# DAY2 MARKETPLACE TECHNICAL FOUNDATION

## 01 FRONTEND REQUIREMENT

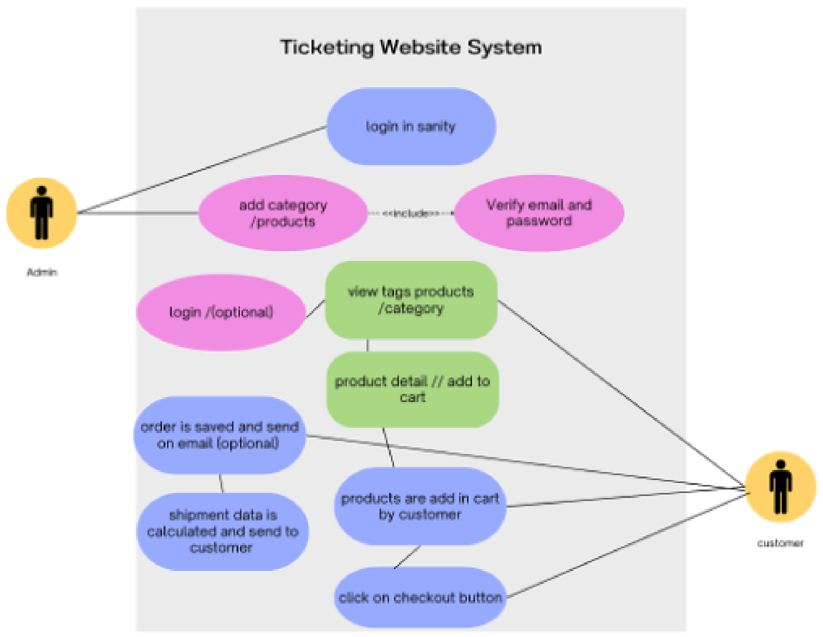
- a. TopNavbar: common in all .these two contain dropdown for changing language which can be localization “i8ln” and currency change – these two feature can be done in future. Also it contain cart and wishlish which will done through context api (like adding product in wishlist or cart)
- b. Navbar : These contain multiple pages
- c. Footer : These contain pages link.
- d. Home page : Now on home page there is a section for featured products , latest products , trending product –(these are product which will fetch from database using tags like featured latest and trending and category when on clicking category – it will shifted to product page using dynamic routing.
- e. Product page: Product detail page contains view as ascending or descending order feature also it contains product under category .
- f. Product detail page contains detail information of product and add to cart functionality . On clicking product will be added to cart.On clicking wishlish product will add to wishlist as well
- g. Now clicking on cart button on top we will directed to cart page. Now total and subtotal will be calculated and clicking on calculate shipping button we will be calculating shipping will calculated based on by shipengine.
- h. The product and total and subtotal will be added to orders .
- i. The products are added in cart and wish list . Note they will be cleared when user logout.
- j. Here we are keeping cart and wish list in contextapi for global state management and the reason is that we don’t want to unnecessary on database and also it will time to fetch it.
- k. Since we are using sanity there are two users admin who will add category and product and a another user who will see products and add them so we need to track them so will also provide a contact form to save their info.
- l. After order is save a notification will be given “Your order is saved”.

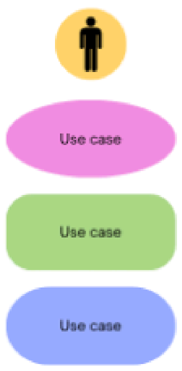
## 02 FRONTEND REQUIREMENT

- 1. Backend --- sanity is being as database.
- a. Category --- schema design by admin
- b. Product --- schema design by admin
- c. Review --- saved to schema by customer.
- d. Order --- saved to schema by customer.
- e. Payment – saved by customer to schema.
- 2. Third party API
- a. Stripe can be used for handling payments done by cards
- b. Shipment engine to calculate shipment
- c. Bandmay can be use for handling loan because furniture price can be costly.
- d. Tab ui – react library
- e. Star rating library.
- EMAIL NODEMAILER

# 02 SYSTEM ARCHITECTURE

**ecommer ce**


Ticketing Website System
login in sanity
add category /products
<<include>>
Verify email and password
Admin
login /(optional)
view tags products /category
product detail // add to cart
order is saved and send on email (optional)
shipment data is calculated and send to customer
products are add in cart by customer
click on checkout button
customer



——Use this line between actors and use cases——

◂--------Use this line between use cases--------▸

| | | |
|---|---|---|
| nextjs - frontend | sanity -backend | |
| ↓ Login /create account screen | ↓ Data is stored in sanity | confirmation through email |
| View category --products | > Data is fetched for api/category and api/products | shown to user |
| add to cart /wishlist | add through context api/ destroy when logout | cart added product and show to user |
| Order -placement | order is saved in sanity | Order detail is save in database --sanity |
| Shpping tracking | Shipping calculation is fetched by user --via shipment engine | |

# 02 endpoints

3- Plan API requirement
In here first the data will be fetch from MockAPI,

----------------------------------
End point Name:/category
Method :GET
Description: fetch category _id, name, image from sanity
Response Detail:{id:1,category:chair,category:img_url}
---------------------------------
End point: Name:/product
Method : GET
Description:fetch product _id , name , colours,beforeprice,afterprice,rating,description,catergories_id,tags from sanity
Response detail:{_id:1,name:plamwoodchair,color:[
Red
,yellow,
Blue],beforeprice:321,afterprice : 123 ,rating:4,description:"abc xx",
categories_id:1,tags:[latest,featured]}
------------------------------------------------
For review:
End point :/review
Method:post
Description : post for each product
Product description : review :{_id,review,rating,p_id}

-----------------------------------------
For certain product based on featured , latest , trending
End point : product?tags=${tags} tags is featured
Method : get
Description : get certain product based on tags
{_id:1,name:plamwoodchair,color:[
Red
,yellow,
Blue],beforeprice:321,afterprice : 123 ,rating:4,description:"abc xx",
categories_id:1,tags:[featured],r_id:1}

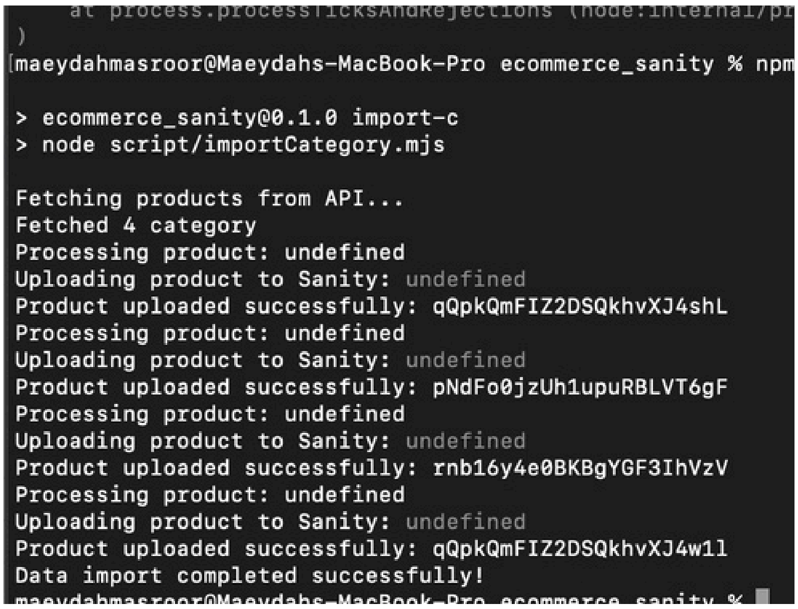
-------------------------------------------------
End point:/order
Method :post
Description : create order in sanity
Payload: order:{
Status, date purchased,price
} ,customer info{
First name
Lastname
Address
Address detail:
{first address , second address and city , country}
}} , product detail :{ img , name , color , size , price},subtotal , total},payment:{card type , name , card number , date}
------------------------------------
Endpoint Name: /shipment
Method: GET
Description: Track order status via third-party API.
Response: Shipment ID, order ID, status, expected delivery date.
----------------------------------------

# 03

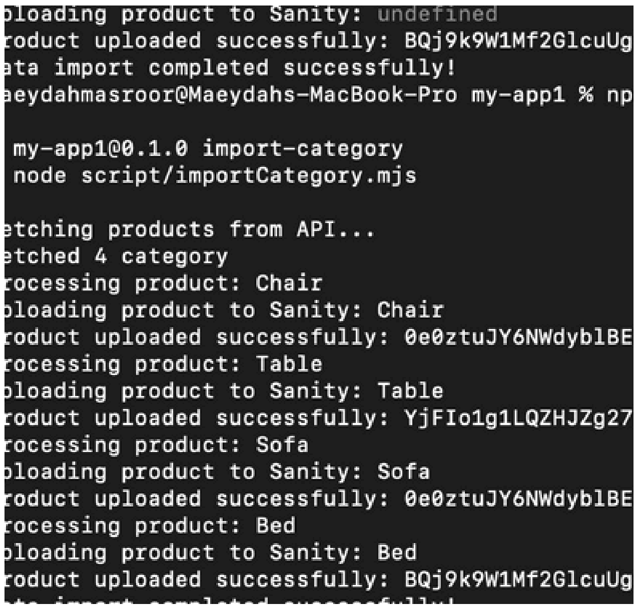
1. Here we will be using context api for global state management so that cart value increased or decreased based on add to cart value which is design in product detail page. Same goes for wish list as well
2. Dynamic routing is being use by linking category -> catgory->[id] ->product->[id]
3. APi confriguation defined above.
4. Use cases
a. As an admin , I add product inside category or use mock api to store data
b. As an admin I view orders and shiping of each customer
c. As an admin I do above activity by login in first using email and password
d. As a customer I view a product inside category or product display on home page
e. As customer I click on category and its directs me to products page having lots of products
f. As a customer I click on add to cart and value in cart goes to 1 I , can update or decreased value by – or +
g. As admin I add stock inside product ,So when product goes out stock it no add to cart is shown.
h. As a customer after I have add product on cart , I go checkout where I fill information (email ,password , address) and it provide total value and upon clicking calculate it calculate amount based on address and courier service.
i. A order is confirmed I receive email regarding order.
5. Technical milestone
a. First define schema --- refined it
b. Next define mock api – may be problem because it give paid after two api made
c. Next migrate mock api on sanity
d. Next output saved product on sanity.
e. Next make dynamic routing using category -> category->[id]->page.tsx ->product->[id]
f. Next create context api --- add to cart
g. Optional integrate --- bandmay api
h. Save cart info in order schema
i. Next use shipping to calculate –
j. Next email

## 04 Data Migration Option

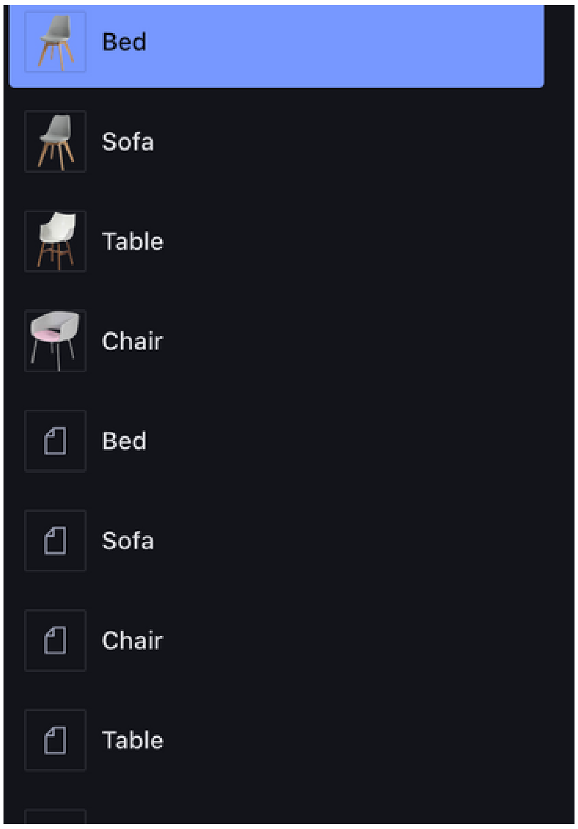
in this step we are going to create a script folder in main folder and then write a script and import[product or category].mjs and then to use and run script we are going to write node “pathname of script” and then on command prompt run npm run [importdata]



```
   at process.processTicksAndRejections (node:internal/pr
 )
[maeydahmasroor@Maeydahs-MacBook-Pro ecommerce_sanity % npm

 > ecommerce_sanity@0.1.0 import-c
 > node script/importCategory.mjs

 Fetching products from API...
 Fetched 4 category
 Processing product: undefined
 Uploading product to Sanity: undefined
 Product uploaded successfully: qQpkQmFIZ2DSQkhvXJ4shL
 Processing product: undefined
 Uploading product to Sanity: undefined
 Product uploaded successfully: pNdFo0jzUh1upuRBLVT6gF
 Processing product: undefined
 Uploading product to Sanity: undefined
 Product uploaded successfully: rnb16y4e0BKBgYGF3IhVzV
 Processing product: undefined
 Uploading product to Sanity: undefined
 Product uploaded successfully: qQpkQmFIZ2DSQkhvXJ4w1l
 Data import completed successfully!
 maeydahmasroor@Maeydahs-MacBook-Pro ecommerce_sanity %
```



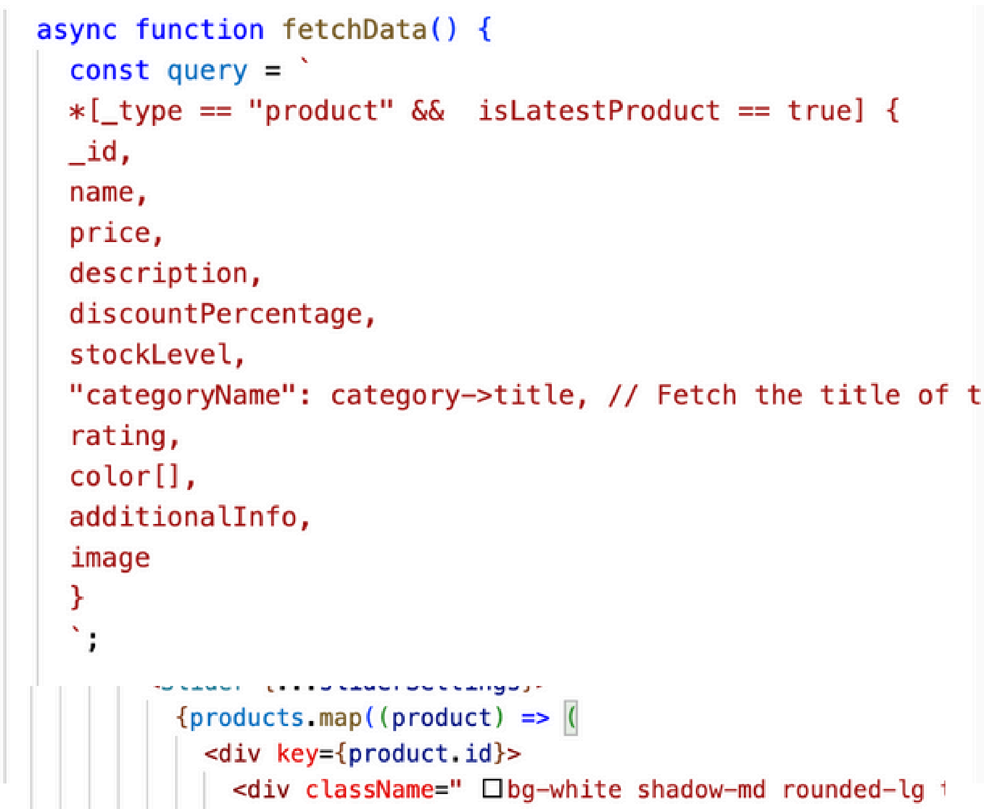
```
ploading product to Sanity: undefined
roduct uploaded successfully: BQj9k9W1Mf2GlcuUg
ata import completed successfully!
aeydahmasroor@Maeydahs-MacBook-Pro my-app1 % np

 my-app1@0.1.0 import-category
 node script/importCategory.mjs

etching products from API...
etched 4 category
rocessing product: Chair
ploading product to Sanity: Chair
roduct uploaded successfully: 0e0ztuJY6NWdyblBE
rocessing product: Table
ploading product to Sanity: Table
roduct uploaded successfully: YjFIo1g1LQZHJZg27
rocessing product: Sofa
ploading product to Sanity: Sofa
roduct uploaded successfully: 0e0ztuJY6NWdyblBE
rocessing product: Bed
ploading product to Sanity: Bed
roduct uploaded successfully: BQj9k9W1Mf2GlcuUg
ata import completed successfully!
```



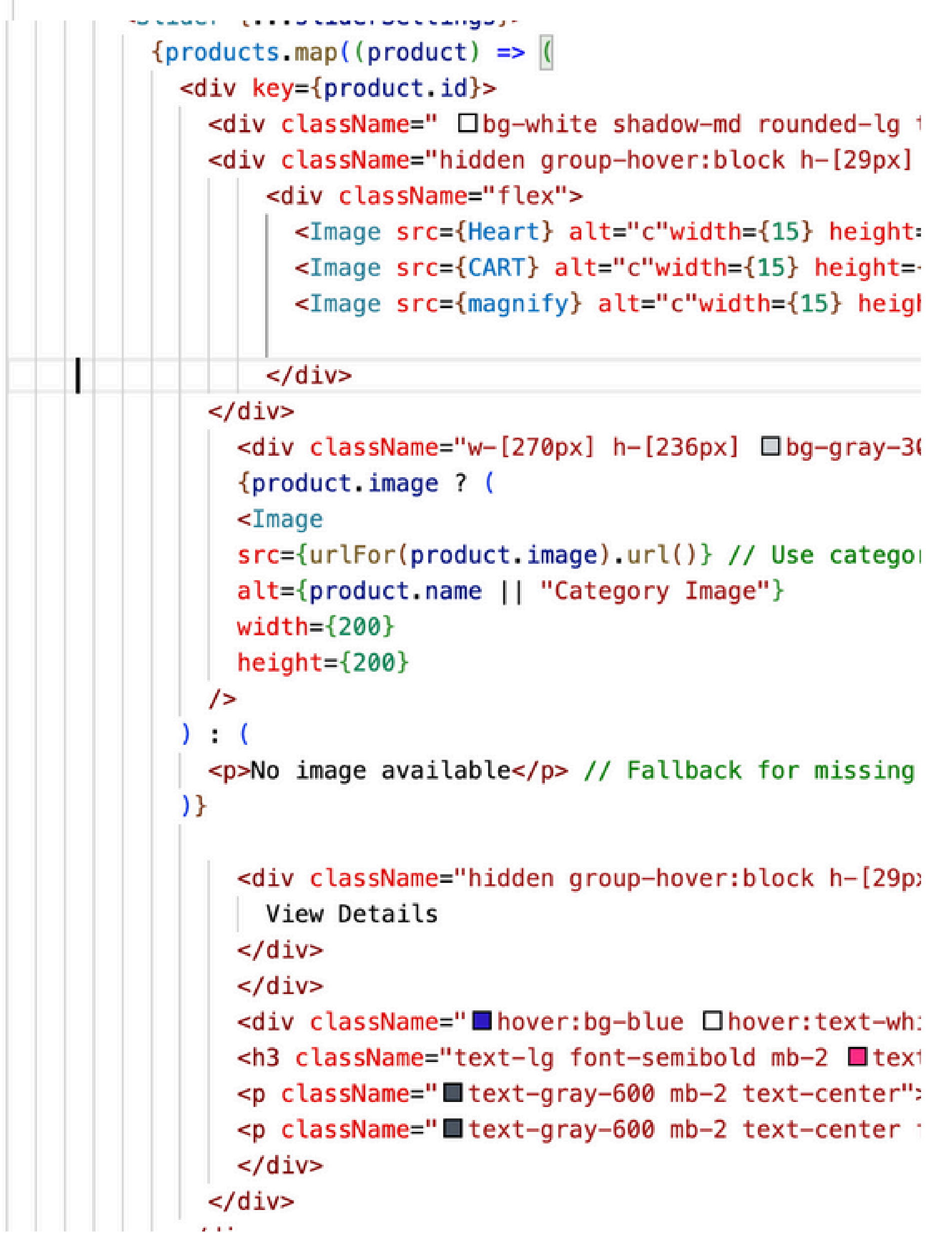
Some of the info was not properly upload so i use manual import then.

# 05 API Integration in nextjs

**In this step we are going to make utility function like query to fetch data**

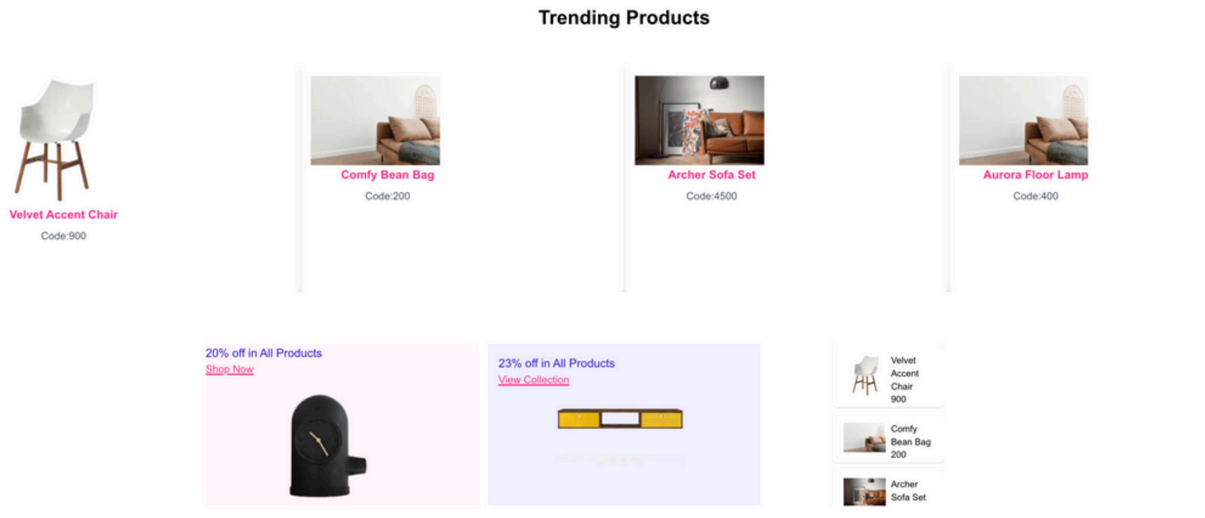


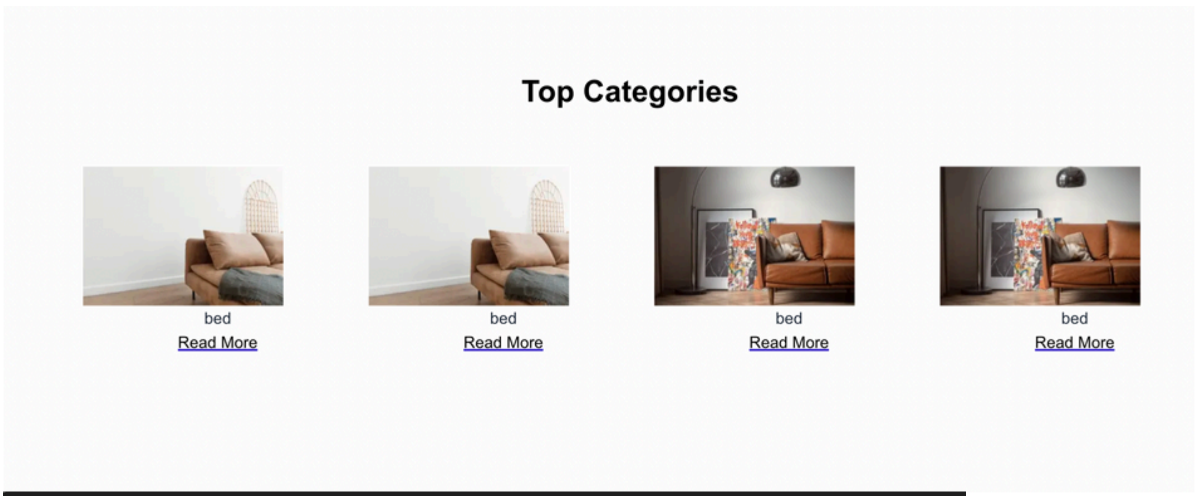
```
async function fetchData() {
  const query = `
  *[_type == "product" &&  isLatestProduct == true] {
  _id,
  name,
  price,
  description,
  discountPercentage,
  stockLevel,
  "categoryName": category->title, // Fetch the title of t
  rating,
  color[],
  additionalInfo,
  image
  }
  `;
```

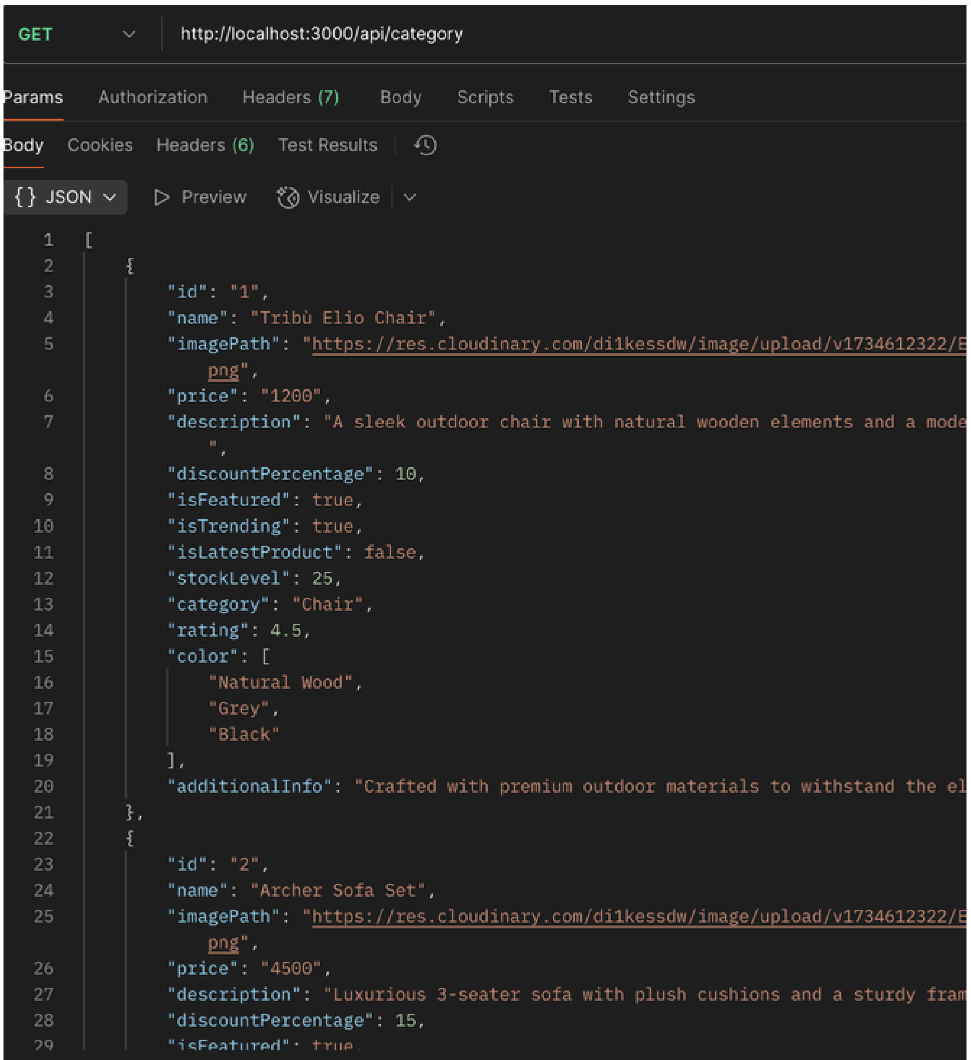


```
      <Slider {...sliderSettings}>
        {products.map((product) => (
          <div key={product.id}>
            <div className=" ☐bg-white shadow-md rounded-lg 
            <div className="hidden group-hover:block h-[29px]
                <div className="flex">
                  <Image src={Heart} alt="c"width={15} height
                  <Image src={CART} alt="c"width={15} height=
                  <Image src={magnify} alt="c"width={15} heig

                </div>
            </div>
              <div className="w-[270px] h-[236px] ☐bg-gray-3
              {product.image ? (
              <Image
              src={urlFor(product.image).url()} // Use catego
              alt={product.name || "Category Image"}
              width={200}
              height={200}
            />
          ) : (
            <p>No image available</p> // Fallback for missing
          )}

              <div className="hidden group-hover:block h-[29p
                View Details
              </div>
              </div>
              <div className="■hover:bg-blue ☐hover:text-wh
              <h3 className="text-lg font-semibold mb-2 ■tex
              <p className="■text-gray-600 mb-2 text-center">
              <p className="■text-gray-600 mb-2 text-center 
              </div>
            </div>
```

## 06







```
http://localhost:3000/api/category
```

```
[
    {
        "id": "1",
        "name": "Tribù Elio Chair",
        "imagePath": "https://res.cloudinary.com/di1kessdw/image/upload/v1734612322/E
            png",
        "price": "1200",
        "description": "A sleek outdoor chair with natural wooden elements and a mode
            ",
        "discountPercentage": 10,
        "isFeatured": true,
        "isTrending": true,
        "isLatestProduct": false,
        "stockLevel": 25,
        "category": "Chair",
        "rating": 4.5,
        "color": [
            "Natural Wood",
            "Grey",
            "Black"
        ],
        "additionalInfo": "Crafted with premium outdoor materials to withstand the el
    },
    {
        "id": "2",
        "name": "Archer Sofa Set",
        "imagePath": "https://res.cloudinary.com/di1kessdw/image/upload/v1734612322/E
            png",
        "price": "4500",
        "description": "Luxurious 3-seater sofa with plush cushions and a sturdy fram
        "discountPercentage": 15,
        "isFeatured": true,
```

# Day 3 Checklist:
# Self-Validation Checklist:

| | | |
|---|---|---|
| **API UNDERSTANDING** | **YES** | |
| **SCHEMA VALIDATION** | YES | |
| DATA MIGRATION | YES(DID BUT I ADDED SOME INFO MANUALLY) | |
| API INTEGRATION | YES(BUT DYAMIC DATA NOT BEING ON VERCEL) | |
| SUBMISSION PREPARATION | YES | |