DETAILED TECHNICAL DOCUMENT

1. System Architecture Overview:

Front End & Styling:

1. Using Next.js for building front-end of marketplace.

2. Using Tailwind-CSS for styling and designing.

3. Using Shaden-Ui for already prepared component and low work load.

4. Responsive Design for all mobile and product.

5. Use authentication for security.

Backend:

1. Using Heedless CMS (Sanity) to manage Data

- Manage Products Data
- Manage Customers Data
- Manage Order Data
- Mange Inventory of Product's

Third Party API:

1. Using Sanity Api to fetch Data for Products, User, Order.

2. Using Payment Gateway for payment online and secure transaction.

3. Using Shipment Api for orders Product, Tracking, Delivery status.

2. Key Workflows:

Authentication:

User visit the web page the authentication checked if user login or not then on the base of authentication the next task done. For Example, If User is new not registered before do the singup page is shown.

Order Placement:

User go to products page then user select the product that he likes, then click on product card component, Shows selected product details after that the user add the product to cart or directly go to the payment/checkout page for payment, After payment the order is placed then the data from the user order products is send to sanity for managing.

Payment-Api:

When User payed the payment the request sent to payment api for secure transactions and checked ether the payment is succeeded or failed.

Shipment-Api:
After payment done and ordered is placed the data is sent to shipment api for delivering the products to the given address, User can see product status ether it is packed, departure or delivered. User also see live tracking of products.

3. API Requirements:

Sanity/product (Get): This api is used to Get Product Data for Products page.

Sanity/Order (Post & Get): This api is used to send Order Data to the sanity for Management and also to fetch data of order for user in which user can see the status of their order or cancel the order (under term and condition).

Api/Payment (Post): User send money to send money by payment api and api progress either the payment is succeeded or failed.

Api/Shipment/Status (Get & Post): User can see the ordered product data where it is departure or delivered. User ordered data sent to Shipping Api for further working like for packing order, parcel send to the give address.

Api/Shipment/Tracking(Get): User can see the product live where the product is reached and how much time user will receive their parcels.

4. Sanity Schema Design:

Schema for Products:
```
export const productSchema = {
  name: "product",
  title: "Product",
  type: "document",
  fields: [
   {
     name: "productName",
     title: "Product Name",
     type: "string",
   },


   {
     name: "category",
     title: "Category",
     type: "string",
   },
```

```
      {
        name: "price",
        title: "Price",
        type: "number",
      },
      {
        name: "quantity",
        title: "quantity",
        type: "number",
      },
      {
        name: "image",
        title: "Image",
        type: "image",
        options: {
          hotspot: true,
        },
      },
      {
        name: "description",
        title: "Description",
        type: "text",
      },
    ],
};
```

Schema for Order:

```
export const orderDetails = {
 name: "formSubmission",
 title: "Form Submission",
 type: "document",
 fields: [
  {
   name: "firstName",
   title: "First Name",
   type: "string",
  },
  {
   name: "lastName",
   title: "Last Name",
   type: "string",
  },
  {
   name: "address1",
   title: "Address 1",
   type: "string",
  },
  {
   name: "address2",
   title: "Address 2",
   type: "string",
  },
  {
   name: "postalcode",
   title: "Postal Code",
   type: "string",
  },
  {
   name: "locality",
   title: "Locality",
   type: "string",
  },
```

```
        {
          name: "email",
          title: "Email",
          type: "string",
        },
        {
          name: "phone",
          title: "Phone",
          type: "string",
        },
        {
          name: "pan",
          title: "PAN",
          type: "string",
        },
      ],
    };
```

5.   Collaboration Notes:

I didn't share with anyone even didn't post on LinkedIn so I have no collaboration noted.