DAY 3 – API INTEGRATION

GENERAL E-COMMERCE

API INTEGRATION PROCESS :

1. **Integrate Sanity Setup and Initialize Environment Variables**

- Sanity Setup: Sanity is a headless CMS that helps manage content in a structured way. The first step is to create a Sanity account, then set up a new project and dataset (e.g., production). Sanity Studio is the interface for managing content types and schema definitions.
- Environment Variables: For security, environment variables like SANITY_PROJECT_ID and SANITY_DATASET are used to configure the connection between your frontend app and the Sanity API. These are usually stored in a .env file in your project.

2. **Data Fetching**

- Fetching Data: To get content from Sanity, you use the Sanity API, which allows you to send GROQ (Graph-Relational Object Query) requests to retrieve specific content. Queries define what data to fetch, such as blog posts, authors, or other content types. This data is then displayed dynamically on your website or application.

3. **Data Processing**

- Processing Data: Once data is fetched from Sanity, you may need to process it before displaying it. This could involve formatting dates, sorting data, or transforming content into a displayable format (e.g., turning Markdown text into HTML). Processing ensures the data fits the structure your application needs.

4. **Data Creation in Sanity**

- Creating Content: Sanity allows content creators to define and create new content using schemas (content models) which structure how the content should be entered. For example, a "post" schema might define fields like title, body, and author. Once the schema is set up, users can add content through the Sanity Studio interface, which can then be fetched dynamically in your app.

5. **Error Handling**

- Handling Errors: While interacting with Sanity's API, you might encounter issues such as failed API requests or invalid data formats. It's important to implement error handling to gracefully manage these situations. This could involve using try-catch blocks or checking for errors in API responses, ensuring that the application continues to function smoothly even when issues arise.

ADJUSTMENT MADE TO SCHEMAS :

1. Product Schema (products.ts)

- **Purpose**: This schema serves as the main structure for all types of products in your store. It can be used as a base for the other more specific product types like cricket bats, shoes, etc.
- **Fields**:
  - name: String field for the product's name.
  - price: Number field for the product's price.
  - description: Text field for detailed information about the product.
  - image: Image field for the product's image.
  - category: Reference field to link to specific categories (e.g., cricket bats, shoes).

2. Cricket Bats Schema (cricket_bats.ts)

- **Purpose**: This schema represents cricket bats, a specific product type. It extends from the base products schema or can be a separate schema with more specialized fields.
- **Fields**:
  - material: String field to specify the bat's material (e.g., willow, synthetic).
  - weight: Number field to specify the weight of the bat in grams.
  - size: String field for the size (e.g., short handle, long handle).
  - sponsorship: Boolean to indicate if the bat is associated with a sponsorship.

3. Cricket Balls Schema (cricket_balls.ts)

- **Purpose**: This schema handles cricket balls, another specific type of product.
- **Fields**:

  - color: String field to indicate the color of the ball (e.g., red, white).
  - material: String field for the material of the ball (e.g., leather).
  - weight: Number field to specify the ball's weight.
  - brand: String field to specify the ball's brand (e.g., Kookaburra, SG).

4. Protections Schema (protections.ts)

- **Purpose**: This schema would be used to store protective equipment such as gloves, pads, helmets, etc.
- **Fields**:
  - type: String field for the type of protection (e.g., gloves, pads, helmet).
  - size: String field for the size of the protection (e.g., small, medium, large).
  - material: String field to define the material used (e.g., leather, synthetic).
  - price: Number field for the price of the protection gear.

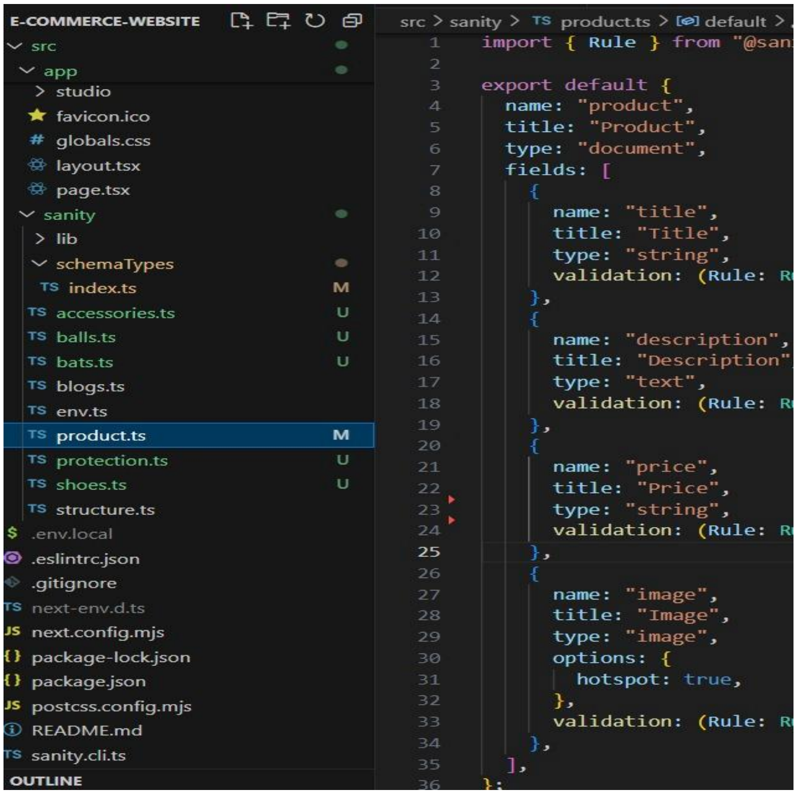
5. Shoes Schema (shoes.ts)

- **Purpose**: This schema manages product data for cricket shoes.
- **Fields**:
  - brand: String field for the shoe brand (e.g., Adidas, Nike).
  - size: String field for shoe sizes (e.g., 8, 9, 10).
  - color: String field for the shoe color (e.g., white, black).
  - material: String field to specify the material used (e.g., synthetic, rubber).

6. Accessories Schema (accessories.ts)

- **Purpose**: This schema stores products related to accessories, such as bags, hats, or water bottles.
- **Fields**:
  - type: String field to define the type of accessory (e.g., bags, caps, water bottles).
  - color: String field for the accessory's color.
  - material: String field for the material used in the accessory (e.g., cotton, nylon).
  - price: Number field to define the price of the accessory.

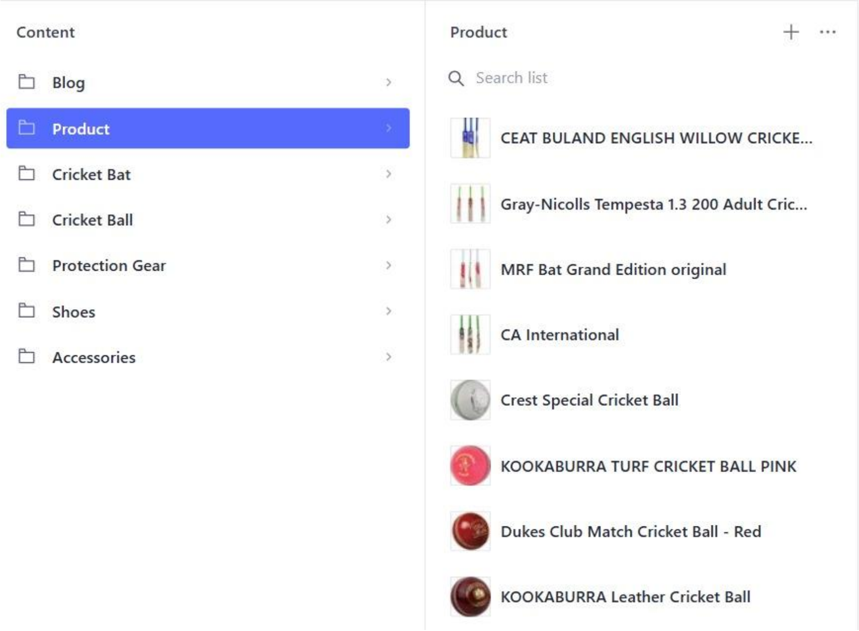
SCHEMA TYPES :



```
import { Rule } from "@san

export default {
  name: "product",
  title: "Product",
  type: "document",
  fields: [
    {
      name: "title",
      title: "Title",
      type: "string",
      validation: (Rule: R
    },
    {
      name: "description",
      title: "Description"
      type: "text",
      validation: (Rule: R
    },
    {
      name: "price",
      title: "Price",
      type: "string",
      validation: (Rule: R
    },
    {
      name: "image",
      title: "Image",
      type: "image",
      options: {
        hotspot: true,
      },
      validation: (Rule: R
    },
  ],
};
```

SANITY FIELDS :



CEAT BULAND ENGLISH WILLOW CRICKE...

Gray-Nicolls Tempesta 1.3 200 Adult Cric...

MRF Bat Grand Edition original

CA International

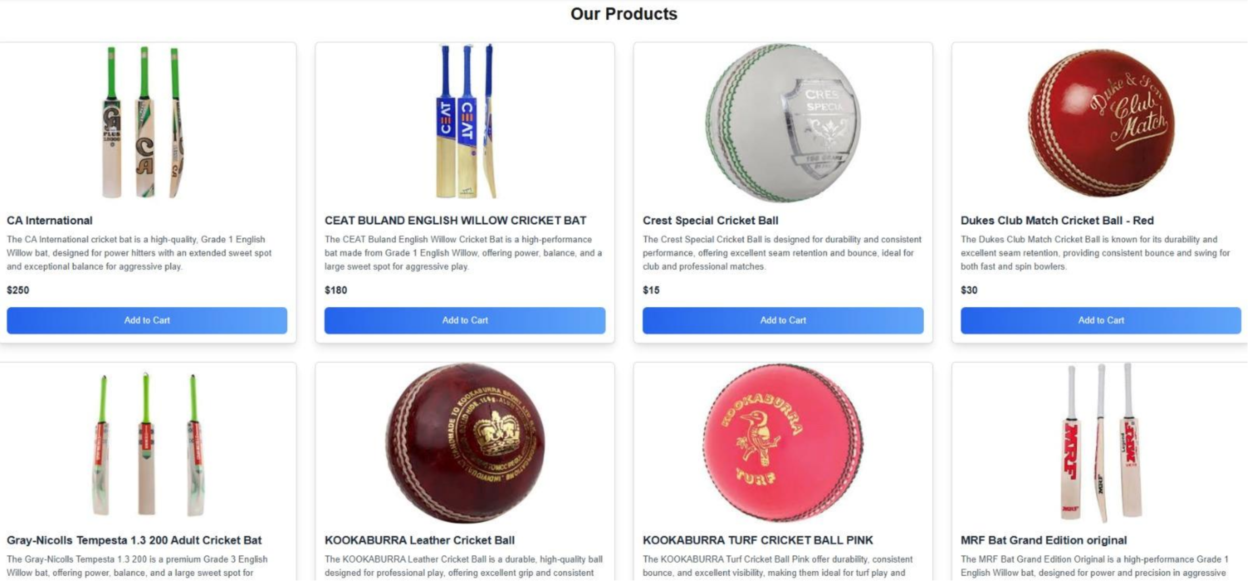
Crest Special Cricket Ball

KOOKABURRA TURF CRICKET BALL PINK

Dukes Club Match Cricket Ball - Red

KOOKABURRA Leather Cricket Ball

DATA IN FRONTEND :



Our Products

CA International

The CA International cricket bat is a high-quality, Grade 1 English Willow bat, designed for power hitters with an extended sweet spot and exceptional balance for aggressive play.

$250

CEAT BULAND ENGLISH WILLOW CRICKET BAT

The CEAT Buland English Willow Cricket Bat is a high-performance bat made from Grade 1 English Willow, offering power, balance, and a large sweet spot for aggressive play.

$180

Crest Special Cricket Ball

The Crest Special Cricket Ball is designed for durability and consistent performance, offering excellent seam retention and bounce, ideal for club and professional matches.

$15

Dukes Club Match Cricket Ball - Red

The Dukes Club Match Cricket Ball is known for its durability and excellent seam retention, providing consistent bounce and swing for both fast and spin bowlers.

$30

Gray-Nicolls Tempesta 1.3 200 Adult Cricket Bat

The Gray-Nicolls Tempesta 1.3 200 is a premium Grade 3 English Willow bat, offering power, balance, and a large sweet spot for

KOOKABURRA Leather Cricket Ball

The KOOKABURRA Leather Cricket Ball is a durable, high-quality ball designed for professional play, offering excellent grip and consistent

KOOKABURRA TURF CRICKET BALL PINK

The KOOKABURRA Turf Cricket Ball Pink offer durability, consistent bounce, and excellent visibility, making them ideal for turf play and

MRF Bat Grand Edition original

The MRF Bat Grand Edition Original is a high-performance Grade 1 English Willow bat, designed for power and precision in aggressive