

MARKETPLACE TECHNICAL FOUNDATION - FURNITURE E-COMMERCE PLATFORM

1. DEFINE TECHNICAL REQUIREMENTS FOR MY WEBSITE:

→ Frontend:

1 .Pages To Implement



Signup /Login Page
HomePage
Product Listing Page
Product Detail Page
Cart Page
Wishlist
Checkout Page
Order Confirmation Page

2.Responsive Design

3.Smooth Navigation

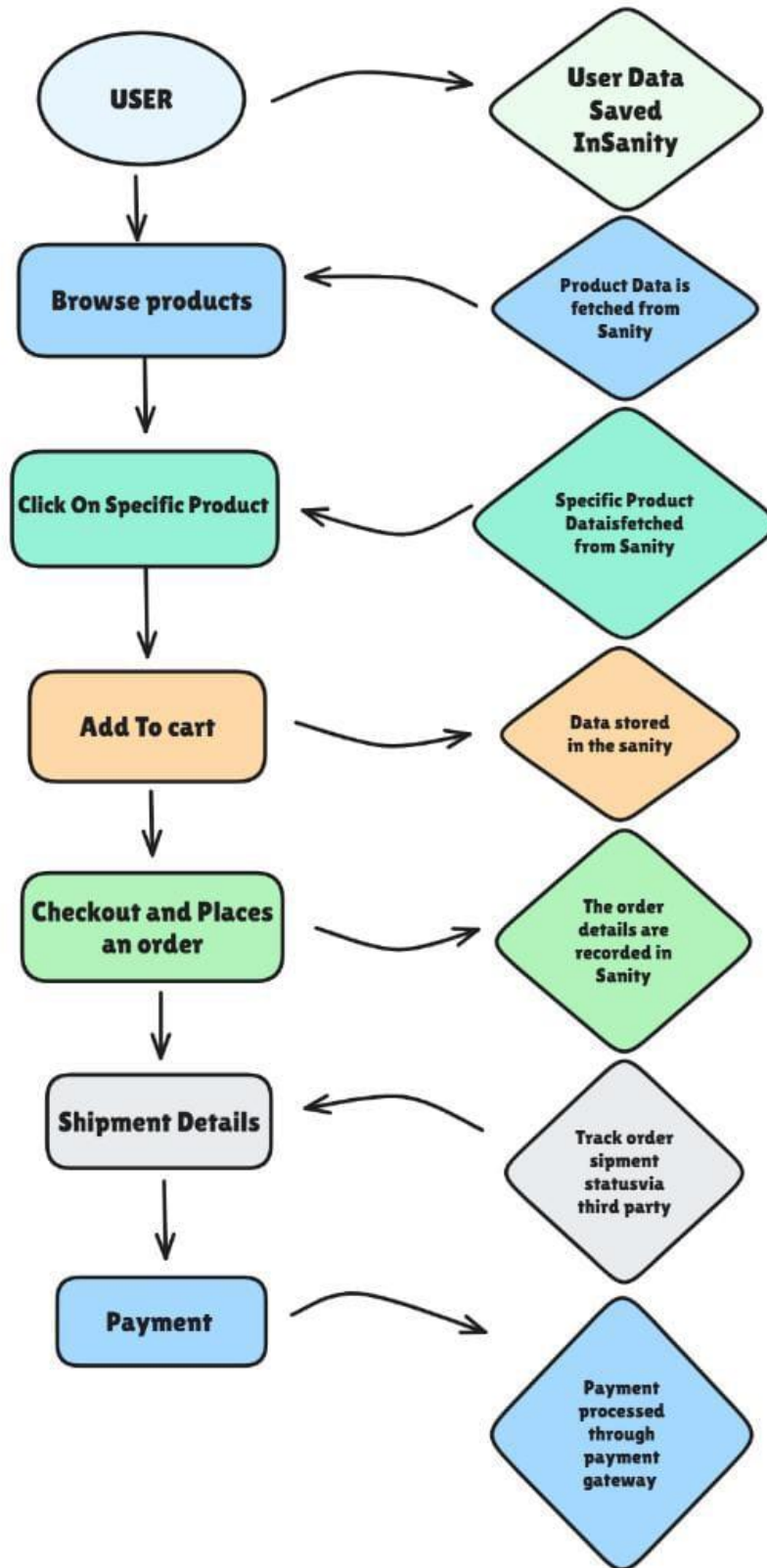
→ Backend

By using Sanity schema CustomerData, ProductData ,
OrderData , DeliveryZone and Paymnts are easily managed

→ Third Part API

- UseShipEngine for Shipment tracking
- Use Stripe , Paypal for payment gateways.
- Geolocation API for Delivery Zones

2. DESIGN SYSTEM ARCHITECTURE :



PLANNING THE TECHNICAL FOUNDATION OF MY WEBSITE

1.1 OVERVIEW OF THIS FLOWCHART :

-When a User come on my website , he will be provided with a good user interface , responsive design and smooth navigation.

-He signup or login in the website and the Customer data will be stored in the sanity.

-He browses the products, the data of products is fetched from sanity.

-He clicks on a product , the detailed product data is fetched from Sanity.

-Adds an item to the cart, the data in sanity updated.

-Places an order, the order data is stored in the sanity.

-For shipment details, we will fetch data from an external API.

-Payment will be processed through payment gateways.. and confirmation will be provided to the customer.

3. PLAN FOR API REQUIREMENTS :

Endpoints	Method	Description	Response
/customer	POST	Update user detail in sanity	{id ,name , email , phone}
/products	GET	Fetch all products	{id , name,price,stock,image}
/product/:id	GET	Fetch data of specific product	{id,name,description,price,stock,category, size,material,weight,image}
/orders	POST	Create new order in sanity	{customerid,productdetail,totalprice}
/orders/:id	GET	Fetch order detail by id	{orderid,customerid,productid,Quantity, Totalprice,orderdate,orderstatus, paymentstatus,shippingcost,deliverydate,discounts}
/shipment/:id	GET	Track order shipment status via 3rd part	{shipmentid ,status, deliverydate}
/payment	POST	Process payment via gateways	{paymentid,orderid,paymentmethod, amount,paymentdate,paymentstatus}

4. SANITY SCHEMA EXAMPLE:

EXAMPLE SCHEMA FOR PRODUCTS :

```
export default
```

```
{ name: 'product',
```

```
type: 'document',
fields: [
  { name: 'name', type: 'string', title: 'Product Name' },
  {name: 'description', type: 'string', title: 'ProductDescription'},
  { name: 'price', type: 'number', title: 'Price' },
  { name: 'stock', type: 'number', title: 'Stock Level' },
  {name: 'category', type: 'string' , title: 'ProductCategory'},
  {name: 'size' , type: 'number', title: 'ProductSize'},
  { name: 'images' , title: 'Images', type: 'array', of: [{ type: "image" }] },
  {name: 'material' , type: 'string', title: 'ProductMaterial'},
  {name: 'weight' , type: 'number', title: 'ProductWeight'},
]
```

5. TECHNICAL ROADMAP:

Steps to Complete the Project

1. Frontend Development:

- Implement responsive UI using Next.js.
- Develop key pages (Signup/Login page ,Home, Product Listing, Product Details, Cart, Checkout, Order Confirmation).

2. Sanity CMS Configuration:

- Set up Sanity CMS backend.
- Design and implement schemas for products, orders, users .

3. API Integration:

- Integrate Sanity APIs for product, cart, and order management.
- Configure third-party APIs for shipment tracking and payment processing.

4. Testing:

- Perform end-to-end testing of all workflows.
- Ensure mobile and desktop compatibility.

5. Deployment:

- Deploy to Vercel.

- Configure and deploy Sanity backend.

2 Milestones and Deliverables

- **Milestone 1:** Complete frontend UI for core pages.
 - **Milestone 2:** Configure Sanity schemas and integrate APIs.
 - **Milestone 3:** Perform workflow testing and resolve issues.
 - **Milestone 4:** Deploy and document the project for final submission.
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