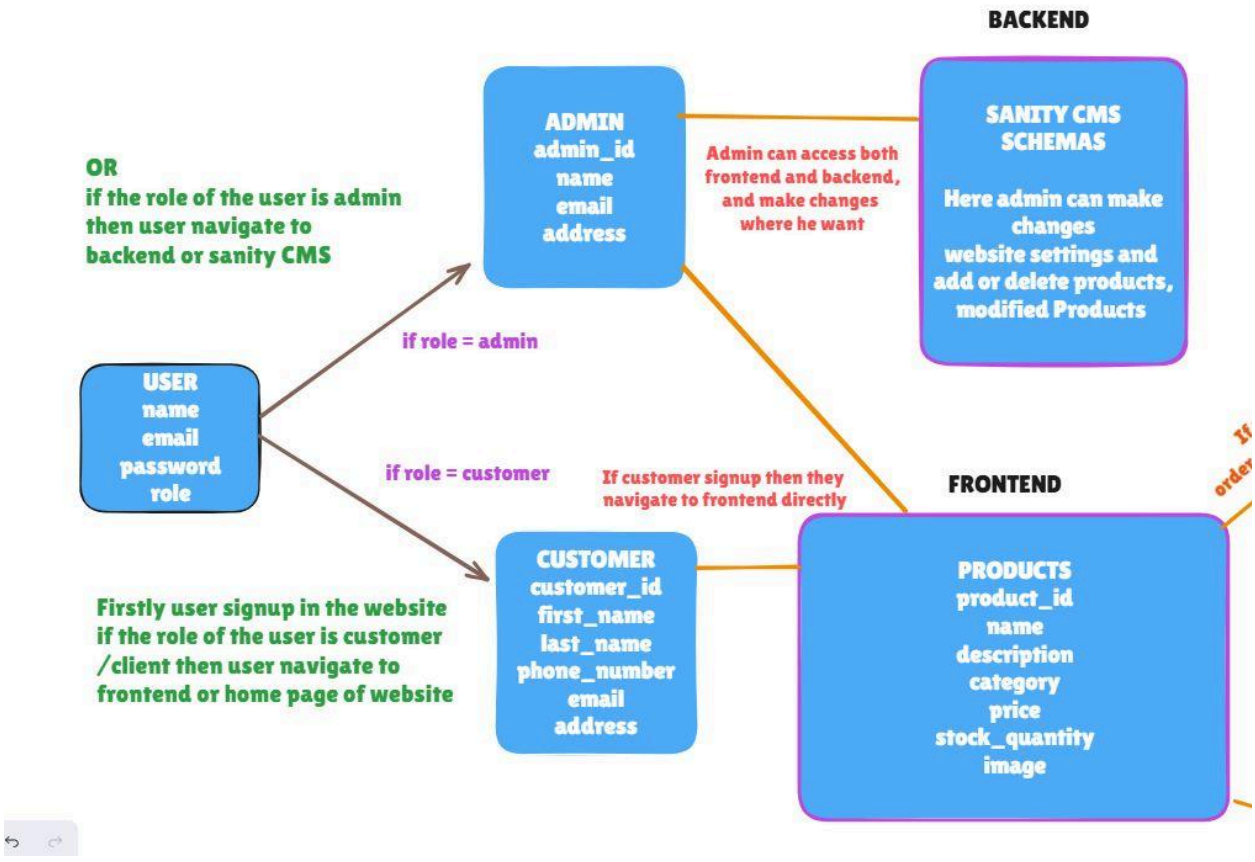
2) Payment Gateway API:
- Securely process customer payments.
- Ensure a smooth checkout process with reliable and secure transactions.

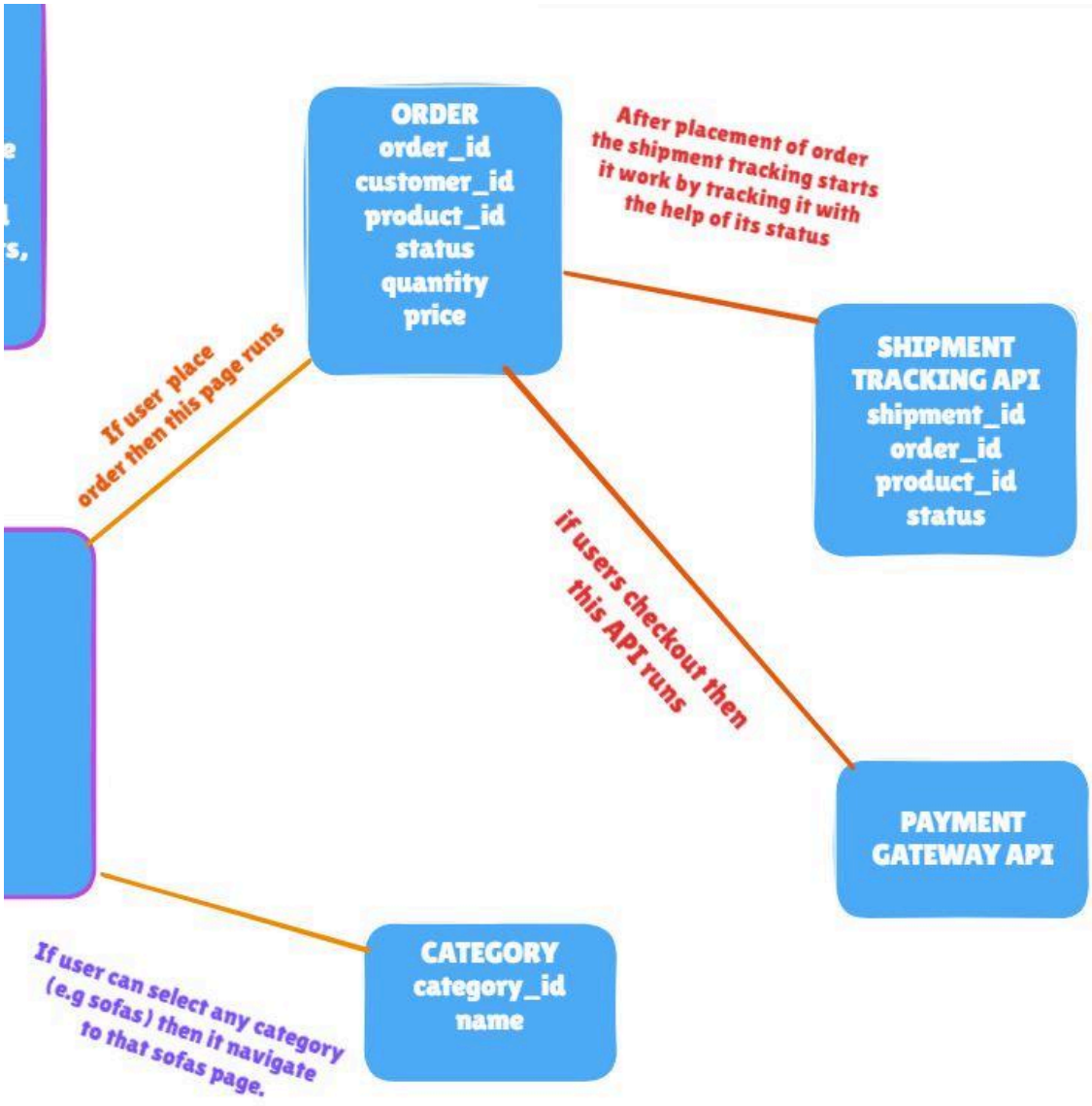
3) Frontend Support:
- Display shipment tracking updates in real-time.
- Validate and process payments securely.

Design System Architecture

Key Workflows






ORDER
order_id
customer_id
product_id
status
quantity
price
After placement of order the shipment tracking starts it work by tracking it with the help of its status
SHIPMENT TRACKING API
shipment_id
order_id
product_id
status
If user place order then this page runs
if users checkout then this API runs
PAYMENT GATEWAY API
CATEGORY
category_id
name
If user can select any category (e.g sofas) then it navigate to that sofas page.

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' }
          ]
         };
```

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"}

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 Confirmatiion:

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