

Day 4 - Building Dynamic Frontend Components for Your Marketplace

01

**KEY COMPONENT
TO BUILD**

02

**FRONTEND BEST
PRACTICE**

04

EXPECTED OUTPUT

05

CHECKLIST

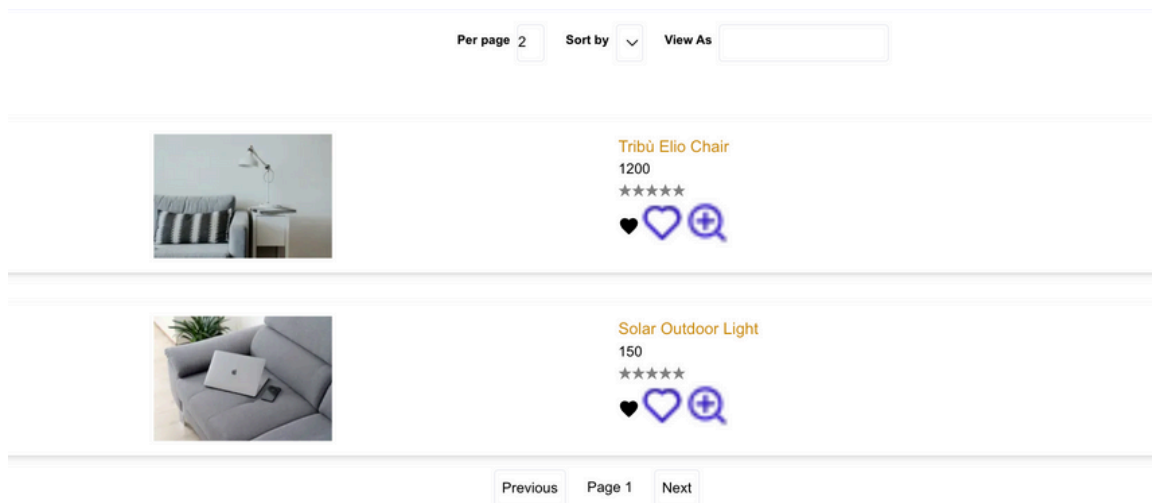


02

KEY COMPONENT TO BUILD

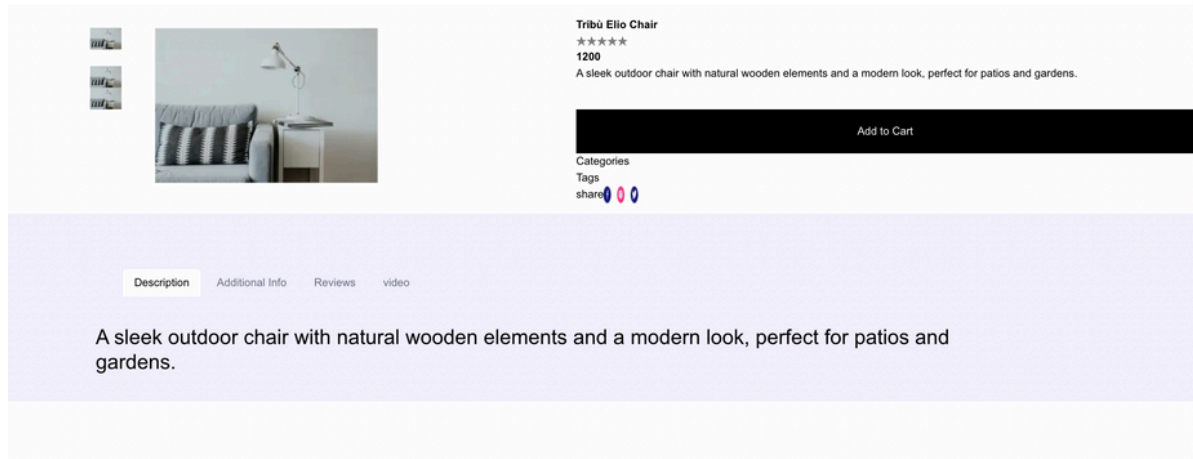
03

A fully functional product listing page displaying dynamic data from Sanity CMS or APIs.



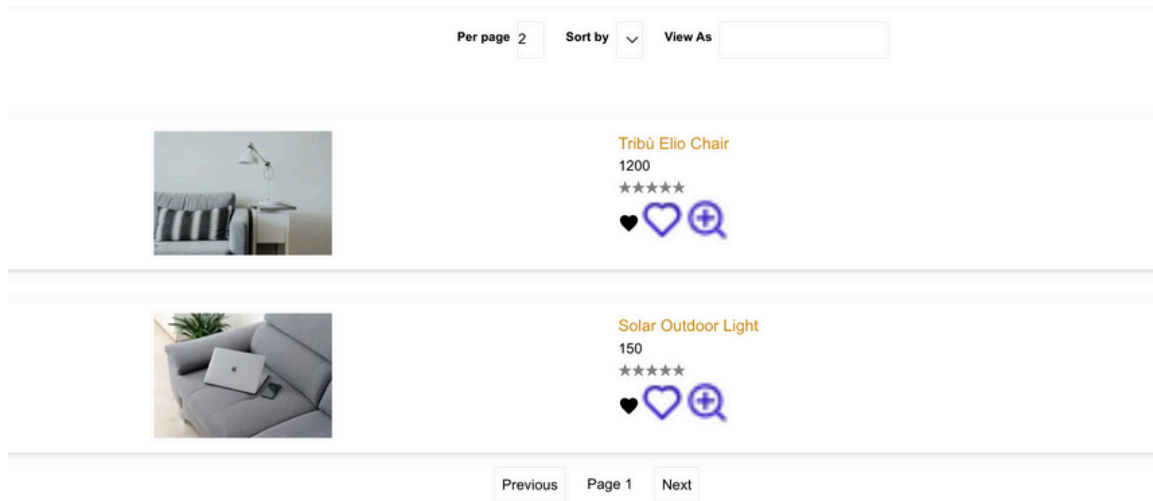
03

Individual product detail pages implemented using dynamic routing.



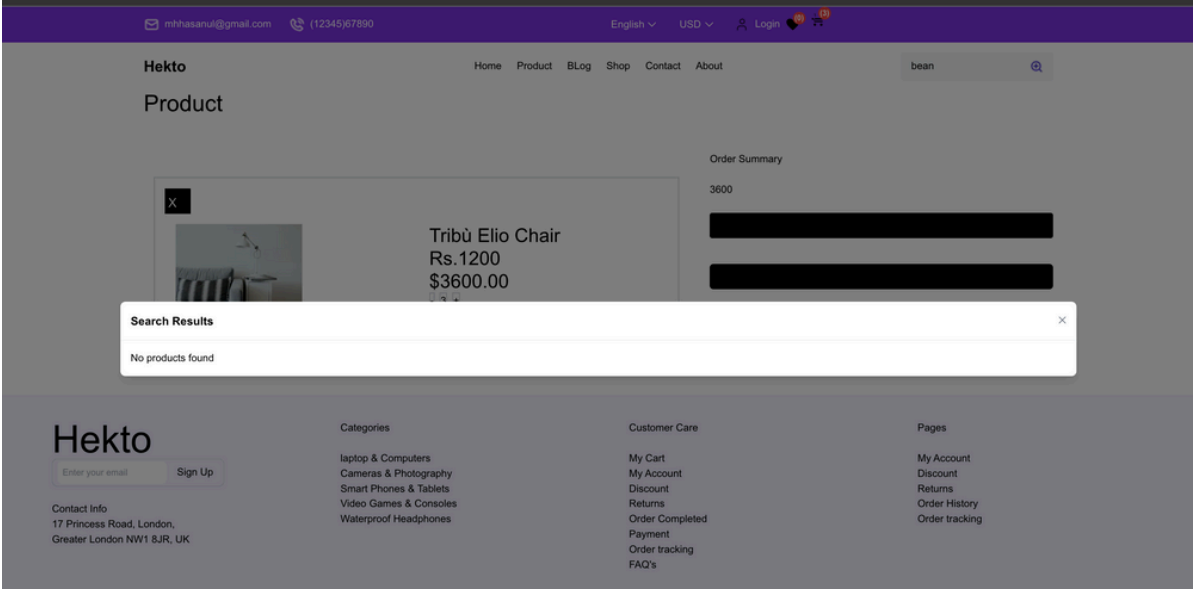
04

Advanced category filters to refine and segment product views dynamically.



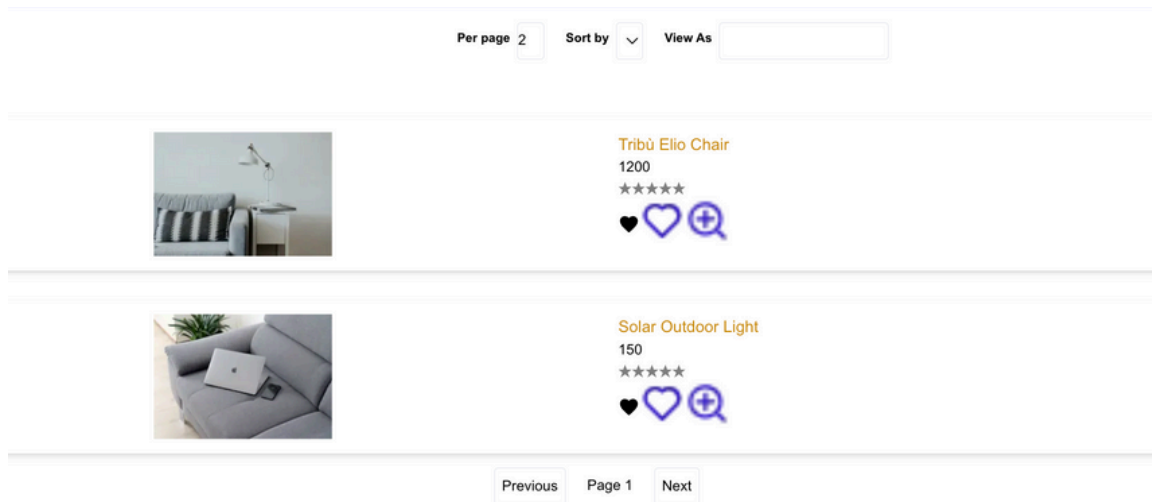
04

A search bar that efficiently filters products by name or tags.



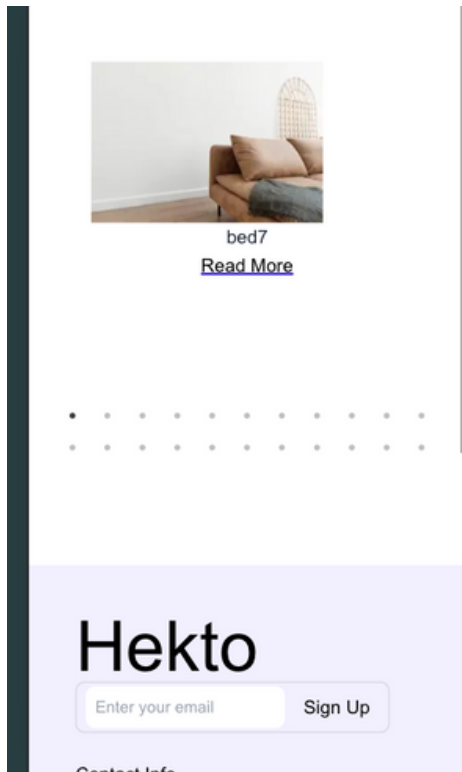
04

Additional features like pagination and related products on detail pages.



04

Components styled to ensure responsiveness and a professional look across devices.



04

Modular and reusable components for future scalability.

```
> studio
★ favicon.ico
# globals.css
TS layout.tsx
TS page.tsx
✓ components
  TS Categories.tsx
  TS DiscountAd.tsx
  TS DiscountedItem.tsx
  TS FeatureProduct.tsx
  TS Features.tsx
  TS Footer.tsx
  TS Hero.tsx
  TS LatestProduct.tsx
  TS Navbar.tsx
  TS News.tsx
```

03

```
name: "isTrending",
title: "Is Trending",
type: "boolean",
description: "Whether the product is trending",
},
{
name: "isLatestProduct",
title: "Is Latest Product",
type: "boolean",
description: "Whether the product is a latest addition",
},
{
name: "stockLevel",
title: "Stock Level",
type: "number",
description: "Available stock of the product",
},
{
name: 'category',
type: 'reference', // Reference field
to: [{ type: 'category' }], // Referencing the "category" schema
title: 'Category',
},
{
name: "rating",
title: "Rating",
type: "number",
description: "Rating of the product (out of 5)",
validation: (Rule:any) => Rule.min(0).max(5),
},
{
name: "color",
title: "Color",
type: "array",
of: [{ type: "string" }],
description: "Available colors for the product",
},
{
name: "additionalInfo",
title: "Additional Info",
type: "text",
description: "Additional information about the product",
},
],
};
```

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]

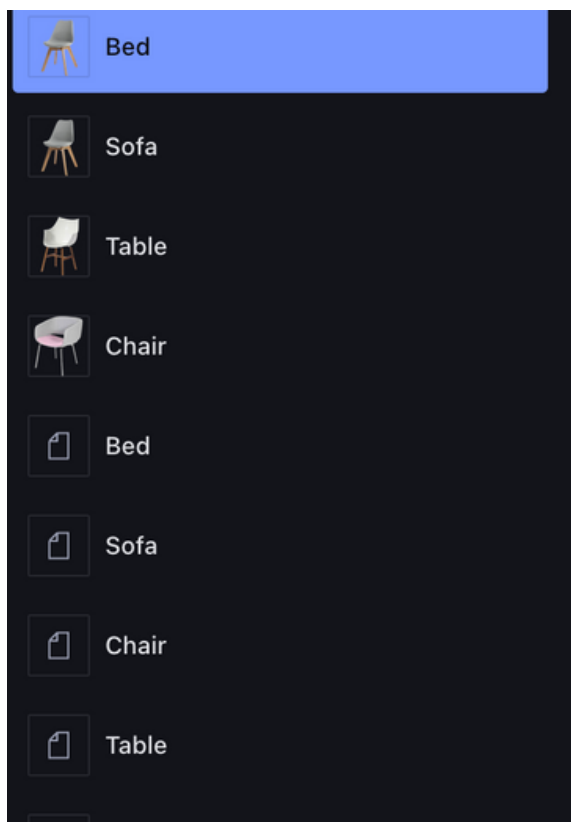
```
at process.processTicksAndRejections (node:internal/p...
)
[maeydahmasroor@Maeydahs-MacBook-Pro ecommerce_sanity % npm
> ecommerce_sanity@0.1.0 import-c
> node script/importCategory.mjs

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 %

Loading product to Sanity: undefined
Product uploaded successfully: BQj9k9W1Mf2GlcuUg
Data import completed successfully!
maeydahmasroor@Maeydahs-MacBook-Pro my-app1 % np

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

Fetching products from API...
Fetched 4 category
Processing product: Chair
Loading product to Sanity: Chair
Product uploaded successfully: 0e0ztuJY6NWdyblBE
Processing product: Table
Loading product to Sanity: Table
Product uploaded successfully: YjFIo1g1LQZHJZg27
Processing product: Sofa
Loading product to Sanity: Sofa
Product uploaded successfully: 0e0ztuJY6NWdyblBE
Processing product: Bed
Loading product to Sanity: Bed
Product uploaded successfully: BQj9k9W1Mf2GlcuUg
Data import completed successfully!
```



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

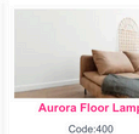
05 API Integration in nextjs

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 the category
      rating,
      color[],
      additionalInfo,
      image
    }
  `;
}
```

```
{products.map((product) => (
  <div key={product.id}>
    <div className="bg-white shadow-md rounded-lg p-4">
      <div className="hidden group-hover:block h-[29px] w-[29px]">
        <div className="flex">
          <Image src={Heart} alt="c" width={15} height={15} />
          <Image src={CART} alt="c" width={15} height={15} />
          <Image src={magnify} alt="c" width={15} height={15} />
        </div>
      </div>
      <div className="w-[270px] h-[236px] bg-gray-300 flex flex-wrap">
        {product.image ? (
          <Image
            src={urlFor(product.image).url()} // Use category image
            alt={product.name || "Category Image"}
            width={200}
            height={200}
          />
        ) : (
          <p>No image available</p> // Fallback for missing image
        )}
      </div>
      <div className="hidden group-hover:block h-[29px] w-[29px]">
        View Details
      </div>
    </div>
    <div className="bg-blue-100 hover:bg-blue p-4">
      <h3 className="text-lg font-semibold mb-2 text-blue-900">
        {product.name}
      </h3>
      <p className="text-gray-600 mb-2 text-center">
        {product.description}
      </p>
      <p className="text-gray-600 mb-2 text-center">
        {product.price}
      </p>
    </div>
  </div>
  ...
)
```

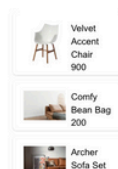
Trending Products



20% off in All Products
[Shop Now](#)



23% off in All Products
[View Collection](#)



Top Categories



bed
[Read More](#)



bed
[Read More](#)



bed
[Read More](#)



bed
[Read More](#)

GET http://localhost:3000/api/category

Params Authorization Headers (7) Body Scripts Tests Settings

Body Cookies Headers (6) Test Results

{ } JSON Preview Visualize

```
1 [
2   {
3     "id": "1",
4     "name": "Tribù Elio Chair",
5     "imagePath": "https://res.cloudinary.com/dilkessdw/image/upload/v1734612322/ElioChair.png",
6     "price": "1200",
7     "description": "A sleek outdoor chair with natural wooden elements and a modern design.",
8     "discountPercentage": 10,
9     "isFeatured": true,
10    "isTrending": true,
11    "isLatestProduct": false,
12    "stockLevel": 25,
13    "category": "Chair",
14    "rating": 4.5,
15    "color": [
16      "Natural Wood",
17      "Grey",
18      "Black"
19    ],
20    "additionalInfo": "Crafted with premium outdoor materials to withstand the elements.",
21  },
22  {
23    "id": "2",
24    "name": "Archer Sofa Set",
25    "imagePath": "https://res.cloudinary.com/dilkessdw/image/upload/v1734612322/ArcherSofaSet.png",
26    "price": "4500",
27    "description": "Luxurious 3-seater sofa with plush cushions and a sturdy frame.",
28    "discountPercentage": 15,
29    "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	