Day 4 - Dynamic Frontend Components-Nike Ecommerce Marketplace

Objective

I have dedicated my efforts to craft and develop dynamic frontend components that present marketplace data sourced from Sanity CMS and API. This day will highlight the importance of building reusable, modular components while incorporating industry-standard techniques for creating scalable and responsive web application.

Key Components to build:

As part of building a dynamic and scalable frontend, I have implemented these key components tailored to enhance the functionality and user experience of the marketplace. Below are the components I have created.

- 1. Product Listing Component
- 2. Product Detail Component
- 3. Category Component
- 4. Search Bar
- 5. Cart Component
- 6. Wishlist Component
- 7. Checkout Flow Component
- 8. User Profile Component
- 9. Reviews and Ratings Component
- **10.**Pagination Component
- **11.Filter Panel Component**
- **12.Footer and Header Components**

Key Components Details developed for my Marketplace:

1. Product Listing Component:

I have successfully integrated the marketplace frontend with Sanity CMS to dynamically fetch and display product details. Each product in the

marketplace has been structured with key attributes, ensuring a rich and comprehensive presentation. The fetched product data includes the following fields:

• **Product Name:** The name of the product is prominently displayed, serving as the primary identifier for users.

• Price:

The price of each product is dynamically fetched and displayed in a clear and consistent format. It highlights affordability and helps users make informed purchasing decisions.

• Product Image:

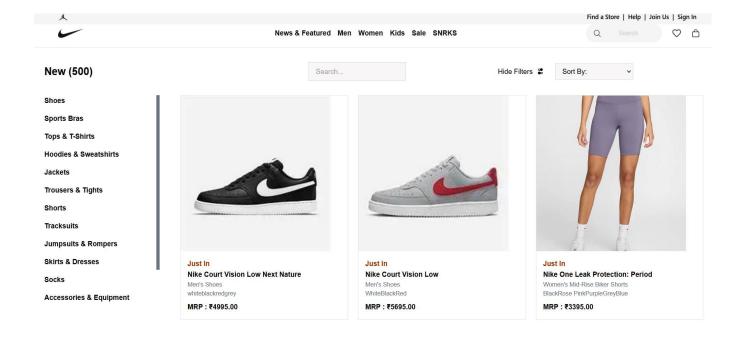
Image of each product are fetched and rendered to visually engage users. Images are displayed in an optimized format, ensuring fast loading while maintaining clarity.

Tag:

Each product includes associated tags, such as "Just In," "Promo Exclusion," or "Sustainable Materials."

• Category:

The category field organizes products into specific sections, making it easier for users to browse similar items. Categories like "Men's Shoes," "Women's Shoes," or "Kids' Older Shoes" enable a seamless and structured shopping journey.



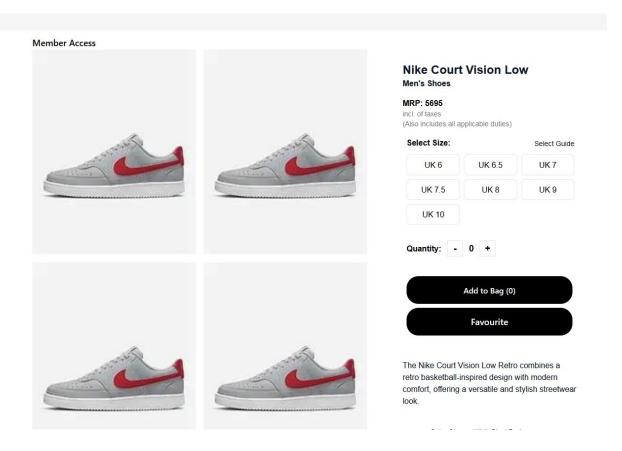
2. Product Detail Component:

Here are the steps I followed to build product detailed page.

- **Setted Up Dynamic Routes**: I used Next.js dynamic routing to create individual product pages based on the product's id.
- Fetch Product Data: I used Sanity Groq query to fetch product data from Sanity Backend.
- Designed the Product Detail Component: Displayed fields like Product Description, Price, Available Sizes, and Colors.
- Quantity Management:

Users can adjust the quantity of each product directly from the product details page.

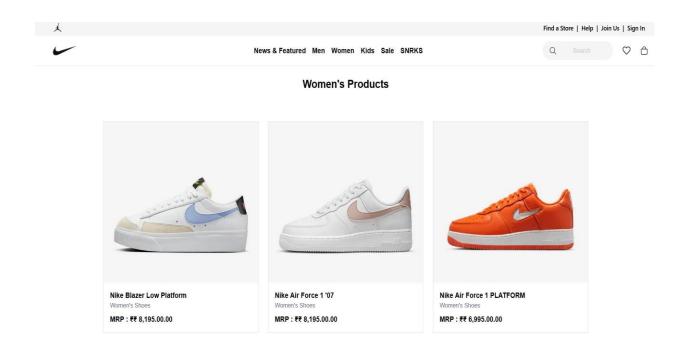
Increment (+) and decrement (-) buttons are typically provided to modify quantities seamlessly.



3. Category Component:

I implement a dynamic Category Component that displays categories fetched from my data source and allows filtering of products by the selected categories.

- Fetch categories data dynamically: from the Sanity CMS.
- Filter products: User can filter products based on selected categories.

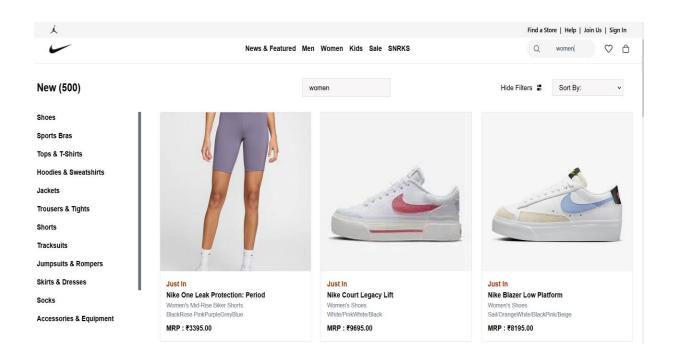


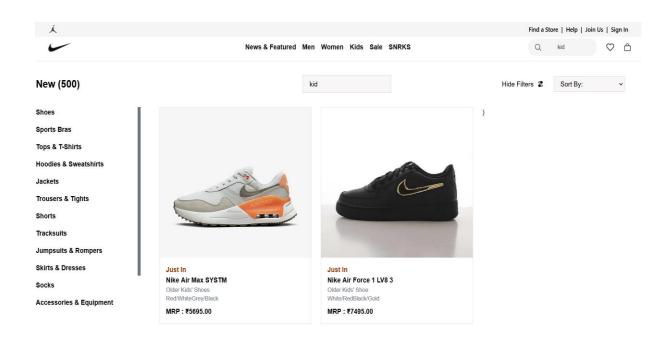
4. Search Bar:

The search bar allows users to easily find specific products from a larger collection by filtering them based on their name or tags. This feature enhances user experience by enabling quick and precise navigation to desired items.

- Search by Name:
 Users can locate products by typing full or partial product names.
- Search by Tag:
 Users can enter a tag, and products with matching tags will be displayed. Like "Just In", "Promo Exclusion" and "Sustained Materials".
- Search by Category:

Users can find products with categories like "Men's Shoes", "Women's Shoes", "Older Kid's Shoes" etc.





5. Cart Component:

The Cart Component serves as a central feature of an e-commerce platform, allowing users to view, manage, and finalize their selected products. It provides a streamlined interface to review added items, adjust quantities, and calculate the total price dynamically.

Display Added Items:

The cart lists all products that the user has added, along with key details such as product name, image, price, and selected attributes (e.g., size, color).

• Dynamic Total Price Calculation:

The total price of each item is calculated based on its price and selected quantity (e.g., price * quantity).

The cart dynamically computes the overall total price for all items, ensuring users see an accurate summary of their costs.

• Interactive Updates:

The cart updates interactively as users add, remove, or modify items, ensuring a smooth and responsive experience.

News & Featured Men Women Kids Sale SNRKS

Q Search

6. Wishlist Component:

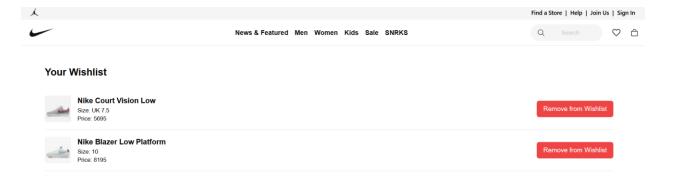
The Wishlist Component is an essential feature in an e-commerce platform, allowing users to save products they are interested in for future reference. It enhances the shopping experience by providing a convenient way to revisit products without needing to search for them again.

Display Wishlisted Items:

The component provides a dedicated section or page where users can view all the products they've saved.

Save Products for Future Reference:

Users can add products to their wishlist with a single click, typically through a heart icon or "Add to Favorite" button displayed on product card or details page.



7. Checkout Flow Component:

The Checkout Flow Component is designed to guide users through the final steps of their purchase. It ensures that all necessary information is collected and validated in a structured and user-friendly manner. The multistep process breaks the checkout into manageable sections, reducing user frustration and increasing the likelihood of purchase completion.

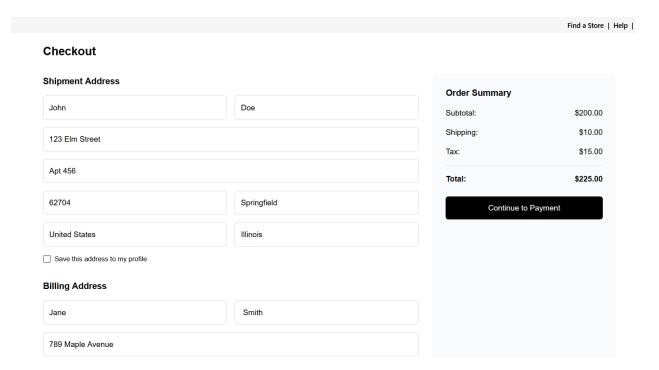
Billing and Shipping Address:

Users provide personal details such as name, email, and phone number. Fields for shipping and billing addresses include:

- Street Address
- City
- State/Province
- Zip/Postal Code
- Country

Payment Details:

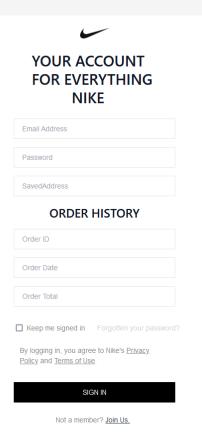
This step collects payment information, sensitive details are not processed but simulated for the flow.



8. User Profile Component:

The User Profile Component serves as a personalized dashboard for the user, providing them with easy access to their details and past interactions with the platform. Here's what it includes:

- User-Specific Details:
- Name: Display the user's full name (e.g., John Doe).
- **Email**: Show the user's registered email address.
- **Saved Addresses**: List the user's saved shipping and billing addresses for quick access during checkout.
- Order History:
- List of Orders: Show a list of the user's past orders, including key information like order number, date, total amount, and status



9. Reviews and Ratings Component:

The Reviews and Ratings Component is an interactive feature that enhances user engagement by enabling customers to share and view feedback on products.

• Viewing Reviews and Ratings:

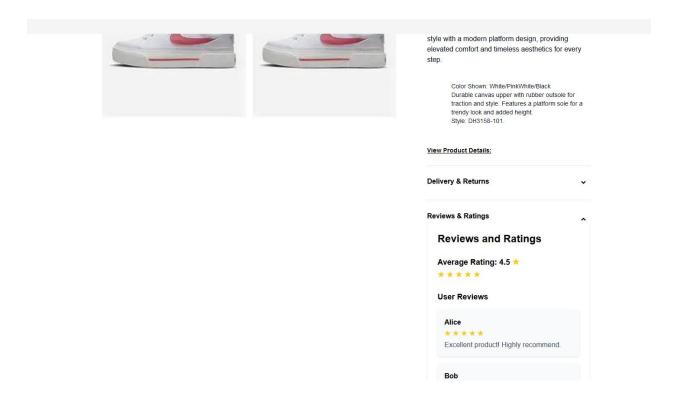
Displayed the product's overall average rating (e.g., a 4.5/5 star rating), calculated dynamically from all user submissions.

Individual Reviews:

Show a list of customer reviews, including:

• Reviewer Name: Display the name or pseudonym of the reviewer.

- Rating: Use a star or numeric format to display the rating given (e.g., 5/5).
- Review Content: Show detailed feedback written by the user.
- **Date of Submission**: Indicate when the review was submitted.



10. Pagination Component:

The Pagination Component is designed to improve user experience by organizing large product lists into manageable chunks. This ensures smooth navigation, reduces page load time, and makes it easier for users to explore products.

Breaking Down Product Lists:

Divided the product list into smaller sections, showing a limited number of items per page "10".

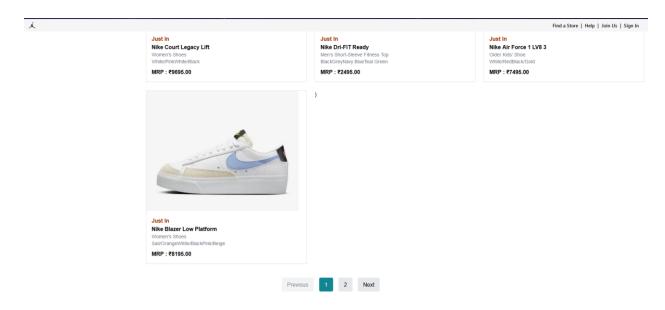
Navigation Features:

Previous and Next Buttons:

Provide easy-to-use buttons to navigate between pages.

Numbered Pagination:

• Display clickable numbers for direct access to a specific page (e.g., 1, 2, 3, ...).

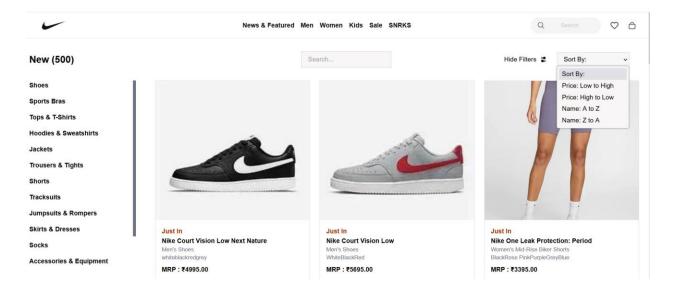


11.Filter Panel Component:

The Advanced Filtering Options enhance the shopping experience by allowing users to narrow down product searches based on their specific preferences. These filters enable users to quickly find products that match their needs, leading to better satisfaction and engagement.

Sort By:

A multi-select dropdown or checklist lets users filter products by specific name alphabets and prices high to low , low to high.



12. Footer and Header Components:

The Header and Footer components are integral parts of a website's **UI** (User Interface), providing essential navigation and branding elements. Here's an outline for both components, with key considerations for consistency, responsiveness, and accessibility.

• Header Component:

• Nike Header:

Typically displayed on the left side, clicking on the logo should navigate back to the homepage.

Navigtion Links:

Include links to key sections such as "News & Featured," "Men," "Women," "Kids," "Sale,".

Search Bar:

Allow users to search for products, collections, or other content.

Wishlist, Cart:

Display icons for user actions like Wishlist (FaRegHeart) and Cart (IoBagOutline).

• Footer Component:

Navigation Links:

Similar to the header, the footer should include links to important sections of the website (e.g., About, Contact, Terms of Service, Privacy Policy, Careers, etc.).

Links to help sections such as FAQs, Customer Service, Store Locator, etc.

Social Media Icons:

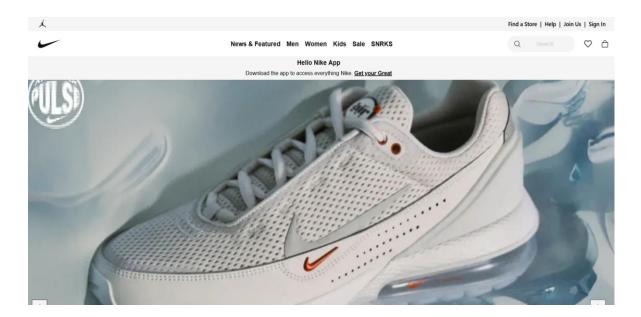
Icons that link to Nike's official social media pages (Instagram, Twitter, Facebook, YouTube, Pinterest).

- Legal Information:
- **Copyright**: This typically includes the year and copyright information.
- **Terms and Conditions**: Links to legal disclaimers, privacy policies, terms of service, etc.
- Accessibility Statement: Ensure the website is accessible for users with disabilities.

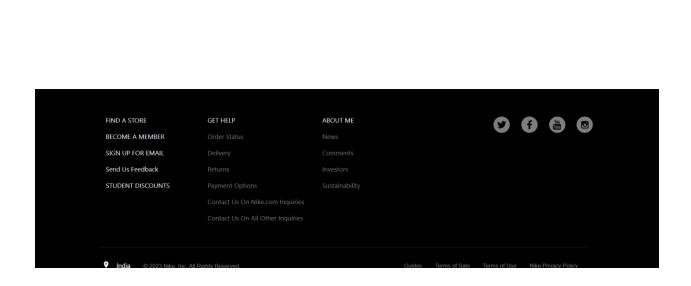
• Contact Information:

This section can contain customer service contact information such as email, phone numbers, and physical store locations.

HEADER SECTION:



FOOTER SECTION:



Find a Store | Help | Join Us | Sign In

Conclusion:

I've successfully built and integrated dynamic frontend components for my E-commerce Marketplace using Next.js and Sanity CMS. This project enabled me to apply modern best practices in React development, and I've focused on creating a seamless and engaging user experience (UX/UI). I implemented state management for tracking cart and wishlist items, as well as built pagination and filtering options to improve product discovery.