Day 4 - Building Dynamic Frontend Components for CottonCloud

Today, I focused on building one of the most important parts of CottonCloud—the Product Listing Component. This is where all products are displayed dynamically, making it easy for users to browse and find what they're looking for.

What This Component Does

The Product Listing Component is designed to fetch and render product data in a **clean, grid-based layout**. Each product card includes:

✅**Product Name** – So users know what they're looking at.
✅**Price** – Because pricing is key for any marketplace.
✅**Image** – A good visual makes all the difference.
✅**Stock Status** – Clearly showing whether an item is available or out of stock.

How I Built It

Since I'm using **Next.js 15**, I made sure the component loads data dynamically from **Sanity**. The layout is styled using **Tailwind CSS**, keeping it responsive and visually appealing. Each product appears as a **card**, making the UI clean and user-friendly.

This component is just the start—there's still a lot to refine, like adding filters, sorting, and maybe even animations for a smoother user experience. But for now, the basic structure is in place

Product Detail Component

For the **Product Detail Component**, I set up **dynamic routing in Next.js 15** to generate individual product pages. Each page includes:

- **Product Description** – Gives users a clear idea of the item.
- **Price** – Displayed prominently.
- **Available Sizes or Colors** – So users can choose their preferences.

With **Sanity** handling the backend and **Tailwind CSS** for styling, the page loads dynamically based on the product ID. I'll be adding images to make it more visually appealing

Category Component

For the **Category Component**, I made sure it dynamically fetches categories from the data source. When a category is selected, the products update accordingly.

✅**Categories are loaded dynamically** from Sanity.
✅**Filters products** based on the selected category.
✅**Connected to product fields**, ensuring only relevant products appear.

This keeps the browsing experience smooth and organized

Search Bar Component

I added a **Search Bar** to make finding products easier. It filters products dynamically based on **name or tags**, updating results instantly as users type.

✅**Real-time filtering** for a smooth experience.
✅**Matches product names & tags** for better accuracy.
✅**Integrated with the product list** to display relevant results.

This makes navigation quicker, helping users find what they need effortlessly

Cart Component

The cart component displays **added items, quantity, and total price**. It uses **state management** to track cart items and update them dynamically.

User Profile Component

The user profile displays **name, email, and saved addresses**. It also shows **order history and shipping details** whenever the user logs in, making it easy to track past purchases.

Filter Panel Component

The filter panel allows users to refine products **by category**. When a category is selected, the product list updates dynamically to show relevant items.

Footer and Header Components

Header Features:

- Search bar for quick product lookup.
- User profile icon with different views for signed-in and signed-out users.
- Dark and light theme toggle for customization.

Footer Features:

- Links to essential pages like Home, About, and Contact.
- Consistent design to maintain branding.
- Fully responsive and accessible across devices.

Notifications Component

- Displays **real-time alerts** for key actions.
- The **Save button** in shipping details triggers an alert.
- Uses **toast notifications** or modals for feedback on actions like adding to cart or errors.
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Order Tracking Component

- Tracks **order status** and updates it every **30 hours** using **local storage**.
- Displays estimated delivery time and order progress.
- Keeps users informed without needing a backend update.
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Discount and Promotion Component

- **Discount details** are shown in the **hero section**.
- Discounts are **applied on the payment card** during checkout.
- Dynamically updates based on active promotions.

Gift Card and Voucher Component

- **Vouchers are displayed in the hero section**.