

Day 02 Of Hackathon

Submission Title:

“Marketplace Technical Foundation --- HomeAura General E-Commerce”

System Architecture Overview:

[FrontEnd {Nextjs}]



[Sanity CMS] -----> [Product Data API]



[Third Party APIs] -----> [Shipment Tracking API]

-----> [payment Gateway]

Component Description:

1. FrontEnd (Next.js):

- User Interface for browsing, purchasing and managing orders.
- Dynamic pages for Home, Product listing , Product Details, Cart , Checkout and Order confirmation.

2. Sanity CMS:

- Acts as the backend for products, order and customer data management.
- Customizable schemas to handle various data entities .

3. Third Party API:

- Shipment tracking API : fetches real shipment status.
- Payment Gateway: Process secure payments.

Key Workflows:

1. User Registration:

- User signs up using a form on frontend.
- Data is validated on frontend and sent to sanity.

- Sanity stores the user details.

2. Product Browsing:

- User navigates to product listing pages.
- Frontend fetches product data via sanity product API.
- Products are displayed dynamically.

3. Order Placement:

- User adds items to cart and proceeds to checkout.
- Checkout details are sent to sanity CMS via API.
- Sanity stores the data and user receive order confirmation.

4. Shipment Tracking:

- zuser requests order status.
- Frontend fetches shipment details via third party API.
- Shipment status is displayed to user in real time.

API Requirements:

General E-commerce APIs:

1. Fetch Products:

- Endpoints : /products
- Method: GET
- Description: fetch all available products from sanity.
- Response Example: [

```
{“id”: 1, “name”: “Product 1”, “price” : 100 , “stock”: 20}
```

```
{“id”: 2, “name”: “Product 2”, “price” : 200 , “stock”: 10}
```

```
]
```

2. Create an order:

- Endpoints : /order
- Method: POST
- Description:
- Payload Example:
{
 “customerInfo”: {
 “name”: “Moiz”,
 “email”: Moiz123@gmail.com

```

},
"products":[
{"id": 1, "quantity" : 2},
{"id": 2, "quantity" : 3}
\
"paymentStatus": "Paid"}

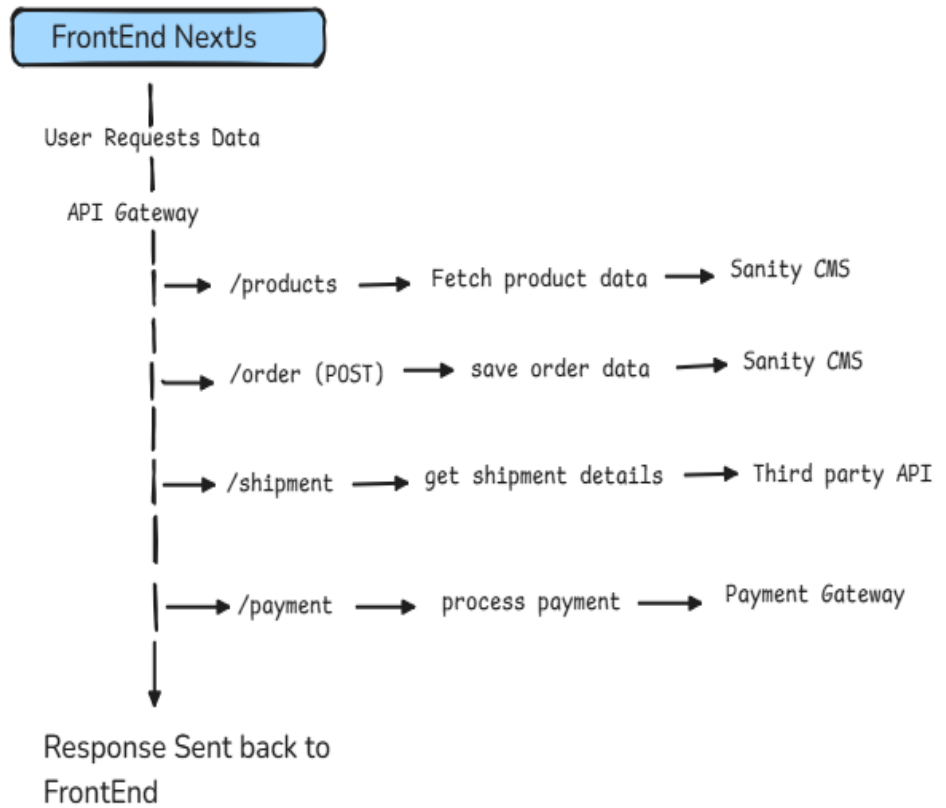
```

3. Shipment Tracking:

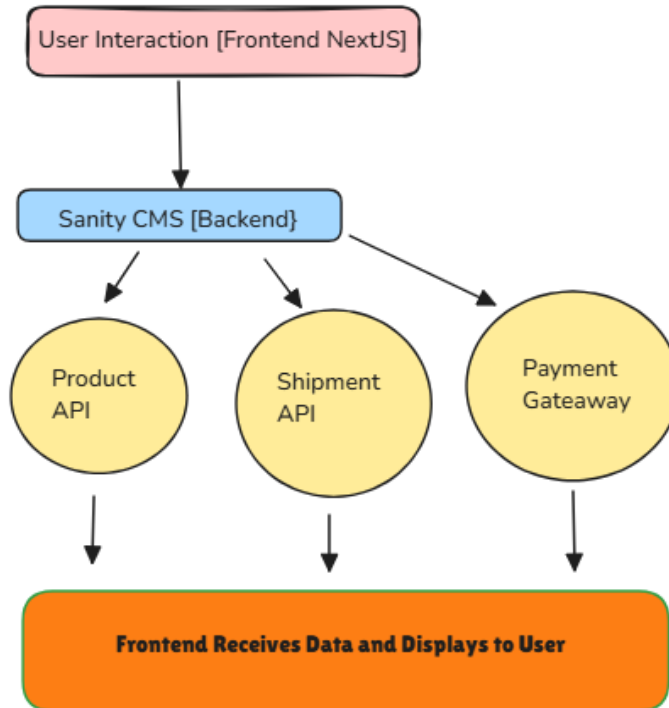
- Endpoint: /shipment
- Method: GET
- Response Example: {"shipmentId": "12345",
- "orderId": "98765",
- "status": "In Proceed", "expectedDeliveryDate": "2025-01-20"}



API EndPoints By Duaa Pirzada

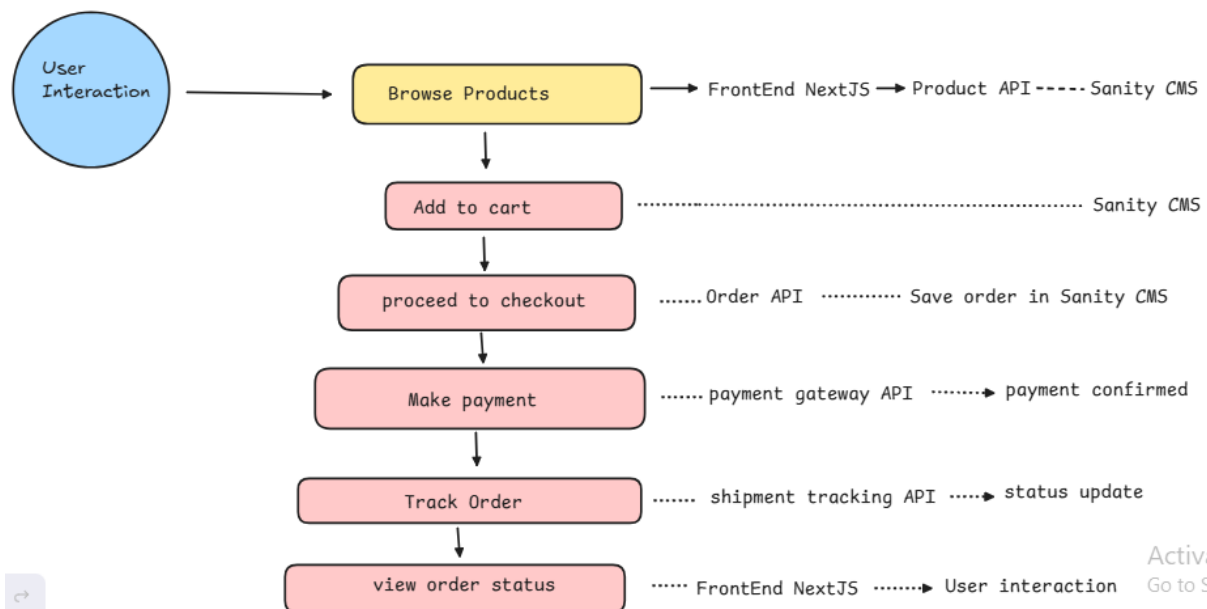


System Architecture By Duaa Pirzada



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Diagram Structure Overflow By Duaa Pirzada



Activate \
Go to Setting