

Day 3: API Integration & Data Migration

Process of API Integration

To begin the API integration, I followed the steps below:

1. Creating the Script Folder

2. First, I created a script folder at the root of my project directory.

3. Creating the importData.mjs File

Inside the script folder, I created a file named `importData.mjs`.

4. Adding the Script to package.json

In the `package.json` file, I added a new script under the "scripts" section:

```
"import-Data": "node script/importData.mjs".
```

5. Running the Script

After setting up the script, I ran it in the terminal using the command:

```
npm run import-Data.
```

6. Fetching Data from the API

Once the script was executed, it successfully fetched the data from the API.

7. Exporting Data to Sanity The script then exported the fetched data to Sanity one by one, completing the integration process.

Adjustments Made to Schema

During the integration process, I made the following adjustments to the schema:

1. Field Name Correction

I corrected the name of a field from `new` to `isNew` to ensure successful export of all API data to Sanity.

2. Adding Extra Fields

I added two extra fields—`stars` and `rating`—to match the requirements of the UI.

API Calls Data:

```
$ npm run import-Data
```

```
> ecommerce-website@0.1.0 import-Data
```

```
> node script/importData.mjs
```

Uploading image:

```
https://cdn.sanity.io/images/7xt4qcah/production/4e2ed6a9eaa6e1413843e53f3113ccfd2104c301-278x296.pngImage uploaded successfully: image-4e2ed6a9eaa6e1413843e53f3113ccfd2104c301-278x296-png
```

Product Casual Green Bomber Jacket uploaded successfully: {

```
  _createdAt: '2025-01-17T21:09:56Z',
```

```
  _id: 'EJwKv1AMm1jkttYWGNCaHJ',
```

```
  _rev: 'EJwKv1AMm1jkttYWGNCaEH',
```

```
  _type: 'products',
```

```
  _updatedAt: '2025-01-17T21:09:56Z',
```

```
  category: 'hoodie',
```

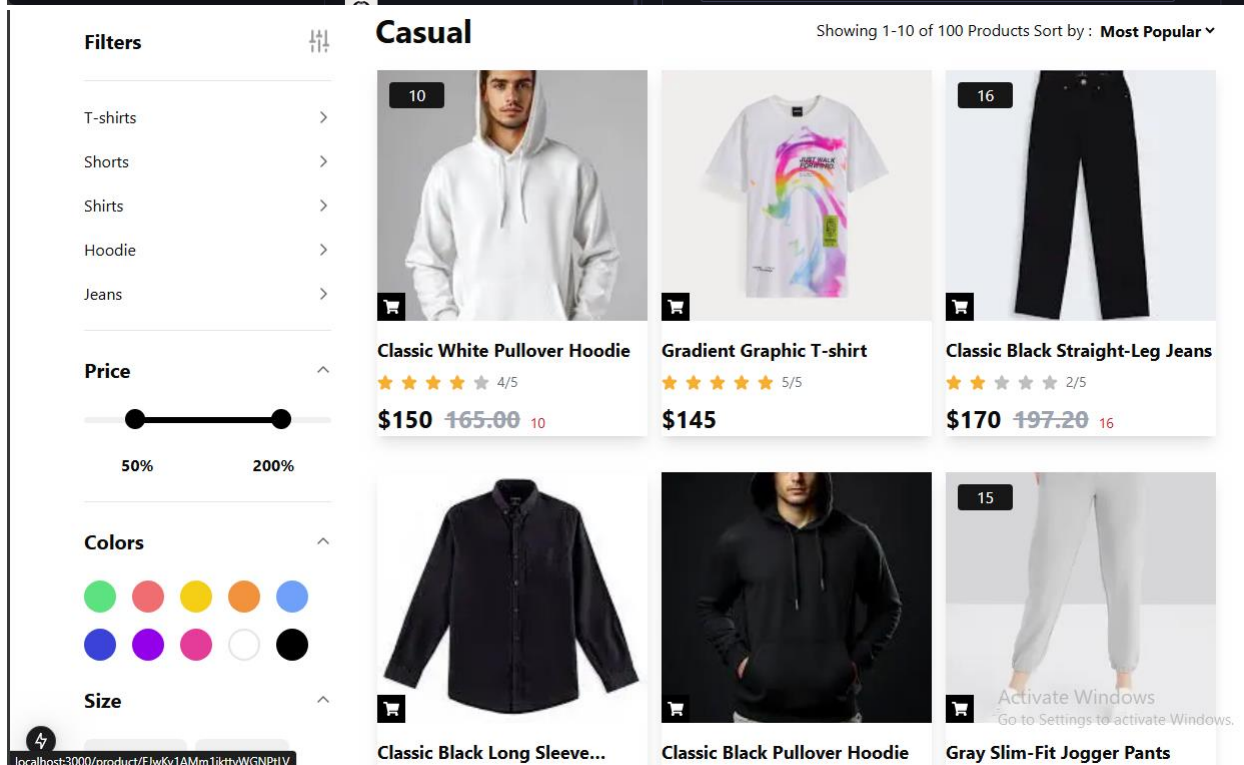
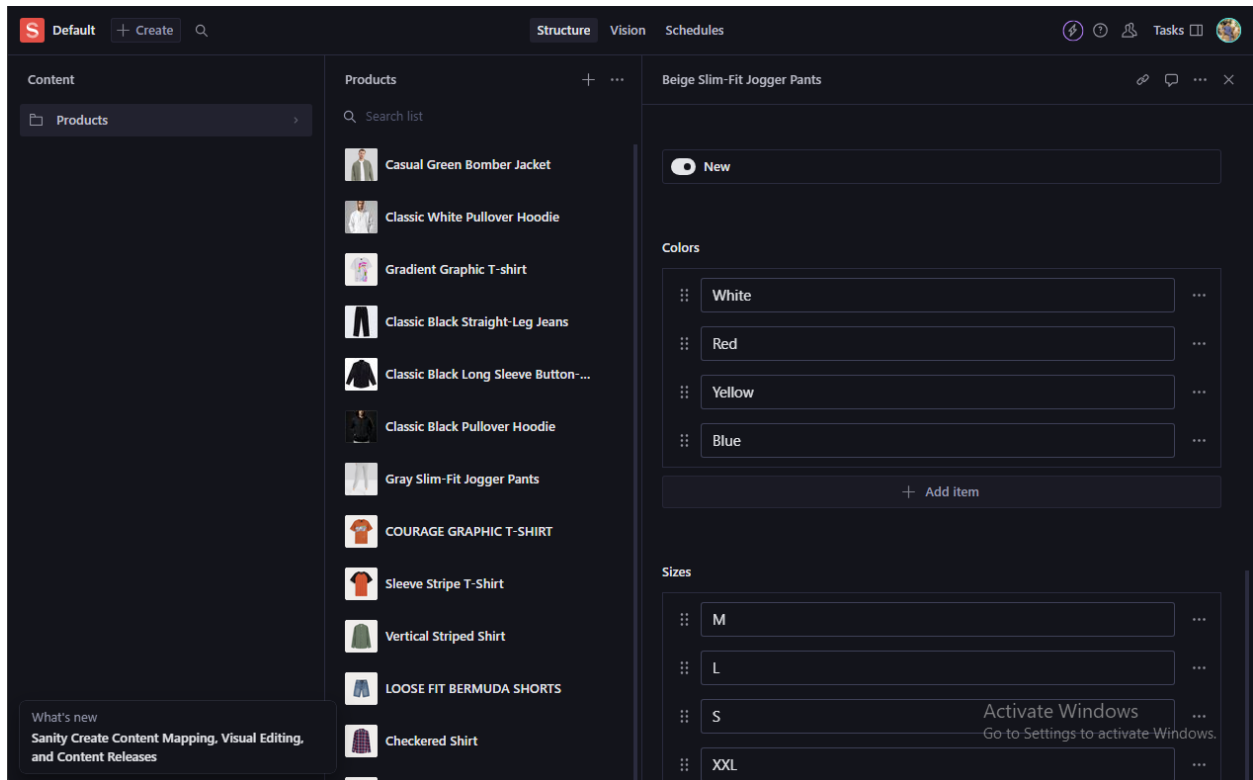
```
  colors: [ 'Blue', 'Red', 'Black', 'Yellow' ],
```

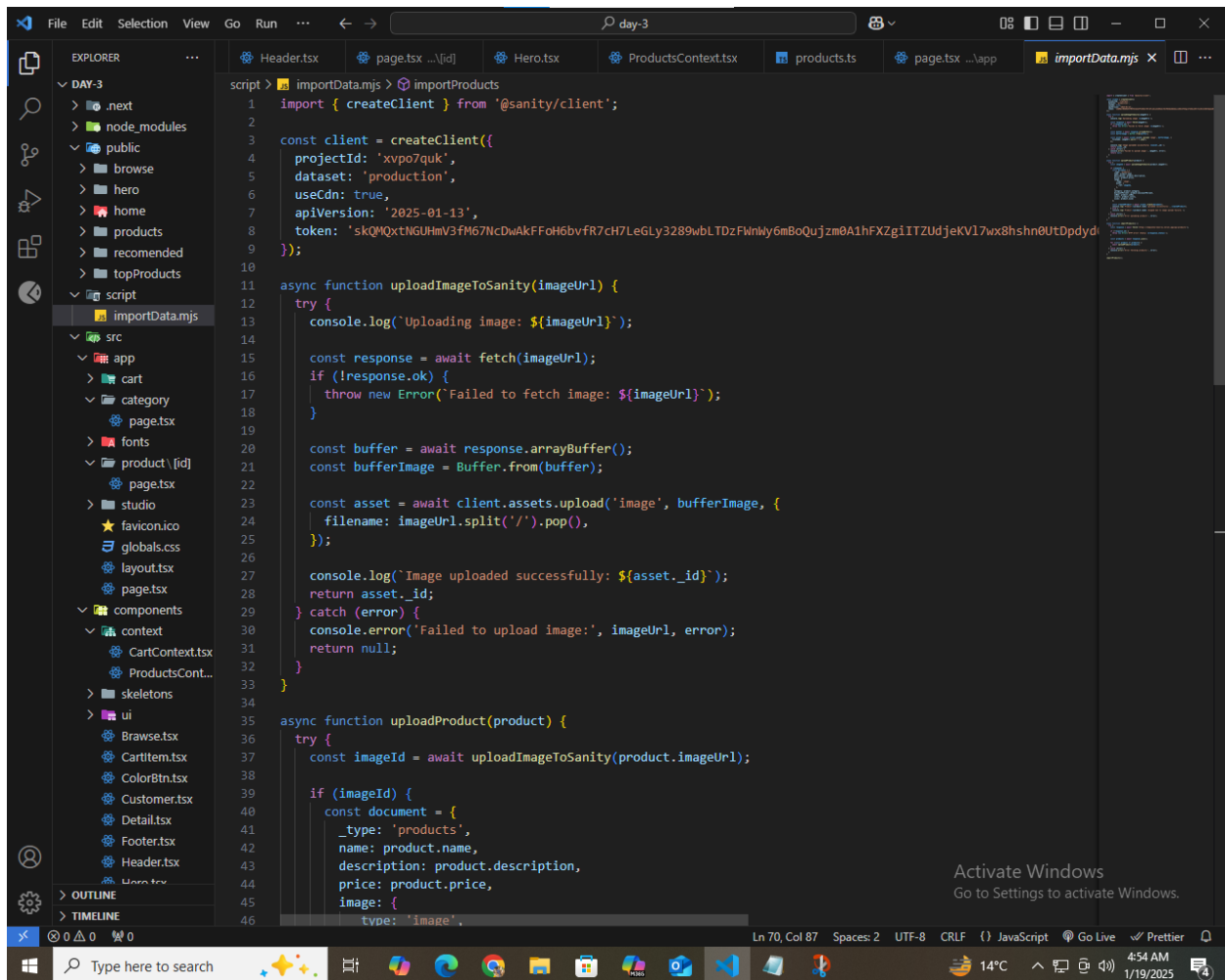
```
  description: "This stylish green bomber jacket offers a sleek and modern twist on a classic design. Made from soft and comfortable fabric, it features snap buttons and ribbed cuffs, giving it a sporty yet refined look. The minimalist
```

style makes it perfect for layering over casual t-shirts or hoodies. Whether you're out with friends or just lounging, this jacket provides a laid-back yet fashionable vibe. Its muted green color adds a subtle, earthy tone that pairs well with a variety of outfits, making it a versatile addition to your casual wardrobe."

```
discountPercent: 20,  
  
image: {  
  _type: 'image',  
  asset: {  
    _ref: 'image-4e2ed6a9eaa6e1413843e53f3113ccfd2104c301-278x296-png'  
  }  
},  
  
isNew: true,  
  
name: 'Casual Green Bomber Jacket',  
  
price: 300,  
  
sizes: [ 'S', 'XXL', 'XL', 'L' ]  
}
```

Snippets:





Fetch Data in UI

I successfully fetched the data in the UI using `useContext()`. Here's the process:

1. Creating Product Context

2. I created a `productContext` to hold the fetched data.

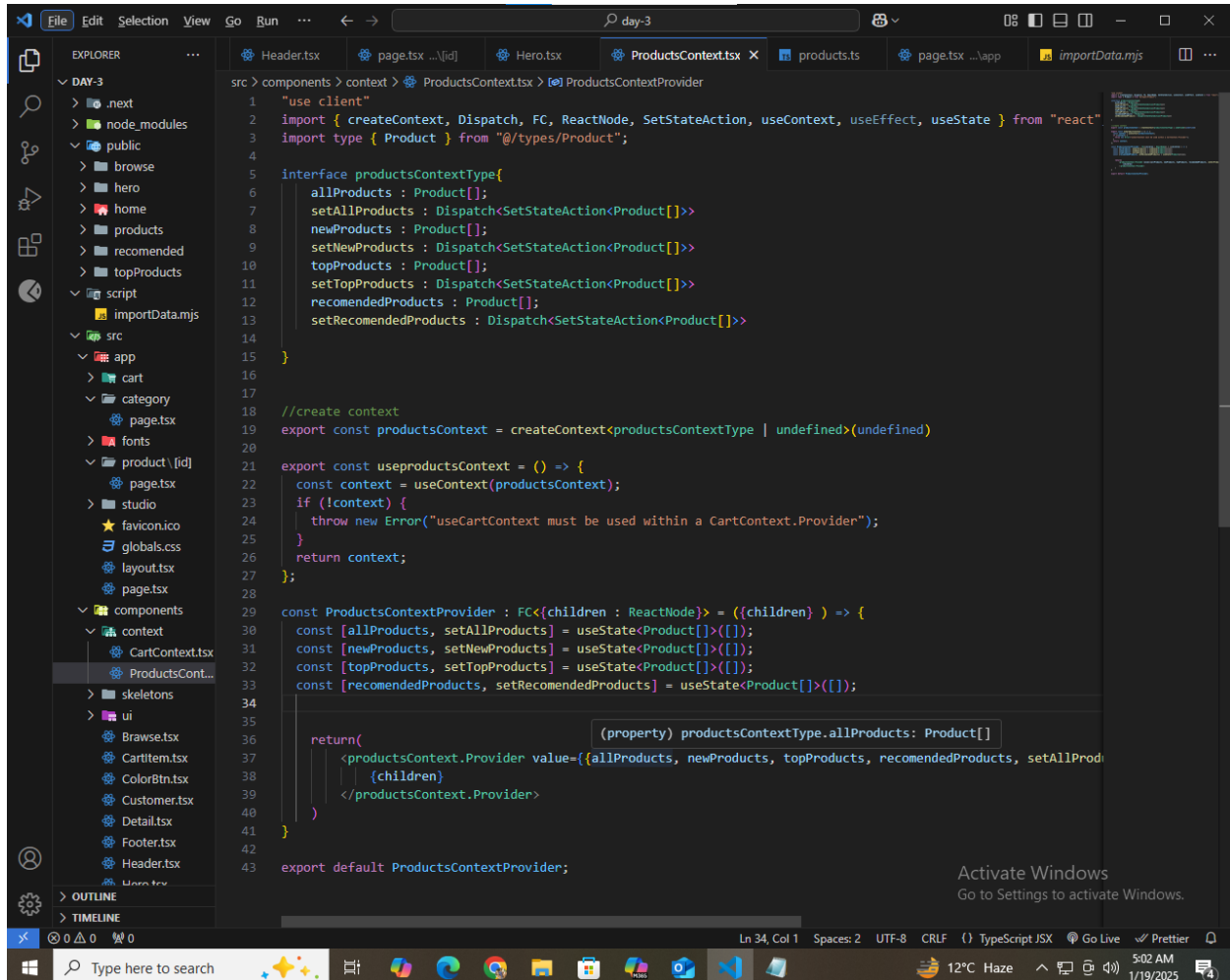
3. Adding Data to Context

The data fetched from the API was added to the `productContext`.

4. Using Context in UI

I utilized the context throughout the UI, ensuring the data was accessible across all components.

Product Context Component:



```
1  "use client"
2  import { createContext, Dispatch, FC, ReactNode, SetStateAction, useContext, useEffect, useState } from "react"
3  import type { Product } from "@types/Product";
4
5  interface productsContextType{
6    allProducts : Product[];
7    setAllProducts : Dispatch<SetStateAction<Product[]>>
8    newProducts : Product[];
9    setNewProducts : Dispatch<SetStateAction<Product[]>>
10   topProducts : Product[];
11   setTopProducts : Dispatch<SetStateAction<Product[]>>
12   recommendedProducts : Product[];
13   setRecommendedProducts : Dispatch<SetStateAction<Product[]>>
14 }
15
16 //create context
17 export const productsContext = createContext<productsContextType | undefined>(undefined)
18
19 export const useproductsContext = () => {
20   const context = useContext(productsContext);
21   if (!context) {
22     throw new Error("useCartContext must be used within a CartContext.Provider");
23   }
24   return context;
25 };
26
27 const ProductsContextProvider : FC<{children : ReactNode}> = ({children} ) => {
28   const [allProducts, setAllProducts] = useState<Product[]>([]);
29   const [newProducts, setNewProducts] = useState<Product[]>([]);
30   const [topProducts, setTopProducts] = useState<Product[]>([]);
31   const [recommendedProducts, setRecommendedProducts] = useState<Product[]>([]);
32
33   return(
34     <productsContext.Provider value={
35       (property) productsContextType.allProducts: Product[]
36     }>
37       <productsContext.Provider value={allProducts, newProducts, topProducts, recommendedProducts, setAllProducts, setNewProducts, setTopProducts, setRecommendedProducts}>
38         {children}
39       </productsContext.Provider>
40     </productsContext.Provider>
41   )
42 }
43 export default ProductsContextProvider;
```

Conclusion

In conclusion, the API integration process was successfully completed by creating a script to fetch data and export it to Sanity. Adjustments were made to the schema to ensure the correct data structure. Additionally, the fetched data was integrated seamlessly into the UI using `useContext()`, making it available across the application. These steps have laid a strong foundation for further development and ensured that the data flow between the backend and frontend is smooth and efficient.