

Urban Loom: Building Dynamic Frontend Components



Objective:

Build a scalable, dynamic frontend for Urbna Loom, a furniture marketplace, using modern web technologies to achieve:

- Real-time cart management
- Dynamic product listings
- Use Zustand state management
- Enterprise-grade UI/UX

Scope:

- 17 Components built for Day 4
- Key Features: Cart system, authentication, responsive layouts etc.

Component Overview:

Component:	Purpose:	Tech Stack:
AddtoCart	Cart item management with real-time updates	Zustand, react-hot-toast
DiscountBanner	Promotional carousel with dynamic CMS data	Sanity CMS, ShadCN Carousel
QuantityOfItems	Cart quantity control with error prevention	Zustand, react-icons
ProductsCard	Product display unit (PDU) with stock status and wishlist	Next/Image, react-icons

1: Steps Taken to Build and Integrate Components :

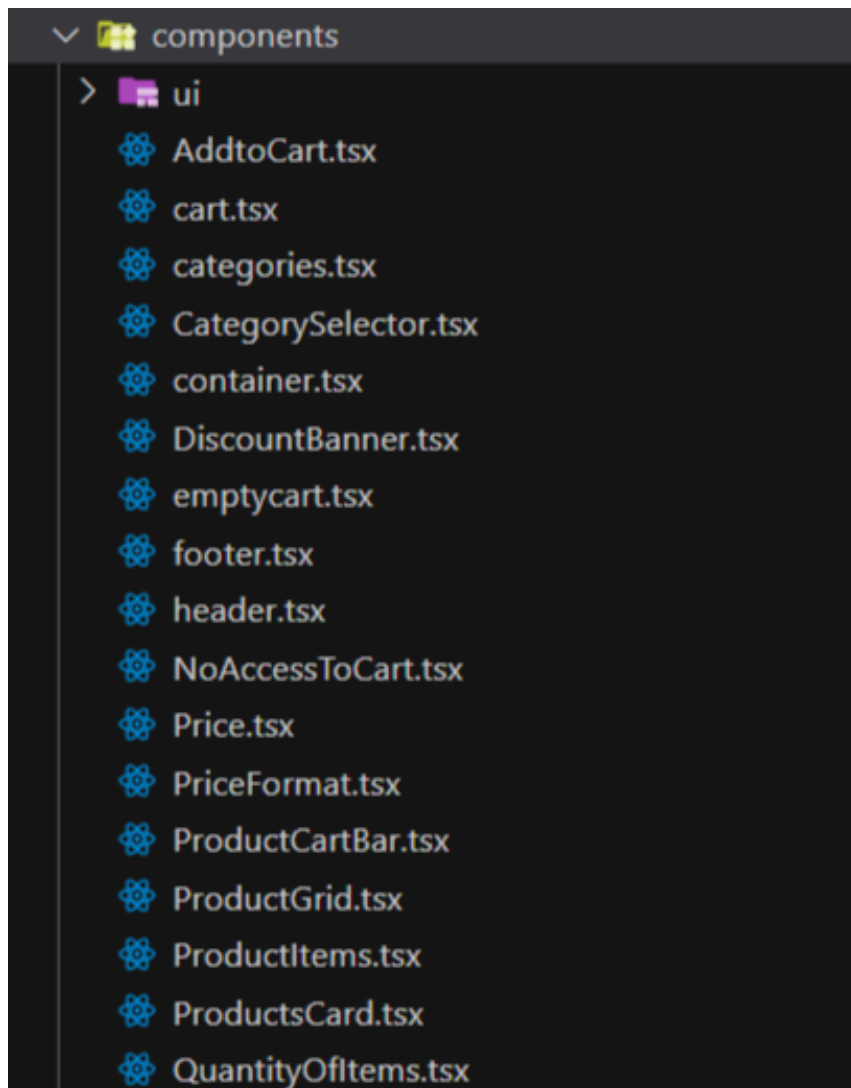
1.0: Steps and Data Migration:

- Connected the Urban Loom project to Sanity CMS.
- Verified data fetching endpoints and tested API integration.

1.1: Component Development:

- Built modular components, each with specific functionality for reuse.
- Dynamically fetched and rendered data within components (e.g., ProductGrid fetching product data).

Like This:



1.2: Integration of Components:

- Incorporated the components into the main application structure.
- Used **Zustand** for state management across Cart, AddToCart, and QuantityOfItems components.

ProductsCard Component:

The ProductsCard component dynamically displays individual product details, including the image, name, price, and a call-to-action button to add the product to the cart. It also handles stock status and includes a product rating feature.

Features:

- **Dynamic Product Display:** Fetches and displays product details including images, name, price, and stock status.
- **Add to Cart Integration:** Allows users to add products directly to the cart.
- **Stock Management:** Displays "Out of Stock" for unavailable items.

Code Snippet:

[illegible]

Cart Component:

The Cart component provides an overview of the items in the cart and their quantities. It enables users to quickly navigate to the cart page with a visual indication of the number of items.

Features:



- Dynamic Item Count: Displays the total number of items in the cart.
- Link to Cart Page: Provides easy access to the cart details.

Code Snippet:

```
2 import React, { useEffect, useState } from "react"; 6.9k (gzipped: 2.7k)
3 import { ShoppingCart } from "lucide-react"; 1.4k (gzipped: 847)
4 import Link from "next/link"; 37.7k (gzipped: 11.4k)
5 import useCartStore from "@store";
6 Tabnine | Edit | Explain | Complexity is 13 You must be kidding
7 const Cart = () => {
8   const [isClient, setIsClient] = useState(false);
9
10  const groupedItems = useCartStore((state) => state.getGroupedItems())
11  useEffect(() => {
12    setIsClient(true);
13  }, []);
14  if (!isClient) return null;
15  return (
16    <Link
17      href="/cart"
18      className="flex items-center md:text-sm gap-2 border border-gray-200 px-2 py-1 rounded-md shadow-md hover:shadow-none text-xs "
19    >
20      <ShoppingCart className="text-cyan-950 w-5 h-5 md:w-6 md:h-6 hoverEffect" />
21      <div className="flex flex-col">
22        <p className="text-xs">
23          <span className="font-semibold">{groupedItems?.length ? groupedItems?.length : 0}</span>
24          items
25        </p>
26        <p className="font-semibold md:text-base text-xs">Cart</p>
27      </div>
28    </Link>
29  );
30 };
31 export default Cart;
32
```

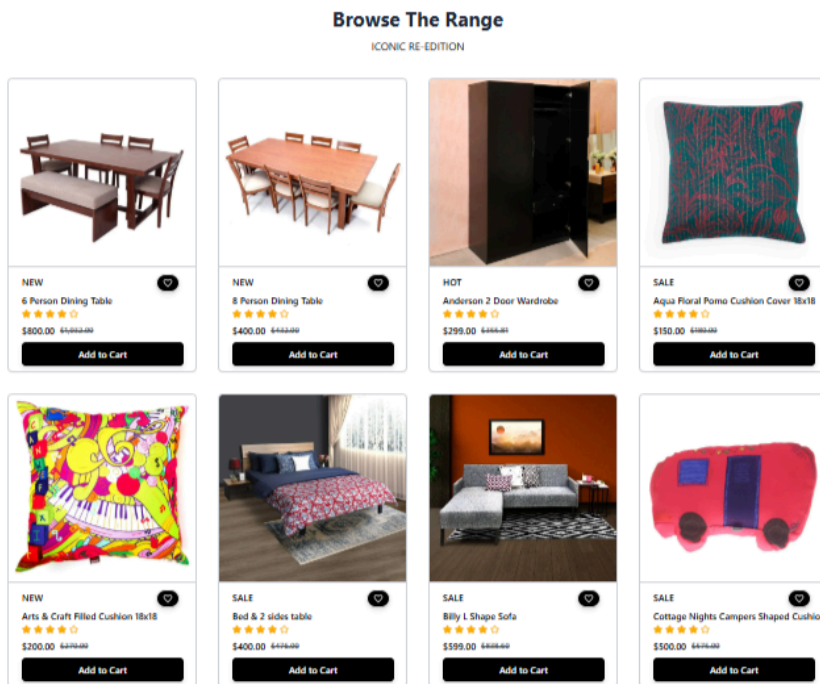
Video:

Shopping Cart

Order Summary		Product	Price	Quantity	Total
SubTotal	\$1,566.90	 Bed & 2 sides table	\$400.00	<div>- 2 +</div>	\$800.00
Discount	\$207.90	 Emerson 4 Door Wardrobe	\$559.00	<div>- 1 +</div>	\$559.00
Total	\$1,359.00	<div>Reset Cart</div>			

Product Listing:

In Urban Loom, product images are dynamically displayed on the product listing page. Each product has an associated image, which is fetched from Sanity CMS and rendered on the website.



Product Detail:

In Urban Loom, the product detail page displays essential information such as product images, price, description, and specifications. Product images are dynamically fetched from the Sanity CMS, ensuring that users always see the most up-to-date visuals for each item. The page also features an 'Add to Cart' button and quantity selection, making it easy for users to purchase the product.



Novak Bed With Two Side Tables

★★★★☆ (25 reviews)

\$350.00 \$420.00

Availability: In Stock

Novak is a king-sized economical bed with a grand extended headboard. Solid wood legs and nightstands with one drawer on each side, attached with the headboard which makes it a space-saving design. Its modern and sleek design with a combination of two colors adds a touch of modern style to it. High Gloss laminated panel on headboard with gold touch which makes it an ideal bed for a wedding gift. Under-bed is of metal frame which gives more strength and durability to it.

245k Most viewing Product

Add to Cart

Compare Color

Ask a Question

Delivery and Return

share

Free Shipping

Free shipping over order \$100

Flexible Payment

Pay with Multiple Credit Cards

1.3: All Component Interaction Flow:

sequenceDiagram :

participant User
participant UI
participant Zustand
participant SanityCMS
participant Clerk

User->>UI: Adds item to cart
UI->>Zustand: Dispatch addItem()
Zustand->>LocalStorage: Persist state
Zustand-->>UI: Update cart counter
UI->>User: Show toast confirmation

User->>UI: Attempts cart access
UI->>Clerk: Check auth status
Clerk-->>UI: Return user session
alt Authenticated
 UI->>Zustand: Load cart items
else Guest
 UI->>NoAccessToCart: Render auth gate
end

2: Best Practices:

Best Practices Which I follow during coding;

2.0: Code Quality:

- Modular Components: Reusable ProductCard, PriceFormat
- Type Safety: TypeScript interfaces for all props (e.g., Product, Category)
- Error Boundaries: Fallback UIs for Sanity CMS data failures

2.1: Accessibility:

- Keyboard Navigation: Full support for cart/quantity controls
- ARIA Labels: Added for screen readers (e.g., aria-label="Add to cart")

Thanks for Viewing

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