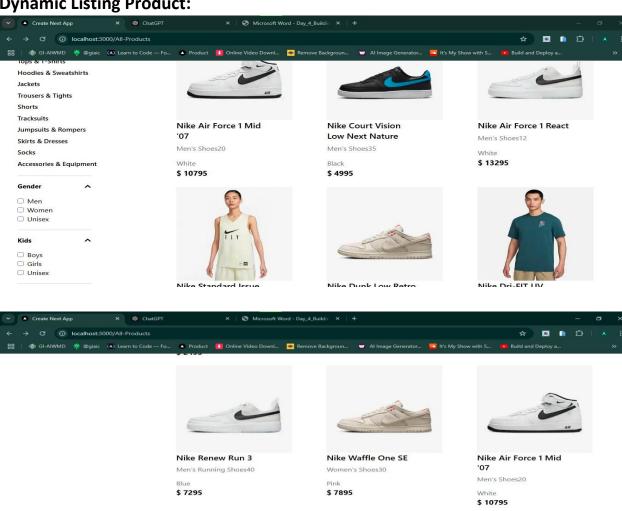
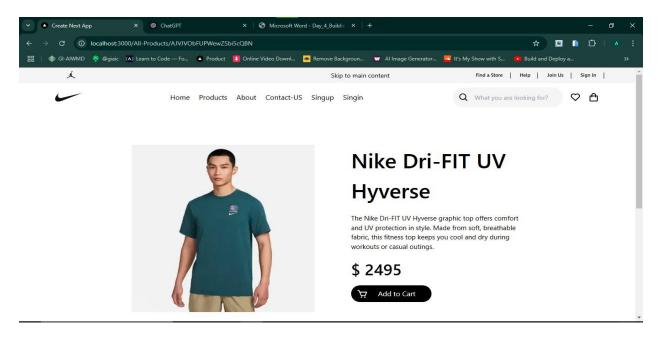
Day 4 - Dynamic Frontend Components – Every Thing	
Functional Deliverables	1-6
Code Deliverable	7-18
Product Listing	8-9
2. Serchbar	10-11
3. Filter	11-14
4. Add To Cart	14-17
5. Check Out	17-18
Technical Report	18

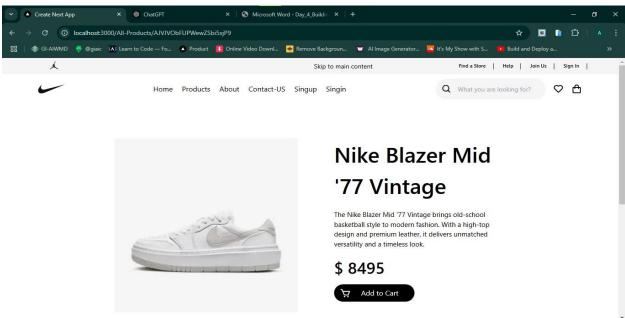
Functional Deliverables:

Dynamic Listing Product:



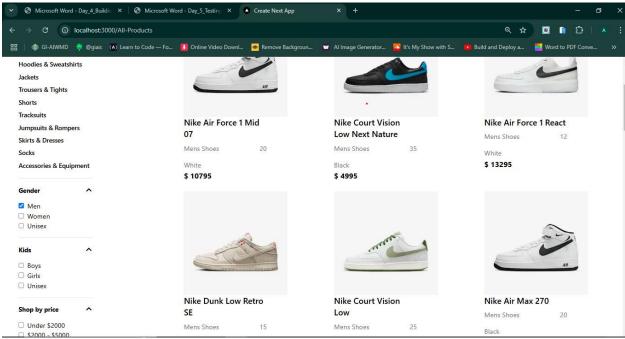
Product detail pages with accurate routing and data rendering:

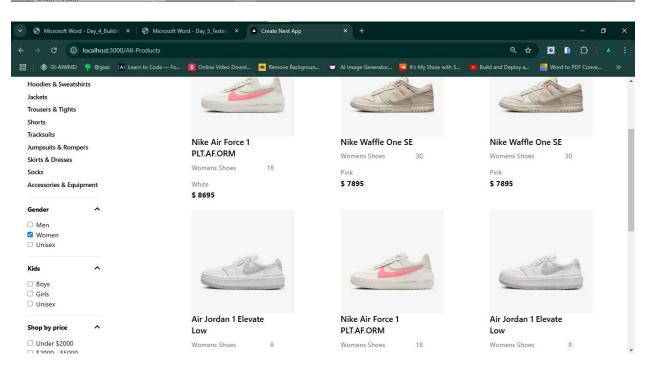




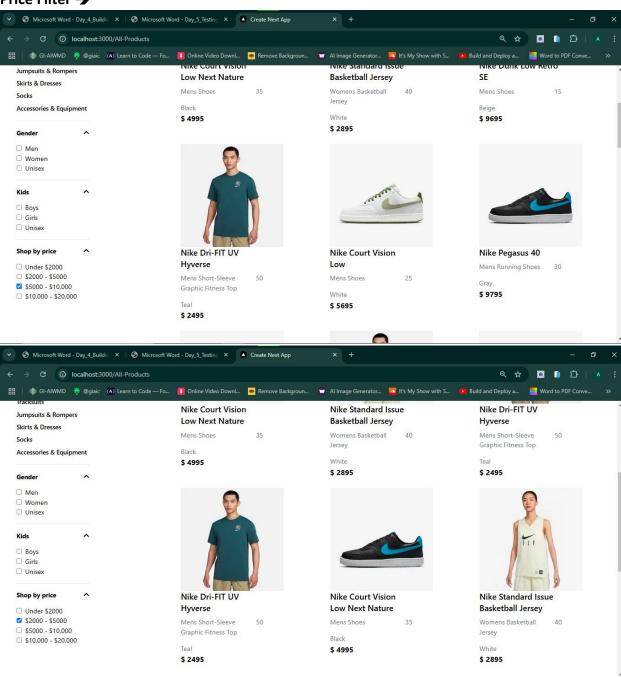
Category & Price filters:

Category Filter →

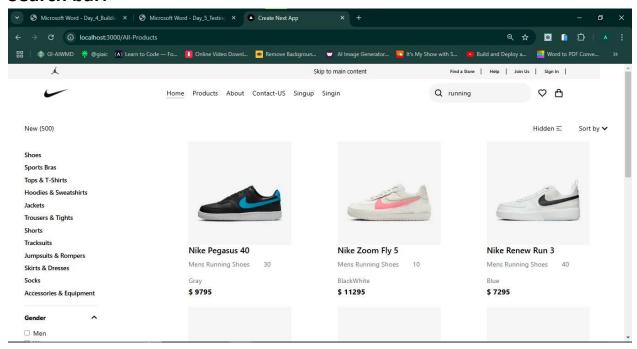


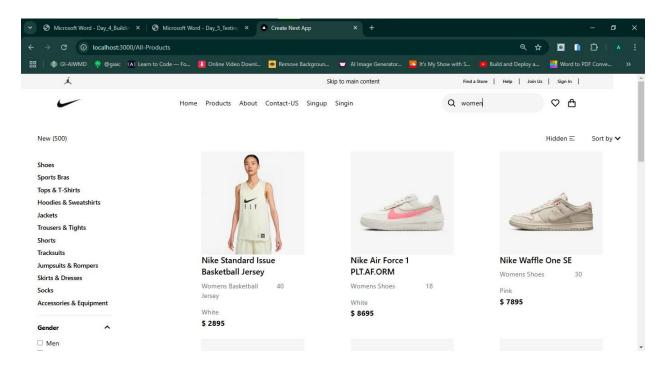


Price Filter →

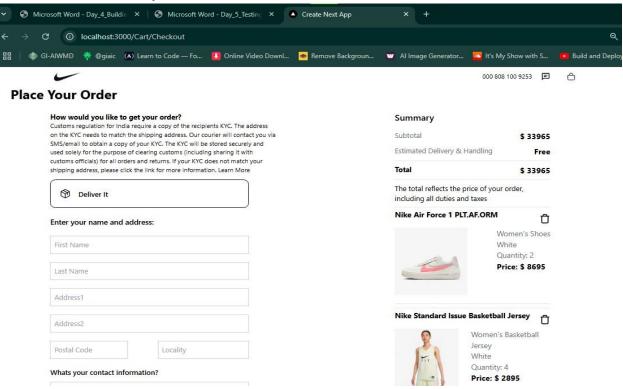


Search bar:

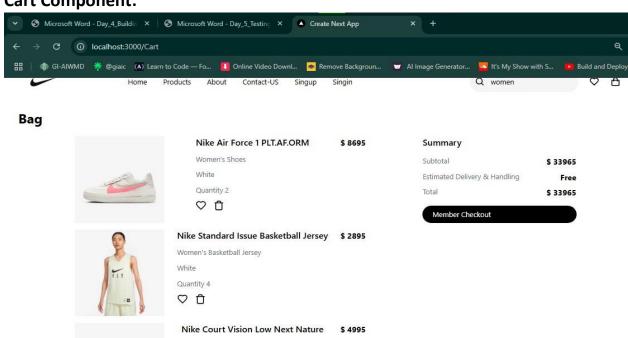




Checkout Flow Component:



Cart Component:



Men's Shoes

Quantity 1

Code Deliverables:

Code snippets for key components:

Product Listing Components & Logic →

COMPONENT

```
import Image from "next/image";
import React from "react";
import Link from "next/link";
import { urlFor } from "@/sanity/lib/image";
interface CardProps {
productimageUrl: string;
productid: string;
productName: string;
productCategory: string;
productinventory: number;
productprice: number;
productcolors: string[];
}
const Card = (props:CardProps) => {
return (
 <>
  <div className="max-w-[1440px]">
   <Link href={`/All-Products/${props.productid}`}>
    <lmag src={urlFor(props.productimageUrl).url()} alt="Product Image" width={250}</pre>
     height={250}
    />
    <h3 className="text-xl font-semibold mb-2 w-[200px]">{props.productName}
    {props.productCategory}
     {props.productinventory}
    {props.productcolors}
    $ {props.productprice}
   </Link>
  </div>
 </>
);
```

```
};
export default Card;
LOGIC→ interface Product {
 _id: string;
 productName: string;
 category: string;
 price: number;
 inventory: number;
 colors: string[];
 status: string;
imageUrl: string;
 description: string;
const ProductDetails = () => {
 let { search } = useSearch();
 const api = `*[_type == "product"]{
 _id,
 productName,
 category,
 price,
 inventory,
 colors,
 status,
 "imageUrl": image.asset->url,
 description
}`;
 const [productData, setProductData] = useState<Product[]>([]);
 const [filteredProduct, setFilteredProduct] =
  useState<Product[]>(productData);
// for fetching data
 useEffect(() => {
  async function fetchData() {
   const product = await client.fetch(api);
   console.log(product);
   setProductData(product);
   setFilteredProduct(product);
  fetchData();
```

Search Bar Logic & Copmonent:

COOMPONENT

```
<div className="hidden lg:flex lg:justify-center lg:items-center rounded-r-[300px]">
       <span className="cursor-pointer bg-[#F5F5F5] px-3 py-3 rounded-l-[50%] ">
        <BiSearch size={23} />
       </span>
       <input
        value={search}
        onChange={handleSearch}
        placeholder="What you are looking for?"
        className="bg-[#F5F5F5] px-3 py-3 pl-0 outline-none border-none
placeholder:text-[14px] rounded-r-[300px]"
       />
      </div>
LOGIC→
"use client"
import React, { useContext, createContext, useState, ReactNode, } from "react";
interface SearchContext {
 search: string;
 handleSearch: (event: React.ChangeEvent<HTMLInputElement>) => void;
 setSearch: React.Dispatch<React.SetStateAction<string>>;
const searchbarContext = createContext<SearchContext|undefined>(undefined);
const SearchProvider = ({ children }: { children:ReactNode }) => {
 const [search, setSearch] = useState("");
 const handleSearch = (event: React.ChangeEvent<HTMLInputElement>) => {
  setSearch(event.target.value);
};
 return (
  <searchbarContext.Provider value={{ search, handleSearch, setSearch }}>
   {children}
  </searchbarContext.Provider>
);
};
export default SearchProvider;
```

```
export const useSearch = ():SearchContext => {
 const context = useContext(searchbarContext);
 if (!context) {
  throw new Error("useSearch must be used within a SearchProvider");
return context;
};
 // for serching data
 useEffect(() => {
  if (search === "") {
   setFilteredProduct(productData);
   return;
  } else {
   const filteredData = productData.filter((product) => {
    return (
      product.productName.toLocaleLowerCase() &&
      product.category.toLowerCase().includes(search.toLowerCase())
    );
   });
   setFilteredProduct(filteredData);
}, [search, productData]);
```

Filter Logic & Component:

COMPONETN→

```
<div className="flex justify-between items-center font-bold text-[15px] border-t-2 w-
[50%] mt-4 py-4 pb-4">
       Gender{" "}
       <span>
        <FaChevronUp />
       </span>
      </div>
      <div>
       <input
        type="checkbox"
        className="mr-2"
        onChange={() => filterHandler({ category: "men's" })}
       />
       Men
      </div>
      <div>
       <input
```

```
type="checkbox"
        className="mr-2"
        onChange={() => filterHandler({ category: "women's" })}
       />
       Women
      </div>
      <div>
       <input
        type="checkbox"
        className="mr-2"
        onChange={() => filterHandler({ category: "unisex" })}
       />
       Unisex
      </div>
     </div>
     <div>
      <div className="flex justify-between items-center font-bold text-[15px] border-t-2</pre>
w-[50%] mt-4 py-4 pb-4">
       Kids{" "}
       <span>
        <FaChevronUp />
       </span>
      </div>
      <div>
       <input type="checkbox" className="mr-2" />
       Boys
      </div>
      <div>
       <input type="checkbox" className="mr-2" />
       Girls
      </div>
      <div>
       <input type="checkbox" className="mr-2" />
       Unisex
      </div>
     </div>
     <div></div>
     <div>
      <div className="font-bold flex justify-between items-center text-[15px] border-t-2</p>
w-[50%] mt-4 py-4">
       Shop by price{" "}
```

```
<span>
         <FaChevronUp />
       </span>
      </div>
      <div>
       <input
        type="checkbox"
         className="mr-2"
        onChange={(e) => filterHandler({ priceRange: 2000 })}
       Under $2000
      </div>
      <div>
       <input
        type="checkbox"
         className="mr-2"
        onChange={(e) => filterHandler({ priceRange: 5000 })}
       $2000 - $5000
      </div>
      <div>
       <input
        type="checkbox"
         className="mr-2"
        onChange={(e) => filterHandler({ priceRange: 10000 })}
       />
       $5000 - $10,000
       </div>
LOGIC→
function filterHandler(filters: { priceRange?: number; category?: string }) {
  let filteredData = productData;
  if (filters.priceRange) {
   filteredData = filteredData.filter((product) => {
    return (
     filters.priceRange !== undefined && product.price < filters.priceRange
    );
   });
  if (filters.category) {
   filteredData = filteredData.filter((product) => {
```

```
const category = product.category
    .toLocaleLowerCase()
    .replace(/shoes|Running Shoes/gi, "")
    .trim();
    console.log(category);
    return (
        filters.category !== undefined &&
        category === filters.category.toLocaleLowerCase().trim()
    );
    });
}
setFilteredProduct(filteredData);
console.log(filters);
}
```

Add To Cart Logic & Component:

COMPONENT

```
<div className="flex justify-evenly flex-col lg:flex-row">
     {cart.map((item) => {
      return (
       <div
        key={item. id}
        className="flex flex-col justify-between gap-7 pb-4 md:flex-row"
        <div>
         <lmage
         src={urlFor(item.imageUrl).url()}
         alt="MEn"
         width={200}
         height={200}
        />
        </div>
        <div className="flex flex-col gap-3">
         <h3 className="text-xl font-semibold">
         {item.productName}
         </h3>
         {item.category}
         {item.colors}
         <div className="flex gap-4">
```

```
Quantity {item.quantity}
          </div>
          <div className="flex gap-4 cursor-pointer">
           <Heart />
           <Trash onClick={() => removeFromCart(item._id)} />
          </div>
         </div>
         $ {item.price}
        </div>
      );
     })}
LOGIC→
const { cart, removeFromCart } = useCart();
const [sum, setSum] = useState(0);
useEffect(() => {
 const total = cart.reduce(
   (acc: number, item: { price: number; quantity: number }) =>
    Math.round(acc + item.price * item.quantity),
  0
 );
 setSum(total);
}, [cart]);
//CONTEXT
"use client";
import React from "react";
import { createContext, useContext, useState, useEffect } from "react";
interface CartItem {
id: number;
productName: string;
category: string;
price: number;
inventory: number;
colors: string[];
status: string;
imageUrl: string;
 description: string;
```

```
quantity: number;
}
type CartContextType = {
 cart: CartItem[];
 addToCart: (product: CartItem, quantity: number) => void;
 removeFromCart: (productId: number) => void;
};
const cartContext = createContext<CartContextType | undefined>(undefined);
const CartProvider = ({ children }: { children: React.ReactNode }) => {
 const [cart, setcart] = useState<CartItem[]>(() => {
  if (typeof window !== "undefined") {
   const savedData = localStorage.getItem("cart");
   if (savedData) {
    try {
     return JSON.parse(savedData);
    } catch (e) {
     console.error("Failed to parse cart data:", e);
     return [];
    }
   }
  return [];
 });
 useEffect(() => {
  localStorage.setItem("cart", JSON.stringify(cart));
 }, [cart]);
 const addToCart = (product: CartItem, quantity: number) => {
  setcart((cartitem) => {
   const itemExist = cartitem.find((item) => item. id === product. id);
   console.log(itemExist);
   if (itemExist) {
    return cartitem.map((item) => {
     if (item. id === product. id) {
      console.log("_id", item._id, product._id);
      return { ...item, quantity: quantity };
     } else {
      return item;
```

```
}
    });
   }
   return [...cartitem, { ...product, quantity }];
  });
};
 const removeFromCart = (productId: number) => {
  setcart((cartItem) => {
   return cartItem.filter((item) => item. id !== productId);
 });
};
 return (
  <>
   <cartContext.Provider value={{ cart, addToCart, removeFromCart }}>
    {children}
   </cartContext.Provider>
  </>
);
};
export const useCart = (): CartContextType => {
 const context = useContext(cartContext);
if (!context) {
  throw new Error("useCart must be used within a CartProvider");
return context;
export default CartProvider;
```

Checkout Logic & Component:

Component ->

```
<h1 className="font-bold mb-5 tetx-[25px]">
            {item.productName}
           </h1>
           <button onClick={() => removeFromCart(item._id)}>
            <Trash />
           </button>
          </div>
          <div className="flex justify-between flex-col gap-7 pb-4 md:flex-row">
            <Image
            src={urlFor(item.imageUrl).url()}
            width={160}
            height={160}
            alt="Me n"
            />
           </div>
           <div className=" gap-3">
            {item.category}
            {item.colors}
            <div className=" ">
             Quantity: {item.quantity}
             Price: $ {item.price}
            </div>
           </div>
          </div>
         </div>
        </>
       );
      })}
Logic -
const { cart, removeFromCart } = useCart();
const [sum, setSum] = useState(0);
useEffect(() => {
 const total = cart.reduce(
```

<div className="flex justify-between ">

```
(acc: number, item: { price: number; quantity: number }) =>
    Math.round(acc + item.price * item.quantity),
    0
);
setSum(total);
}, [cart]);
```

Documentation:

Technical Report:

- 1. I first identifying that according to my marketplace what features I have to to implement, then I identify the reusable component like header, footer, card. After identifying implemented logic and fetch data dynamic by provider API.
- 2. Due to beginner and no experience and expertise but so too much problem I face that are not tell in class like it's a challenge for me to send data from ProductDetails to cart so after searching I find the solution of cartcontex,I also face api integarion issue, Component reusability for send a data and Building Logic for filter search and add to cart e.t.c.
- **3.** Try to use Best Practice but, the lack of experience and knowledge there is bad quality code. I Try best Practice like Descriptive Naming for variable, Code Formatting, Use component for reuse, State Management for cart and searchbar.