Day 4 - Dynamic Frontend Components - Nike Shoes

Introduction:

On Day 4, focus on designing and dynamically frontend components for the shoes marketplace. The goal was to enhance the user experience by integrating data from sanity CMS and creating scalable and reusable components.

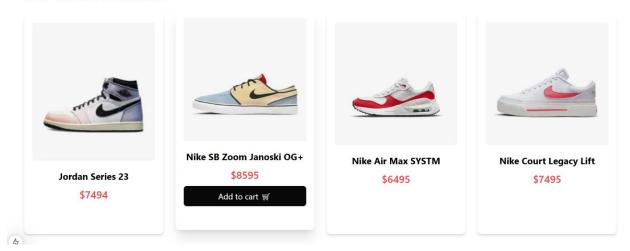
Key Objective:

- Building dynamic frontend components to display data from Sanity CMS.
- Implementing reusable and modular components.
- Understanding state management techniques.
- Applying responsive design and UI/UX best practices.

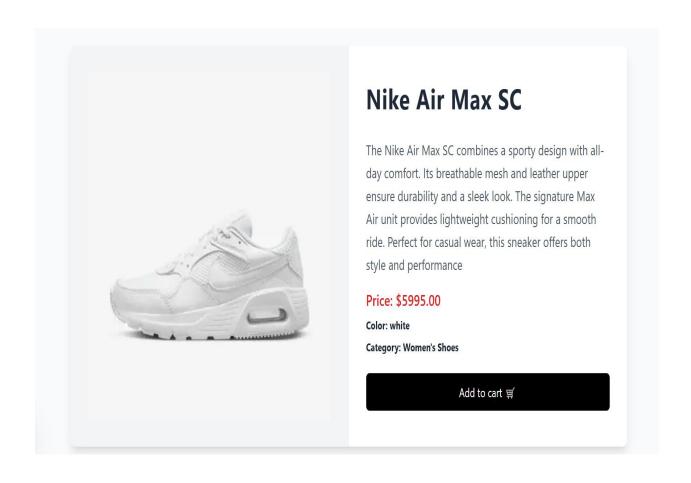
Components Developed:

 Product Listing Component: Displayed products dynamically in a grid layout shows product name, price.

Our Latest Products

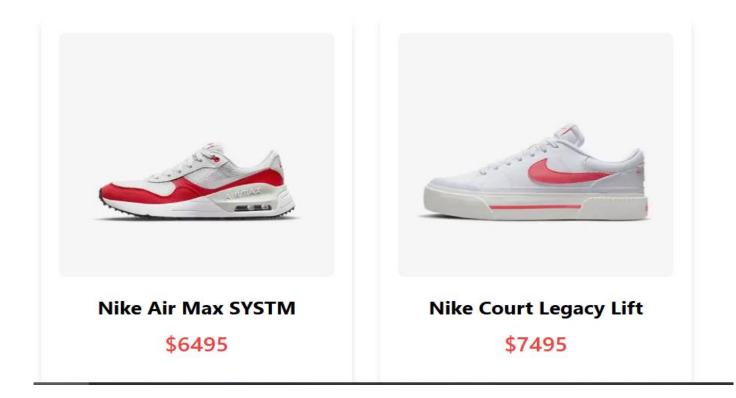


 Product Detail Component: Provided details about the product name, description, price, category, color. Dynamic routing ensures each product has a unique URL for easy sharing.



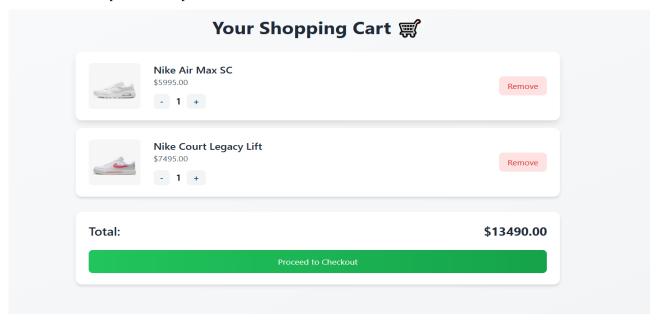
• Search Bar Component

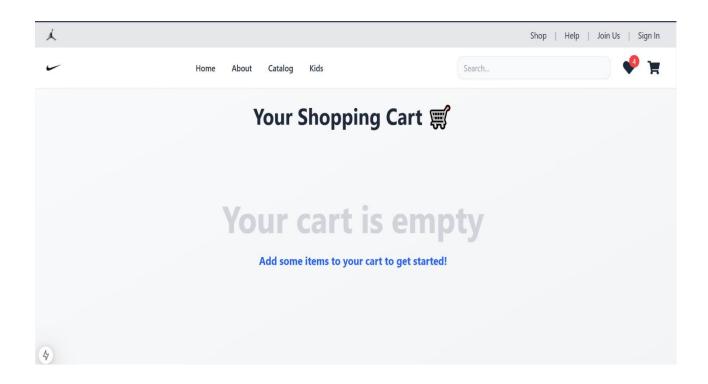
Men's Shoes ×



Add to Cart:

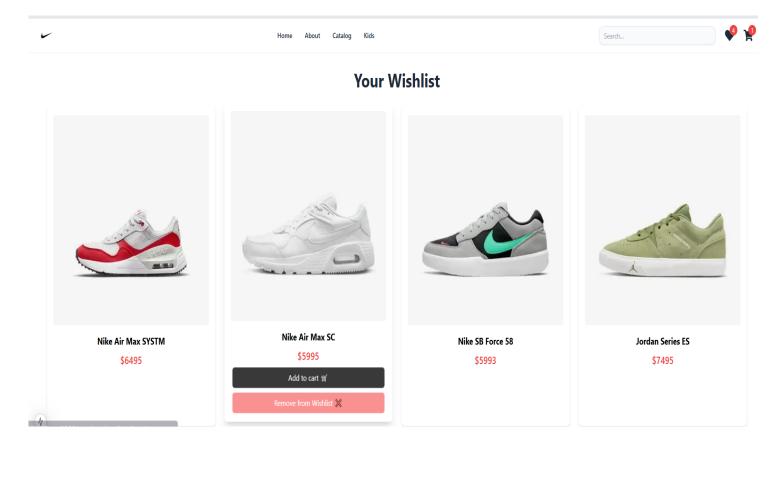
User can add products to the cart, view them, and remove items dynamically.

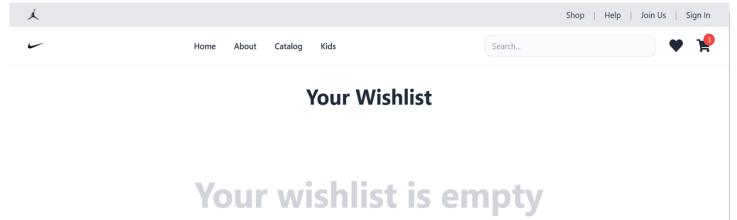




• Wishlist:

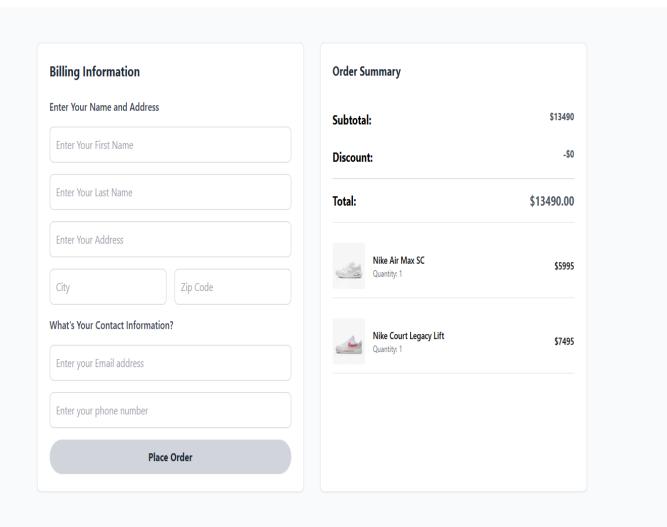
User can add product to the wishlist view them, and remove items dynamically.





Checkout:

User can enter their delivery information, choose a payment method, and confirm their order to complete the purchase.



Code Snippets:

Product Listening Page:

```
const Products = () => {
 const [products, setProducts] = useState<Product[]>([]);
 const { addToCart } = useCart();
  const { addToWishlist } = useWishlist(); // Use useWishlist
 const [showAll, setShowAll] = useState(false);
 useEffect(() => {
   async function fetchProducts() {
     const fetchedProducts: Product[] = await client.fetch(allProducts);
      setProducts(fetchedProducts);
    fetchProducts();
  const handleAddToCart = (e: React.MouseEvent, product: Product) => {
    e.preventDefault();
    addToCart(product);
   Swal.fire({
     position: "top-end",
     title: `${product.productName} added to cart`,
     showConfirmButton: false,
     timer: 1000,
  const handleAddToWishlist = (e: React.MouseEvent, product: Product) => {
   e.preventDefault();
   e.stopPropagation(); // Prevent Link from navigating
```

```
div className="mx-8 px-4 py-8"
 <h1 className="text-3xl font-bold mb-6 ☐ text-gray-700">
 <div className="grid grid-cols-1 sm:grid-cols-2 md:grid-cols-3 lg:grid-cols-4 gap-6">
   {(showAll ? products : products.slice(0, 8)).map((product) => (
      key={product._id}
className="■bg-white shadow-md p-4 rounded-lg hover:shadow-xl transition-shadow duration-300 cur
       <Link href={`/productdetails/${product.slug.current}`}>
         <div className="relative overflow-hidden rounded-md">
           {product.image && (
             <div className="relative">
               <Image
                 src={urlFor(product.image).url()}
                 alt={product.productName}
                 width={300}
                 height={300}
                 className="w-full object-cover rounded-md transform transition-transform duration-300 g
               {/* Heart Icon */}
                 className="absolute top-2 right-2 ■bg-white p-2 rounded-full opacity-0 group-hover:opa
                 onClick={(e) => handleAddToWishlist(e, product)}
                 <FaHeart className="■text-red-500" />
```

Product Details Page:

```
export default function ProductPage() {
 const { slug } = useParams() as { slug: string | string[] };
 const slugStr: string = typeof slug === "string" ? slug : slug ? slug[0] : "";
 const [product, setProduct] = useState<Product | null>(null);
const [loading, setLoading] = useState(true);
 const getProduct = async (slug: string) => {
     const data = await client.fetch(
  groq`*[_type == "product" && slug.current == $slug][0]{
         productName,
          _type,
         image,
         price,
         description,
         inventory,
         category,
"slug": slug.current
       { slug }
     setProduct(data);
     setLoading(false);
     catch (err) {
     console.error("Error fetching product:", err);
     setLoading(false);
```

```
<div className="rounded-lg max-w-5xl w-full md:flex | bg-white shadow-lg overflow-hidden">
 {product.image && (
   <Image</pre>
     src={urlFor(product.image).url()}
     alt={product.productName}
     width={600}
     height={600}
     className="w-full h-auto object-cover rounded-md transform transition duration-500 hover:scale-
 <div className="w-full md:w-1/2 p-8 flex flex-col justify-center">
  <h1 className="text-4xl font-bold \( \square\) text-gray-800 mb-4 tracking-wide">
   {product.productName}
  {product.description}
  Price: ${Number(product.price).toFixed(2)}
  Color: {product.colors}
  Category: {product.category}
```

```
<div className="rounded-lg max-w-5xl w-full md:flex ■bg-white shadow-lg overflow-hidden">
 {product.image && (
   <Image</pre>
    src={urlFor(product.image).url()}
    alt={product.productName}
    width={600}
    height={600}
    className="w-full h-auto object-cover rounded-md transform transition duration-500 hover:scale-
 <div className="w-full md:w-1/2 p-8 flex flex-col justify-center">
  {product.productName}
  {product.description}
  Price: ${Number(product.price).toFixed(2)}
  Color: {product.colors}
  Category: {product.category}
```

Cart Page:

```
const CartPage = () => {
  const { cartItems, removeFromCart, updateCartQuantity } = useCart();
  const router = useRouter();

const handleIncrement = (id: string) => {
    const product = cartItems.find((item) => item._id === id);
    if (product) {
        updateCartQuantity(id, product.inventory + 1);
      }
    };

const handleDecrement = (id: string) => {
    const product = cartItems.find((item) => item._id === id);
    if (product && product.inventory > 1) {
        updateCartQuantity(id, product.inventory - 1);
    }
};

const calculateTotal = () => {
    return cartItems.reduce((total, item) => total + item.price * item.inventory, 0);
};
```

Wishlist Page:

```
const FavoritesPage = () => {
 const { wishlist, removeFromWishlist } = useWishlist();
 const { addToCart } = useCart();
 // Handle Add to Cart
 const handleAddToCart = (e: React.MouseEvent, product: any) => {
   e.preventDefault();
   addToCart(product);
   Swal.fire({
     position: "top-end",
     icon: "success",
     title: `${product.productName} added to cart`,
     showConfirmButton: false,
     timer: 1000,
   });
 };
 const handleRemoveFromWishlist = (e: React.MouseEvent, product: any) => {
   e.preventDefault();
   removeFromWishlist(product._id);
   Swal.fire({
     position: "top-end",
     icon: "success",
     title: `${product.productName} removed from wishlist`,
     showConfirmButton: false,
     timer: 1000,
   });
```

```
<div className="mx-8 px-4 py-8">
 <h1 className="text-4xl font-bold mb-8  text-gray-800 text-center">
   Your Wishlist
 {wishlist.length === 0 ? (
   <div className="py-20">
     Your wishlist is empty
   <div className="grid grid-cols-1 sm:grid-cols-2 md:grid-cols-3 lg:grid-cols-4 gap-6">
     {wishlist.map((product) => (
         key={product._id}
         className=" ■ bg-white shadow-md p-4 rounded-lg hover:shadow-xl transition-shadow duration-300 o
         <Link href={`/productdetails/${product.slug.current}`}>
          <div className="relative overflow-hidden rounded-md">
            {product.image && (
              <Image</pre>
                src={urlFor(product.image).url()}
                alt={product.productName}
                width={300}
                className="w-full object-cover rounded-md transform transition-transform duration-300 g
```

Checkout Page:

```
export default function CheckoutPage() {
 const [cartItems, setCartItems] = useState<Product[]>([]);
 const [discount, setDiscount] = useState<number>(0);
 const [formValues, setFormValues] = useState({
   firstName: "",
   lastName: "",
   address: "",
   city: "",
   zipCode: "",
   phone: "",
   email: "",
 const [formErrors, setFormErrors] = useState({
   firstName: false,
   lastName: false,
   address: false,
   city: false,
   zipCode: false,
   phone: false,
   email: false,
 useEffect(() => {
   setCartItems(getCartItems());
   const appliedDiscount = localStorage.getItem("appliedDiscount");
   if (appliedDiscount) {
     setDiscount(Number(appliedDiscount));
```

```
const subtotal = cartItems.reduce(
 (total, item) => total + item.price * item.inventory,
 0
const total = Math.max(subtotal - discount, 0);
const handleInputChange = (e: React.ChangeEvent<HTMLInputElement>) => {
 setFormValues({
   ...formValues,
   [e.target.id]: e.target.value,
 });
const validateForm = () => {
 const errors = {
   firstName: !formValues.firstName,
   lastName: !formValues.lastName,
   address: !formValues.address,
   city: !formValues.city,
   zipCode: !formValues.zipCode,
   phone: !formValues.phone,
   email: !formValues.email,
 setFormErrors(errors);
 return Object.values(errors).every((error) => !error);
const handlePlaceOrder = async () => {
```