DAY 4 - BUILDING DYNAMIC FRONTEND COMPONENTS FOR YOUR MARKETPLACE

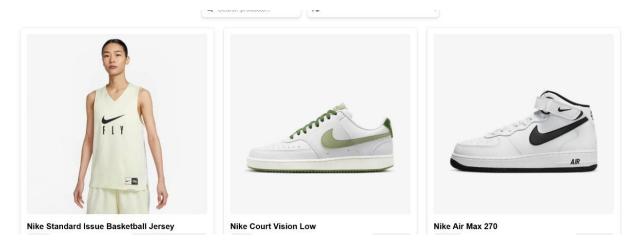
Objective

On Day 4, I focused on adding essential e-Commerce functionalities to the marketplace, including product listing, search functionality, filtering, cart operations, wish list, and checkout process. These features enhance user experience, making the platform more interactive and dynamic.

Key Features Implemented

1. Product Listing

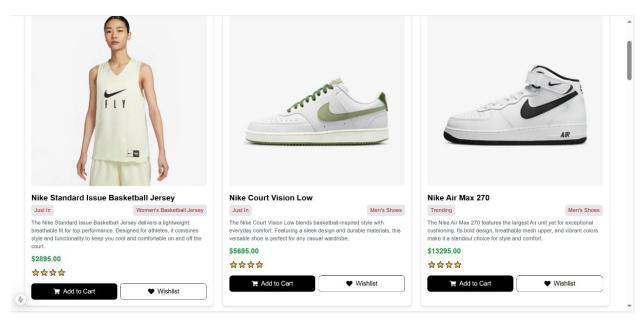
- Designed and developed a dynamic product listing page.
- Products are fetched from **Sanity CMS** and displayed in a grid format.
- Each product card includes:
 - Product Name
 - o Price
 - o Image



2. Product Detail Page

- Created dynamic product detail pages using **Next.js routing**.
- Each page displays:
 - Detailed description
 - o Price
 - Available sizes and colors

- High-resolution images
- o "Add to Cart" and "Add to Wishlist" buttons
- Integrated **related products** section based on category or tags.



```
export default function Store() {

const [products, setProducts] = useState<Product[]>([]);

const [selectedCategory, setSelectedCategory] = useState<string>("All");

const [searchQuery, setSearchQuery] = useState<string>("");

const [cart, setCart] = useState<Product[]>([]);

const [wishlist, setWishlist] = useState<Product[]>([]);

const router = useRouter();

useEffect(() => {

    const fetchProducts = async () => {

        try {

        const data: Product[] = await sanityFetch(allproducts);

        setProducts(data);

    } catch (error) {

        console.error("Error fetching products:", error);

}

fetchProducts();

fetchProducts();
```

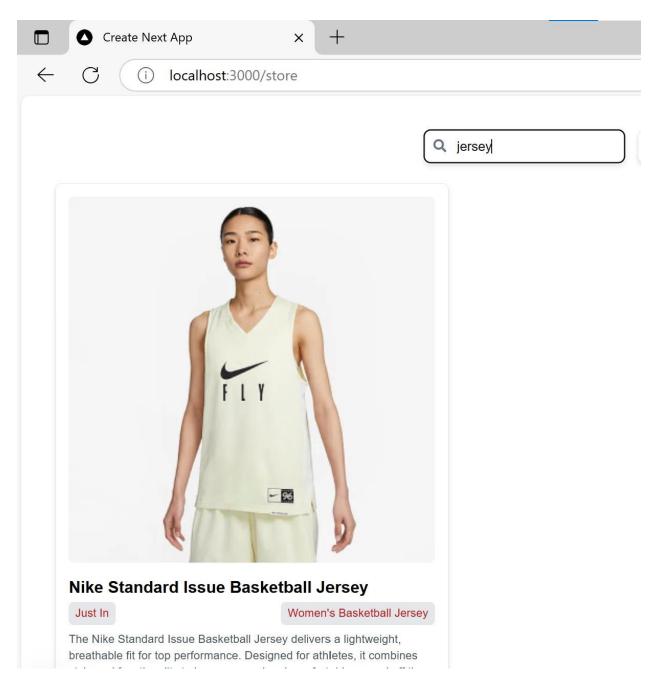
3. Search Bar

- Implemented a **real-time search feature** using input filtering.
- Users can search by **product name**, tags, or keywords.
- Search results update dynamically without page reload.



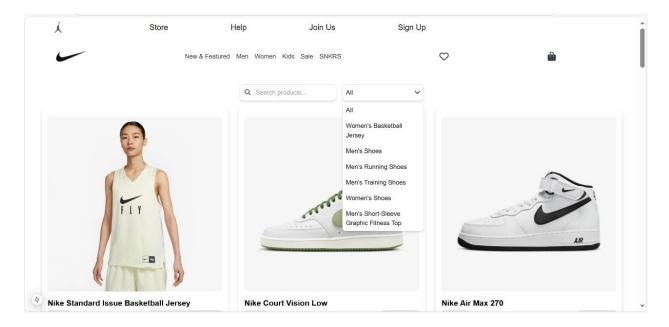
4. Search Product

- Enhanced search functionality to handle large datasets efficiently.
- Used **denouncing** to improve performance.
- Included **empty state handling** when no results are found.



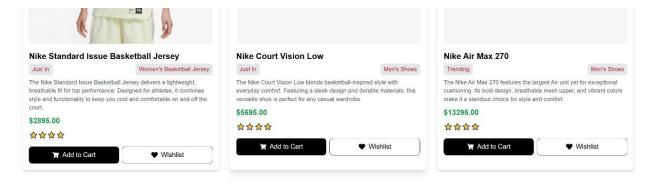
5. Filter by Category

- Added **category-based filtering** on the product listing page.
- Users can refine search results by selecting product categories.
- Filters update results **instantly** without page refresh.



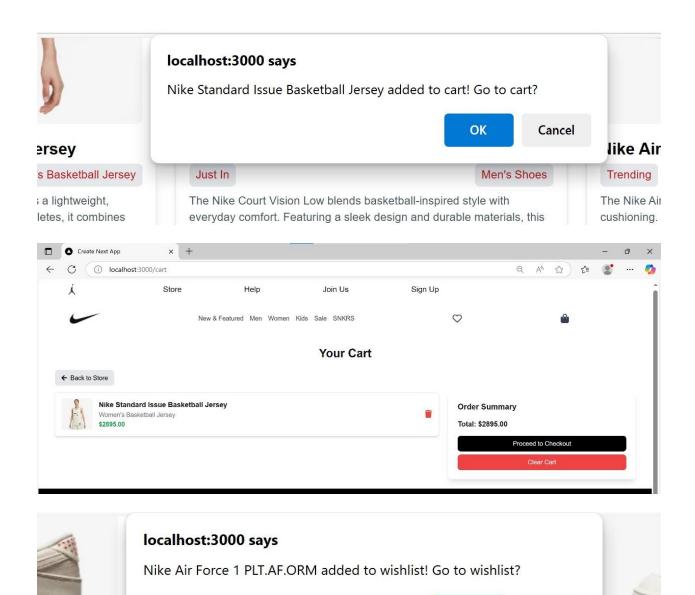
6. Add to Cart & Wishlist

- Implemented "Add to Cart" functionality with state management.
- Users can save items in **Wishlist** for later purchase.
- Local storage or context API is used to persist cart and wishlist data.



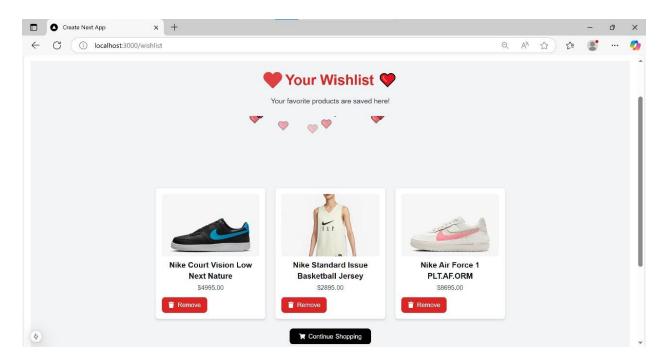
7. Cart Notifications

- Added toast notifications when a product is added to the cart or wishlist.
- Notifications show success messages and product details.
- Implemented an **undo action** for removing items from the cart.



OK

Cancel



8. Checkout & Checkout Notifications

- Built a **multi-step checkout process**, including:
 - o User details (name, address, phone number)
 - o Payment method selection (mock implementation)
 - o Order summary and confirmation
- Added **checkout notifications** for:
 - o Successful order placement
 - o Payment confirmation (mock implementation)
 - Error handling for missing details

