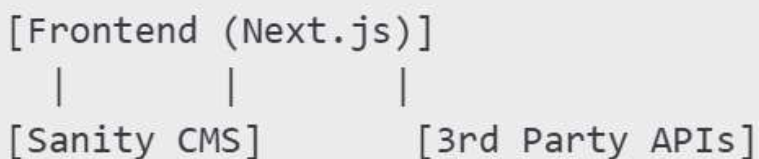


Marketplace Technical Foundation - General eCommerce

1. System Architecture Overview

Diagram:



Description:

1. Frontend (Next.js):

- Displays product listings, details, cart, and checkout.
- Fetches data dynamically from Sanity CMS.

2. Sanity CMS:

- Manages product data, customer details, and order records.

3. Third-Party APIs:

- Handles shipment tracking and payment processing.

Example Workflow:

1. User browses products on the frontend.
2. Frontend fetches product data from Sanity CMS.
3. User places an order:
 - Order details are saved in Sanity CMS.
 - Shipment info fetched via a third-party API.
 - Payment processed through a gateway API.

2. Key Workflows

Product Browsing:

- User views categories or searches for products.
- Data fetched from Sanity CMS via `/products` API endpoint.

Cart and Checkout:

- User adds items to the cart.
- Proceeds to checkout, providing address and payment info.
- Order saved in Sanity CMS and processed.

Shipment Tracking:

- Order status fetched from a third-party shipment API.
- Displayed on the user's order page.

3. API Endpoints

Endpoint	Method	Description	Response Example
/products	GET	Fetch all product details.	{ "id": 1, "name": "Product A", "price": 100 }
/orders	POST	Create a new order in Sanity CMS.	{ "orderId": 123, "status": "Success" }
/shipment	GET	Track order status via third-party API.	{ "shipmentId": 789, "status": "In Transit" }

4. Sanity Schema Example

Product Schema:

```
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' },  
    { name: 'image', type: 'image', title: 'Product Image' }  
  ]  
};
```

Order Schema:

```
export default {  
  name: 'order',  
  type: 'document',  
  fields: [  
    { name: 'customerName', type: 'string',  
      title: 'Customer Name' },  
    { name: 'products', type: 'array', title: 'Products',  
      of: [{ type: 'reference', to: [{ type: 'product' }] }] },  
    { name: 'total', type: 'number', title: 'Total Amount' },  
    { name: 'status', type: 'string', title: 'Order Status' }  
  ]  
};
```

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