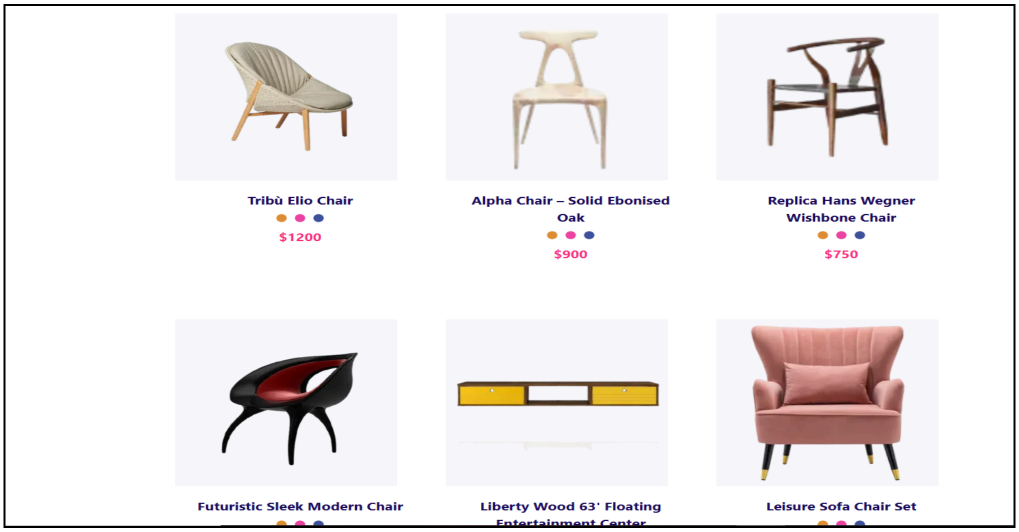
Day 4 - Dynamic Frontend Components Ecommerce Website (Hekto)

Today was an exciting and productive day in my journey of creating a marketplace. I focused on building a **dynamic frontend** that brings the platform to life and provides users with an interactive shopping experience. Here's a breakdown of what I achieved:

Product Listing Component:-

The **Product Listing Component** dynamically showcasing all available products in a clean and organized layout. It fetches product data from a backend API or a static file and renders each item within responsive and visually appealing cards.

- **Dynamic Data Rendering:** Displays product details like name, image, description, price, and category fetched from the backend using groq query.
- **Responsive Design:** Ensures the grid adjusts seamlessly across devices for a consistent user experience.
- **Interactive Cards:** Each product card is styled to highlight essential information, with hover effects and click actions for deeper interaction, such as navigating to a single product page.

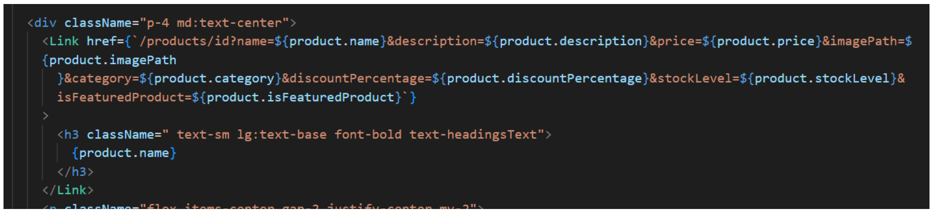

Tribù Elio Chair
$1200
Alpha Chair – Solid Ebonised Oak
$900
Replica Hans Wegner Wishbone Chair
$750
Futuristic Sleek Modern Chair
Liberty Wood 63' Floating Entertainment Center
Leisure Sofa Chair Set

Product Details Component:-

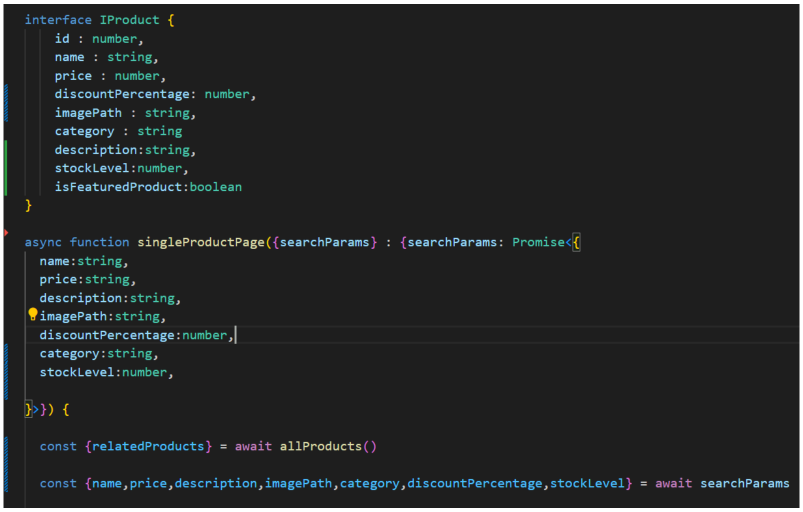
The component provides a comprehensive view of an individual product, allowing users to explore its features and details in depth. This component is designed to dynamically display data passed from the Product Listing Page through the URL using search parameters.

- **Dynamic Data Retrieval:** Retrieves product details such as name, price, description, image, and other attributes from the URL using `useSearchParams` in Next.js. This approach ensures seamless navigation and accurate rendering of the selected product.
- **Interactive Elements:** Users can interact with buttons for adding the product to the cart or initiating the checkout process directly from this page.

Some Code Snippets:

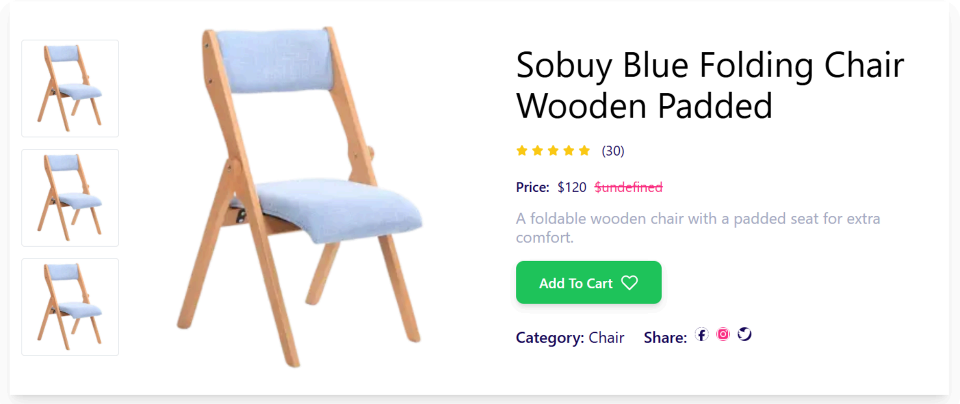


```
<div className="p-4 md:text-center">
  <Link href={`/products/id?name=${product.name}&description=${product.description}&price=${product.price}&imagePath=$
  {product.imagePath
    }&category=${product.category}&discountPercentage=${product.discountPercentage}&stockLevel=${product.stockLevel}&
    isFeaturedProduct=${product.isFeaturedProduct}`}
  >
    <h3 className=" text-sm lg:text-base font-bold text-headingsText">
      {product.name}
    </h3>
  </Link>
  <p className="flex items-center gap-2 justify-center my-2">
```



```
interface IProduct {
    id : number,
    name : string,
    price : number,
    discountPercentage: number,
    imagePath : string,
    category : string
    description:string,
    stockLevel:number,
    isFeaturedProduct:boolean
}

async function singleProductPage({searchParams} : {searchParams: Promise<{
  name:string,
  price:string,
  description:string,
  imagePath:string,
  discountPercentage:number,
  category:string,
  stockLevel:number,

}>}) {

  const {relatedProducts} = await allProducts()

  const {name,price,description,imagePath,category,discountPercentage,stockLevel} = await searchParams
```

Product Detail Page Screenshot:



Sobuy Blue Folding Chair Wooden Padded

★★★★★ (30)

Price: $120 ~~$undefined~~

A foldable wooden chair with a padded seat for extra comfort.

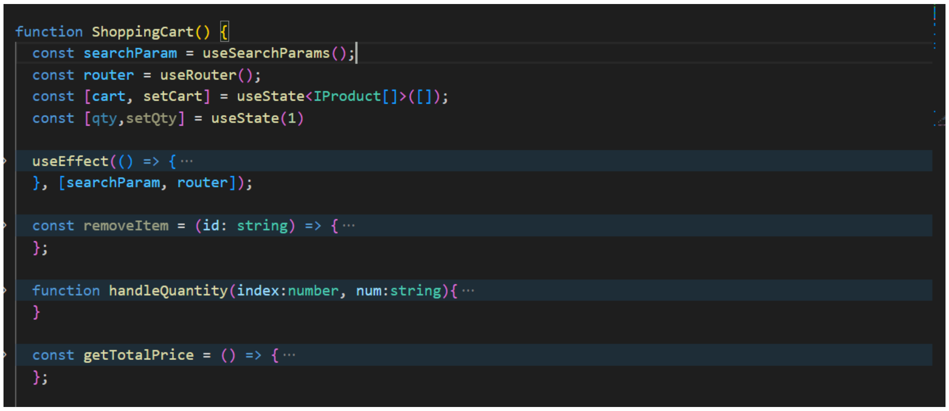
Category: Chair Share:

Cart Component:-

The Cart Component serves as the heart of the shopping experience. It dynamically updates as users add or remove items, ensuring a seamless and interactive experience.

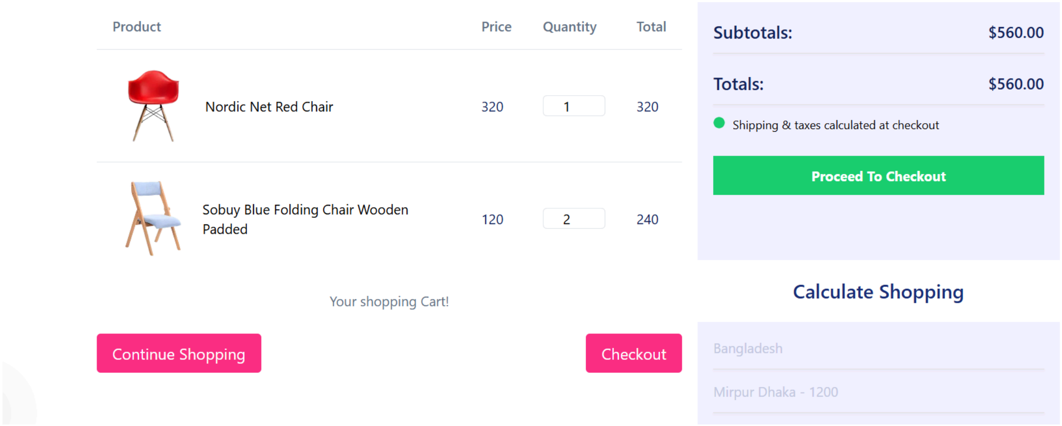
- Displays all products added to the cart with their details such as name, quantity, and price.
- Provides options to update the quantity or remove items from the cart.
- Automatically calculates and updates the total price as changes are made.

Code Snippet:



```
function ShoppingCart() {
  const searchParam = useSearchParams();
  const router = useRouter();
  const [cart, setCart] = useState<IProduct[]>([]);
  const [qty,setQty] = useState(1)

  useEffect(() => {…
  }, [searchParam, router]);

  const removeItem = (id: string) => {…
  };

  function handleQuantity(index:number, num:string){…
  }

  const getTotalPrice = () => {…
  };
```

Cart Component Screenshot:



Product	Price	Quantity	Total
Nordic Net Red Chair	320	1	320
Sobuy Blue Folding Chair Wooden Padded	120	2	240

Your shopping Cart!

Subtotals:	$560.00
Totals:	$560.00

● Shipping & taxes calculated at checkout

Calculate Shopping

Bangladesh

Mirpur Dhaka - 1200