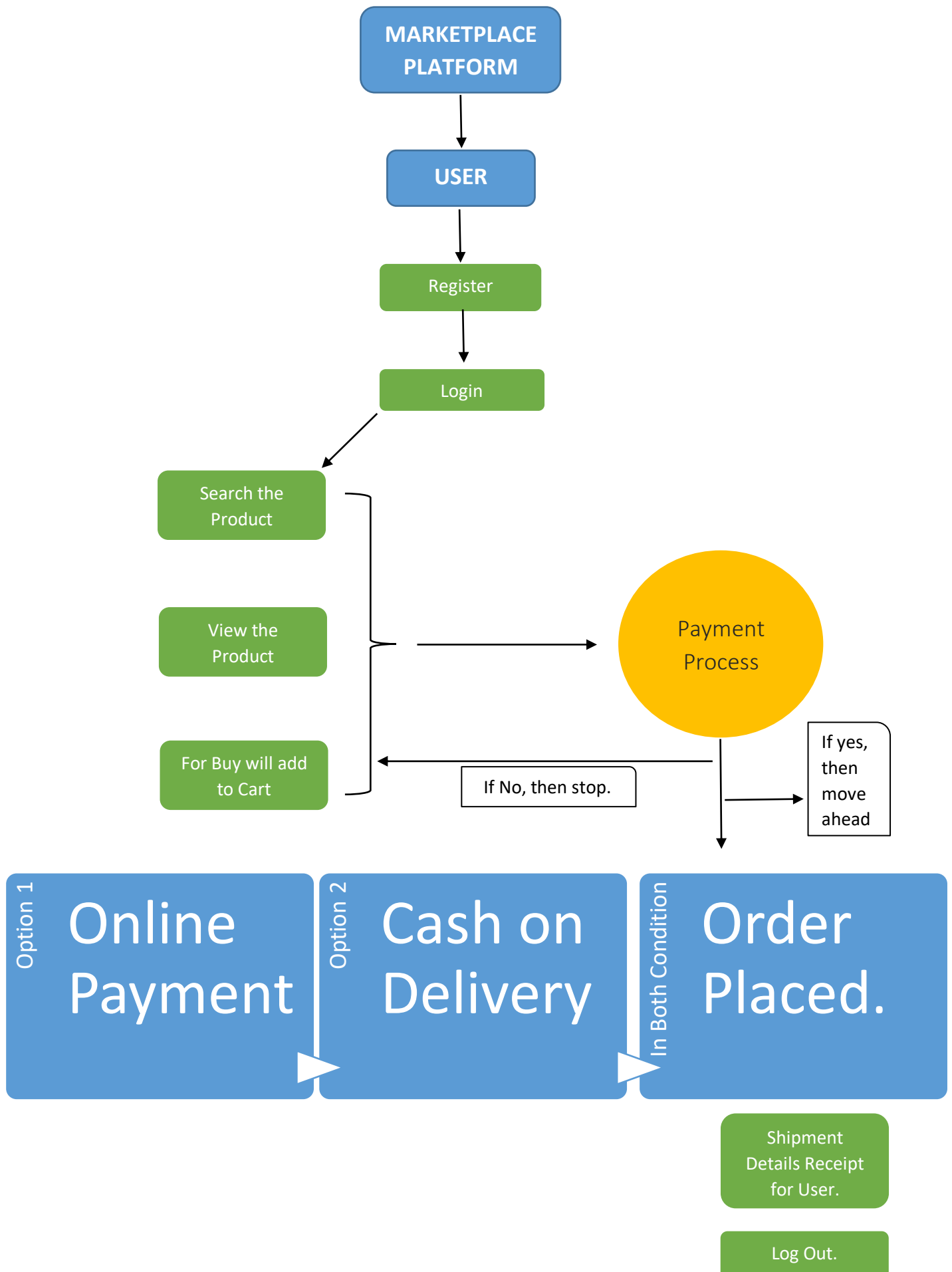
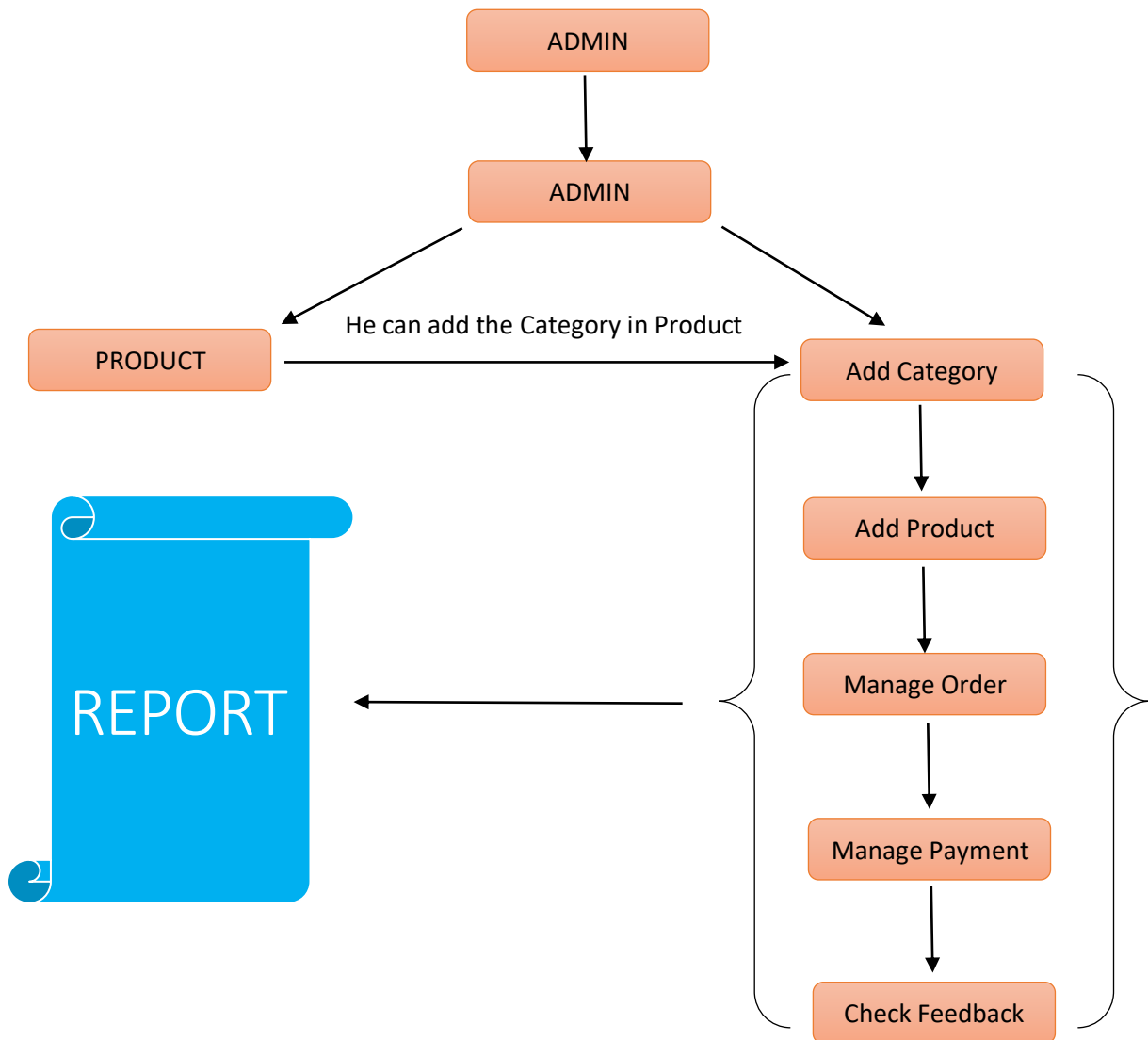


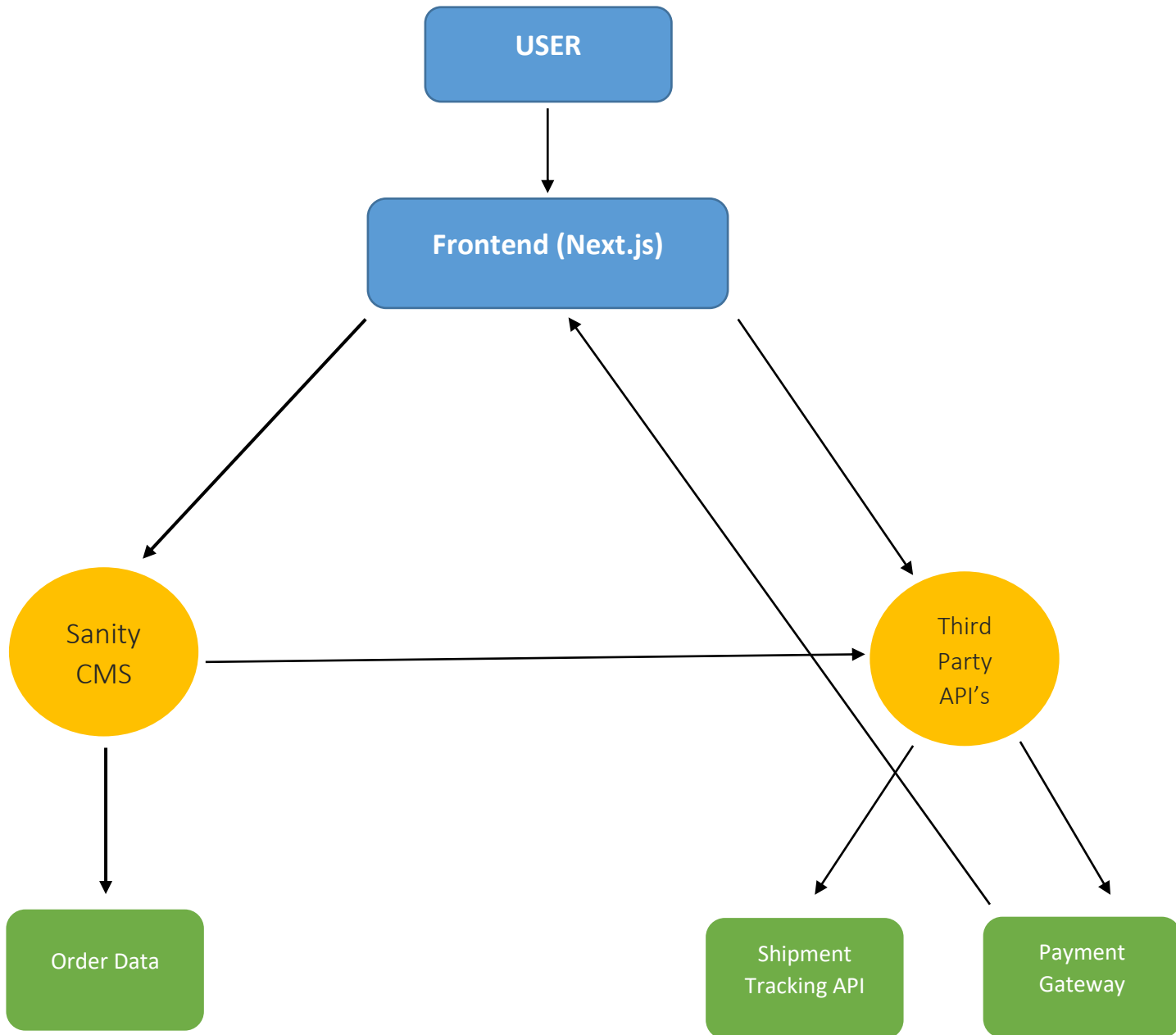
FRONTEND REQUIRED FLOW CHART



ADMIN FLOW CHART



Planning the Technical Foundation Diagram



EXPLANATION

| | |
|---------------------------|--|
| User | USER WILL PERFORM THE ACTION ON FRONTEND PAGE LIKE PRODUCT BROWSING, SELECT THE PRODUCT AND PLACING THE ORDER. |
| FRONTEND (NEXT.JS) | SEND USER ACTION TO THE BACKEND AND THIRD PARTY API'S. |
| SANITY (CMS) | MANAGE AND STORE ALL ORDER AND PRODUCT DATA. |
| THIRD PARTY API'S | THIS WILL HANDLE THE SHIPMENT TRACKING AND PAYMENT PROCESSORS. |
| SHIPMENT TRACKING | THIS WILL PROVIDE REAL TIME TRACKING UPDATES TO THE FRONTEND FOR USER. |
| PAYMENT GATEWAY | WILL PROCESS THE PAYMENT AND WILL SEND BACK THE CONFIRMATION UPDATE. |
| ORDER DATA | ALL THESE DATA WILL STORED IN SANITY CMS FOR BACKEND REFERENCE. (HISTORY). |

Transitioning to Technical Planning.

Define Technical Requirement in any Platform.

Frontend Requirement.

- 1- Make sure that The Platform should be user-friendly for browsing the product and also should be responsive on Mobile or Desktop Device.

Essential Pages.

- 2- Following pages should be part of your platform for the user interaction.
 - a- Home
 - b- About
 - c- Menu
 - d- Shop
 - e- Category
 - f- Sign In
 - g- Sing Up
 - h- Contact
 - i- Product ID (Dynamic Page)
 - j- Add to Cart
 - k- Continuous Shopping
 - l- Payment Method
 - m- Shipment Tracking (Status)
 - n- Order Confirmation.
 - o- Check Out

Backend Requirement With Sanity (CMS).

- 3- Use Sanity (CMS) to managing the following:
 - a- **Product Data, Order Details, History Records of user orders.**
 - b- **Draw Schemas in Sanity to align with product structure (e.g., name, price, stock, id, etc...) &**
 - c- **also for Order structure (e.g., customer info, order details, payment details)**

Third Party API's.

- 4- This will handle the following tasks after placing the order.
 - a. **Shipment tracking information is fetched through a Third-Party API.**
 - b. **Real-time tracking updates are displayed to the user.**
 - c. **Payment details are securely processed through the Payment Gateway.**
 - d. **A confirmation is sent back to the user and recorded in Sanity CMS.**

Interfaces (Data Models):

Product:

- Fields: `_id`, `name`, `price`, `category`, `stock`, `image`, etc.

Customer:

- Fields: `_id`, `name`, `email`, `address`, `phoneNumber`, etc.

Order:

- Fields: `_id`, `productID`, `userID`, `orderStatus`, `totalAmount`, etc.

Payment:

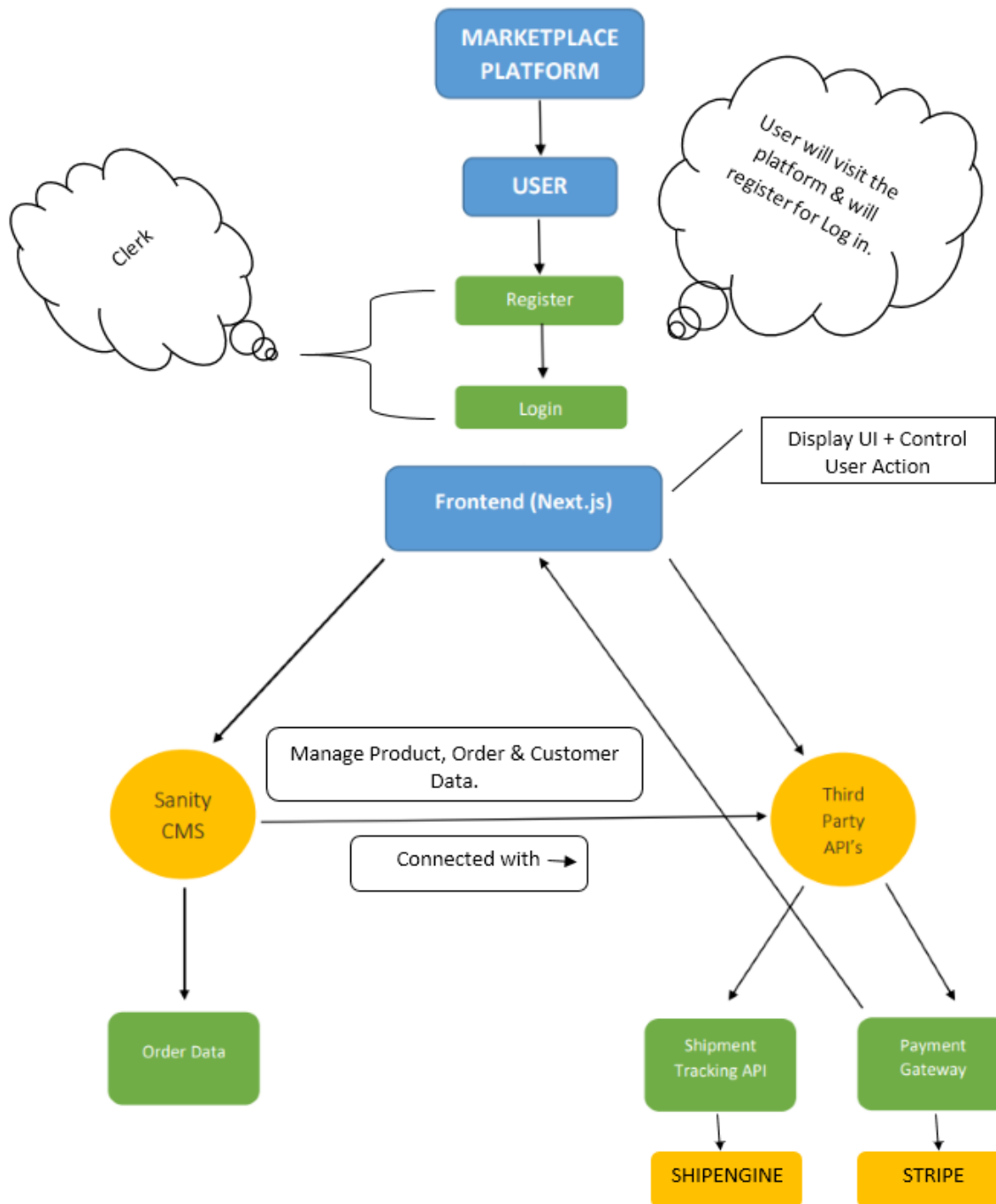
- Fields: `_id`, `orderID`, `paymentMethod`, `amount`, `transactionDate`, etc.

Shipment:

- Fields: `_id`, `orderID`, `courierDetails`, `paymentStatus`, `estimatedDeliveryDate`.

| <u>API Endpoints</u> | | | | | | | |
|----------------------|--------|------------------------------|---------------------------------------|--|--|--|--|
| Endpoint | Method | Description | Response | | | | |
| /Shop | GET | Fetch all product details | {id, name, price, stock, ,image,etc } | | | | |
| /orders | POST | Create a new order | { orderId, status: 'Success' } | | | | |
| /Shipment | GET | Fetch order shipment status | { shipmentId, status, deliveryDate } | | | | |
| /payment | POST | Payment method | { paymentId, status:'Processed' } | | | | |
| /products/id | GET | Fetch single product details | {id, name, price, stock, ,image,etc } | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

DESIGN SYSTEM ARCHITECTURE



EXPLANATION

| | |
|--------------------|--|
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Sanity Schema Example

Here's an example schema for managing product categories and products in Sanity.io:

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: 'customer',
      type: 'reference',
      to: [
        { type: 'customer' }],
      title: 'Customer'
    },
    { name: 'products',
      type: 'array',
      of: [
        { type: 'reference',
          to: [
            { type: 'product' }
          ]
        }
      ]
    },
    { name: 'totalAmount',
      type: 'number',
      title: 'Total Amount' },
    {
      name: 'status',
      type: 'string',
      title: 'Order Status' }
  ]
};
```