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DAY 4 - DYNAMIC FRONTEND COMPONENTS

Published: January 19, 2025

Name of the Marketplace : www.clothsite.com (not confirmed)

Objective:

On Day 4, we will concentrate on designing and creating dynamic frontend components to showcase marketplace data retrieved from Sanity CMS or APIs. This step highlights the importance of modular and reusable component design, as well as real-world techniques for developing scalable and responsive web applications.

Key Learning Outcomes:

1. Build dynamic frontend components to display data from Sanity CMS or APIs.
2. Implement reusable and modular components.
3. Understand and apply state management techniques.
4. Learn the importance of responsive design and UX/UI best practices.
5. Prepare for real-world client projects by replicating professional workflows.

Overview of System Functions:

The project integrates the following key functionalities:

1. Product Listing Page
2. Individual Product Detail Page
3. Cart Page
4. Search Bar

-
5. Checkout Page
 6. Header
 7. Footer
 8. Wishlist Component
 9. Filter Panel Component
 10. Related Products Component
 11. Pagination Component
 12. User Profile Component
 13. Reviews and Ratings Component
 14. Notifications Component
 15. Analytics Dashboard Component
 16. Product Comparison Component
 17. Multi-Language Support Component
 18. Order Tracking Component
 19. FAQ and Help Center Component
 20. Subscription Management Component
 21. Admin Dashboard Component
 22. Discount and Promotion Component
 23. Social Media Sharing Component
 24. Bulk Upload Component
 25. AI Recommendations Component
 26. Gift Card and Voucher Component
 27. Customer Feedback Component
 28. Advanced Search Component

Each feature is integral to constructing a responsive and scalable marketplace platform.

Key Components to Build:

1. Product Listing Component

Code:

```
const { allProducts, addToProducts } = useCart();  
const [isLoading, setIsLoading] = useState(true); // Track loading state
```

```

useEffect(() => {
  fetchProducts()
    .then((fetchedProducts) => {
      addToProducts(fetchedProducts);
      setIsLoading(false); // Data has been loaded
    })
    .catch((error) => {
      console.error("Failed to fetch products:", error);
      setIsLoading(false); // Stop loading even if there's an error
    });
}, []);

const productData = allProducts.find(
  (product) => product._id === (params.slug[0])
);
if (isLoading) {
  return <div>Loading...</div>; // Show a loading state
}

if (!productData?.name) {
  notFound();
}

const ProductListSec = ({ title, data, viewAllLink }: ProductListSecProps)
=> {
  return (
    <section className="max-w-frame mx-auto text-center">
      <motion.h2
        className={cn([
          integralCF.className,
          "text-[32px] md:text-5xl mb-8 md:mb-14 capitalize",
        ])}
      >
        {title}
      </motion.h2>
      <motion.div
      >
        <Carousel
          opts={{
            align: "start",
          }}
          className="w-full mb-6 md:mb-9"
        >
          <CarouselContent className="mx-4 xl:mx-0 space-x-4
sm:space-x-5">
            {data.map((product) => (
              <CarouselItem
                key={product._id}
                className="w-full max-w-[198px] sm:max-w-[295px] pl-0"
              >

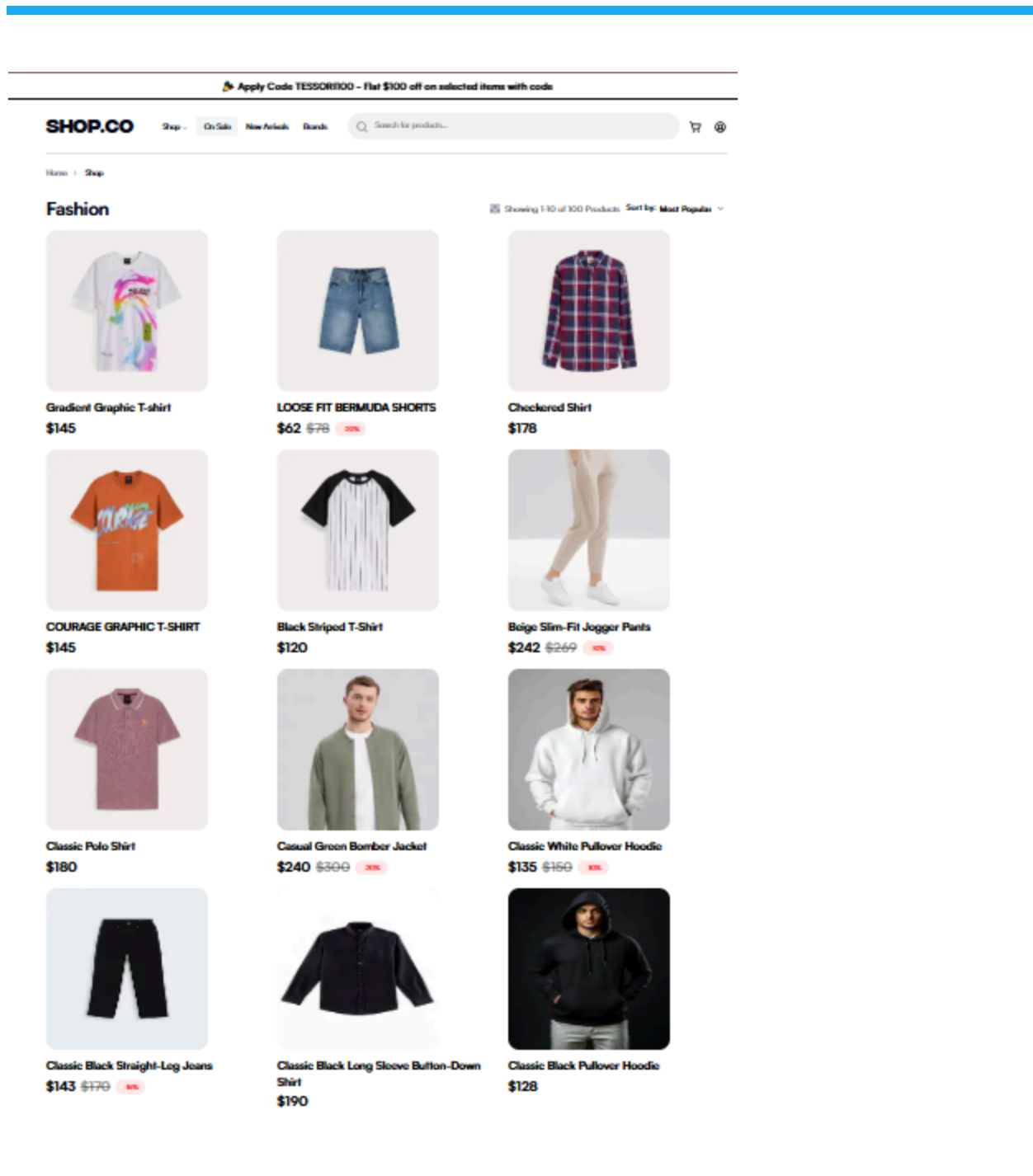
```

```

        <ProductCard data={product} />
      </CarouselItem>
    )))
  </CarouselContent>
</Carousel>
{viewAllLink && (
  <div className="w-full px-4 sm:px-0 text-center">
    <Link
      href={viewAllLink}
      className="w-full inline-block sm:w-[218px] px-[54px] py-4
border rounded-full hover:bg- hover:text-black text- transition-all
font-medium text-sm sm:text-base border-black/10"
    >
      View All
    </Link>
  </div>
)}
</motion.div>
</section>
);
};

```

Output:



2. Individual Product Detail Component

Code:

```
const ProductCard = ({ data }: ProductCardProps) => {
  return (
    <Link
      href={`\shop/product/${data._id}/`}
      className="flex flex-col items-start aspect-auto"
    >
```

```

>
<div className="bg-[#F0EEED] rounded-[13px] lg:rounded-[20px] w-full
lg:max-w-[295px] aspect-square mb-2.5 xl:mb-4 overflow-hidden">
  <Image
    src={data.imageUrl}
    width={295}
    height={298}
    className="rounded-md w-full h-full object-fill hover:scale-10
transition-all duration-500"
    alt={data.imageUrl}
    priority
  />
</div>
<strong className="text-black xl:text-xl">{data.name}</strong>
<div className="flex items-end mb-1 xl:mb-2">

</div>
<div className="flex items-center space-x-[5px] xl:space-x-2.5">
  {data.discountPercent > 0 ? (
    <span className="font-bold text-black text-xl xl:text-2xl">
      {`${Math.round(
        calculateDiscountedPrice(data.price, data.discountPercent)
      )}`}
    </span>
  ) : calculateDiscountedPrice(data.price, data.discountPercent) > 0
? (
    <span className="font-bold text-black text-xl xl:text-2xl">
      {`${calculateDiscountedPrice(data.price,
data.discountPercent)}`}
    </span>
  ) : (
    <span className="font-bold text-black text-xl xl:text-2xl">
      ${data.price}
    </span>
  )}

  {data.discountPercent > 0 && (
    <span className="font-bold text-black/40 line-through text-xl
xl:text-2xl">
      ${data.price}
    </span>
  )}
  {data.discountPercent > 0 ? (
    <span className="font-medium text-[10px] xl:text-xs py-1.5
px-3.5 rounded-full bg-[#FF3333]/10 text-[#FF3333]">
      {`-${data.discountPercent}%`}
    </span>
  ) : (
    data.discountPercent > 0 && (
      <span className="font-medium text-[10px] xl:text-xs py-1.5
px-3.5 rounded-full bg-[#FF3333]/10 text-[#FF3333]">
        {`-${data.price}`}
      </span>
    )
  )
}

```

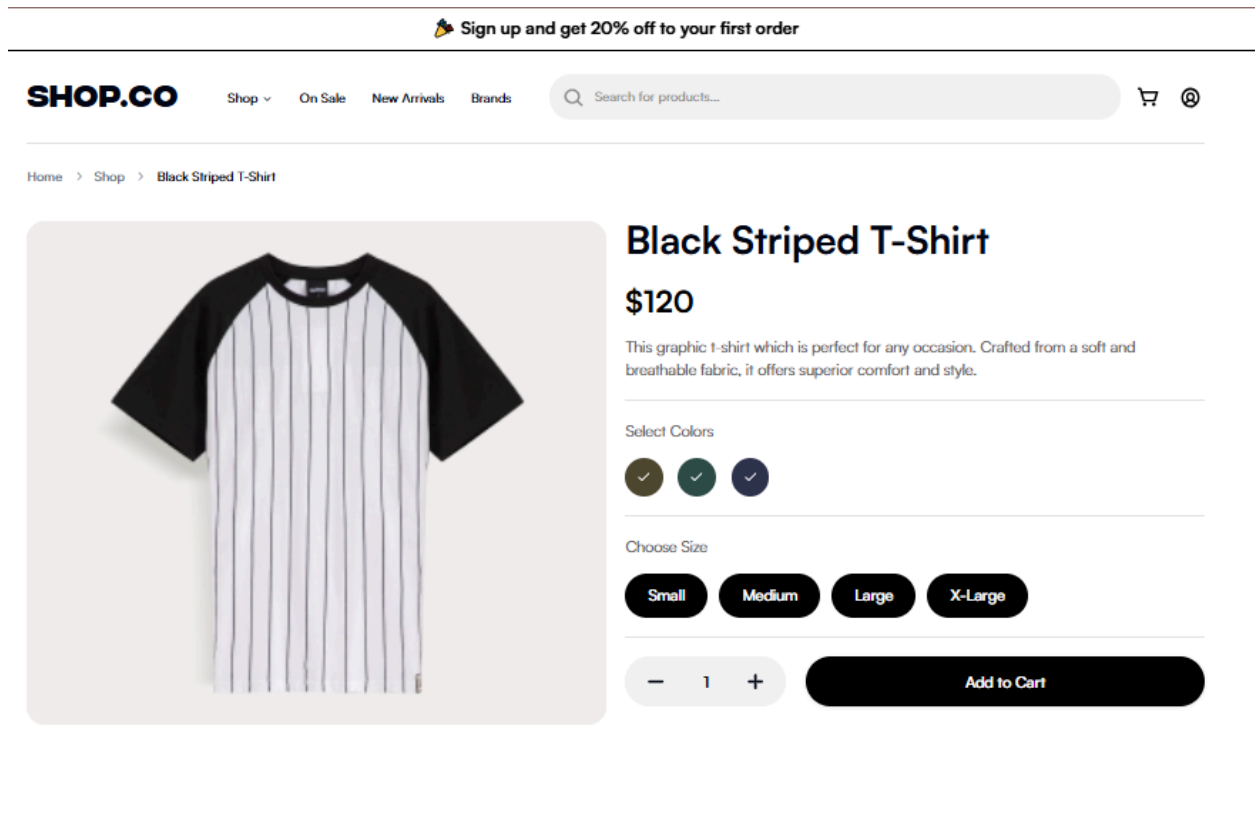
```

    })
  </div>
</Link>
);
};

export default ProductCard;

```

Output:



3. Cart Component

Code:

```

useEffect(() => {

  const validatePromoCode = (promoCode: string) => {
    const promoMatching = validPromoCodes.find(
      (singlePromo) => singlePromo.code === promoCode.trim()
    );

    if (!promoMatching) {
      setPromoError("Invalid promo code!");
      return 0;
    }
  };

```

```

    }
    const currentDate = new Date();
    const expiryDate = new Date(promoMatching.expiry);

    if (expiryDate < currentDate) {
        setPromoError("Promo code has expired!");
        return 0;
    }
    setPromoError("");
    return promoMatching.discount; // Return valid promo discount
};

// Get the promo discount (if valid)
pricing.promoDiscount = promoCode ? validatePromoCode(promoCode) :
0;

const discountedTotal = cart.reduce((total, item) => {
    if (item.discountPercent > 0) {
        return total + calculateDiscountedPrice(item.price,
item.discountPercent) * item.quantity;
    }
    return total;
}, 0);

const nonDiscountedTotal = cart.reduce((total, item) => {
    if (item.discountPercent === 0) {
        return total + item.price * item.quantity;
    }
    return total;
}, 0);

// Calculate the subtotal (sum of all products at original price)
const subtotal = cart.reduce((total, item) => total + item.price *
item.quantity, 0);

// Calculate the total amount after discounts
const total = discountedTotal + nonDiscountedTotal;

// Amount of discount applied
const amountOfDiscount = subtotal - total;

// Update the pricing state
setPricing({
    ...pricing,
    total: total,
    discountedAmount: discountedTotal,
    nonDiscountedAmount: nonDiscountedTotal,
    subtotal: subtotal,
    amountOfDiscount: amountOfDiscount,
    amountAfterDiscount: total,
});
}, [cart, promoCode, finalizedTotal]);

```



```

<div className="container mx-auto px-4 my-8">
  <h1 className="text-5xl mb-6 font-integralCF tracking-tighter font-extrabold">Your Cart</h1>
  <div>
    <FilterMenu />
  </div>
  <div className="flex flex-col lg:flex-row gap-6"
    border p-4 ">
    {cart.map((item) => (
      <div key={item._id} className="relative border-b-2
flex items-center gap-4 mb-6 px-0 py-3">
        <button
          onClick={() => removeFromCart(item._id)}
          className="absolute top-2 right-2
text-red-500 hover:text-red-700"
        >
          <Image src={DeleteIcon} alt="Delete"
width={20} height={20} />
        </button>

        <Image src={item.imageUrl} alt={item.name}
width={100} height={100} className="rounded-md" />

        <div className="flex-1">
          <h3 className="text-lg
font-semibold">{item.name}</h3>
          <p className="text-gray-500">Size:
{item.sizes} | Color: {item.colors}</p>
          <p className="font-bold text-xl
mt-2">${item.price.toFixed(2)}</p>
        </div>

        <div className="absolute bg-[#F0F0F0]
rounded-full bottom-2 right-2 flex items-center gap-2">
          <button
            onClick={() =>
updateQuantity(item._id, item.quantity - 1)}
            className="px-2 py-1.5 bg-[#F0F0F0]
rounded-l-full hover:bg-[#F0F0F0]"
          >
            -
          </button>
          <input
            type="number"
            value={item.quantity}
            className="w-12 text-center
bg-[#F0F0F0] p-1 border rounded-none outline-none"
            min="1"
          />
          <button
            onClick={() =>
updateQuantity(item._id, item.quantity + 1)}

```

```

        className="px-2 py-1.5 bg-[#F0F0F0]
rounded-r-full hover:bg-[#F0F0F0]"
        >
            +
        </button>
    </div>
</div>
    )})
</div>
    <div className="w-full lg:max-w-[500px] bg-white
font-satoshi font-bold shadow-lg border rounded-2xl p-6">
        <h2 className="text-2xl font-semibold mb-4">Order
Summary</h2>
        <div className="flex justify-between mb-2">
            <span className='font-normal
font-satoshi'>Subtotal</span>
            <span>${pricing.subtotal.toFixed(2)}</span>
        </div>
        <div className="flex justify-between mb-2">
            <span className='font-normal
font-satoshi'>Discount </span>
            <span
className='text-red-400'>-${pricing.amountOfDiscount.toFixed(2)}</span>
        </div>
        <div className="flex justify-between mb-2">
            <span className='font-normal
font-satoshi'>Delivery Fee</span>
            <span>${deliveryFee.toFixed(2)}</span>
        </div>
        {pricing.promoDiscount > 0 && promoCode.length > 0 &&
            <div className="flex justify-between mb-2">
                <span className='font-normal
font-satoshi'>Promo Code Discount</span>
                <span
className='text-red-400'>-${pricing.promoDiscount.toFixed(2)}</span>
            </div>
        }
        <div className="flex justify-between font-bold
text-lg">
            <span className='font-normal
font-satoshi'>Total</span>
            <span>${(finalizedTotal).toFixed(2)}</span>
        </div>
        <div className="mt-4 w-full flex flex-row">
            { /* Promo Code Input */ }
            <div className="flex w-full flex-row bg-[#F0F0F0]
rounded-full items-center">
                <Image
                    src={PriceTag}
                    alt="price-tag"
                    width={25}
                    height={25}
                    className="ml-3"
                />
            </div>
        </div>
    </div>

```

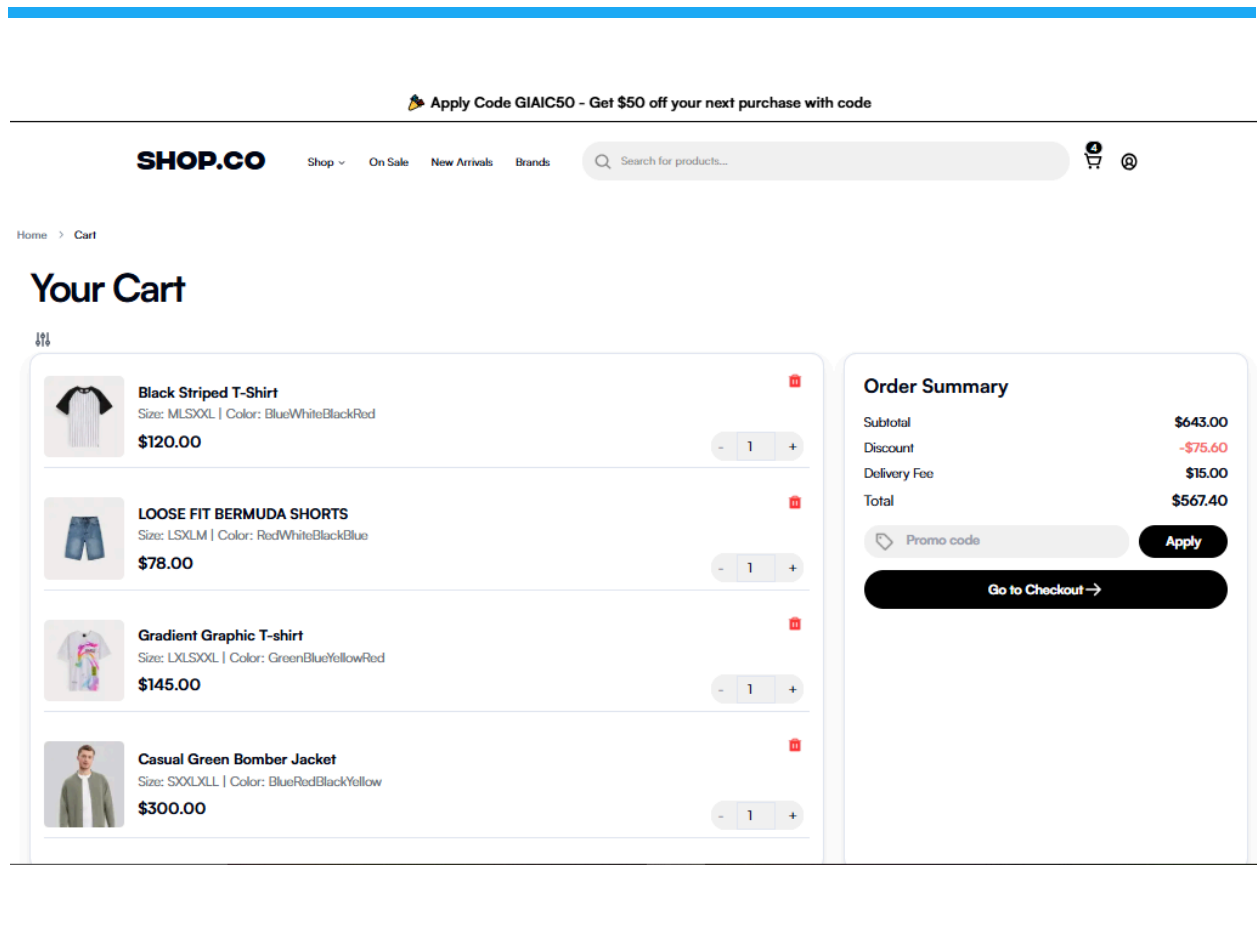
```

        <input
            type="text"
            onChange={ (e) =>
setPromo ((e.target.value).toUpperCase()) }
            value={promo}
            placeholder="Promo code"
            className="w-full pl-4 py-2 bg-[#F0F0F0]
rounded-full focus:outline-none"
        />
    </div>
    { /* Apply Button */ }
    <button onClick={() => setPromoCode(promo)}
className="w-full md:w-1/3 bg-black text-white py-2 ml-3 rounded-full
hover:bg-gray-800">
        Apply
    </button>
</div>

    <Link href="/cart/checkout">
        <button
            onClick={() => totalFromCart(finalizedTotal)}
            className="w-full flex justify-center
items-center bg-black text-white py-3 rounded-full mt-4 hover:bg-black"
        >
            Go to Checkout
            <span>
                <Image src={Arrow} alt='arrow' width={25}
height={25} />
            </span>
        </button>
    </Link>
</div>
</div>
</div>

```

Output:



4. Search Bar Component

Code:

```
const SearchBar: React.FC<SearchBarProps> = ({ products }) => {
  const [isDropdownOpen, setIsDropdownOpen] = useState(false);
  const [searchQuery, setSearchQuery] = useState("");
  const [isInteractingWithDropdown, setIsInteractingWithDropdown] =
    useState(false);

  const handleFocus = () => {
    setIsDropdownOpen(true);
  };

  const handleBlur = () => {
    // Close only if the user is not interacting with the dropdown
    if (!isInteractingWithDropdown) {
      setIsDropdownOpen(false);
    }
  };

  const handleDropdownMouseEnter = () => {
    setIsInteractingWithDropdown(true);
  };
};
```

```

const handleDropdownMouseLeave = () => {
  setIsInteractingWithDropdown(false);
};

const handleCloseDropdown = () => {
  setIsDropdownOpen(false);
};

// Filter products based on search query
const filteredProducts = products.filter((product) =>
  product.name.toLowerCase().includes(searchQuery.toLowerCase())
);

return (
  <div className="relative w-full">
    {/* Search Input */}
    <InputGroup className="hidden w-full md:flex bg-[#F0F0F0] mr-3
lg:mr-10 shadow-none">
      <InputGroup.Text>
        <Image
          priority
          src="/icons/search.svg"
          height={20}
          width={20}
          alt="search"
          className="min-w-5 min-h-5 shadow-none"
        />
      </InputGroup.Text>
      <InputGroup.Input
        type="search"
        name="search"
        value={searchQuery}
        onChange={(e) => {
          setSearchQuery(e.target.value)
          handleFocus()
        }}
        placeholder="Search for products..."
        className="bg-transparent placeholder:text-black/40 shadow-none"
        // onFocus={handleFocus} // Open dropdown on focus
        onBlur={handleBlur} // Close dropdown on blur (only if not
interacting)
      />
    </InputGroup>

    {/* Dropdown */}
    {isDropdownOpen && (
      <div
        className="absolute top-full mt-2 w-full bg-white shadow-md
rounded-md z-10"
        onMouseEnter={handleDropdownMouseEnter}
        onMouseLeave={handleDropdownMouseLeave}
      >

        {/* Separator */}

```

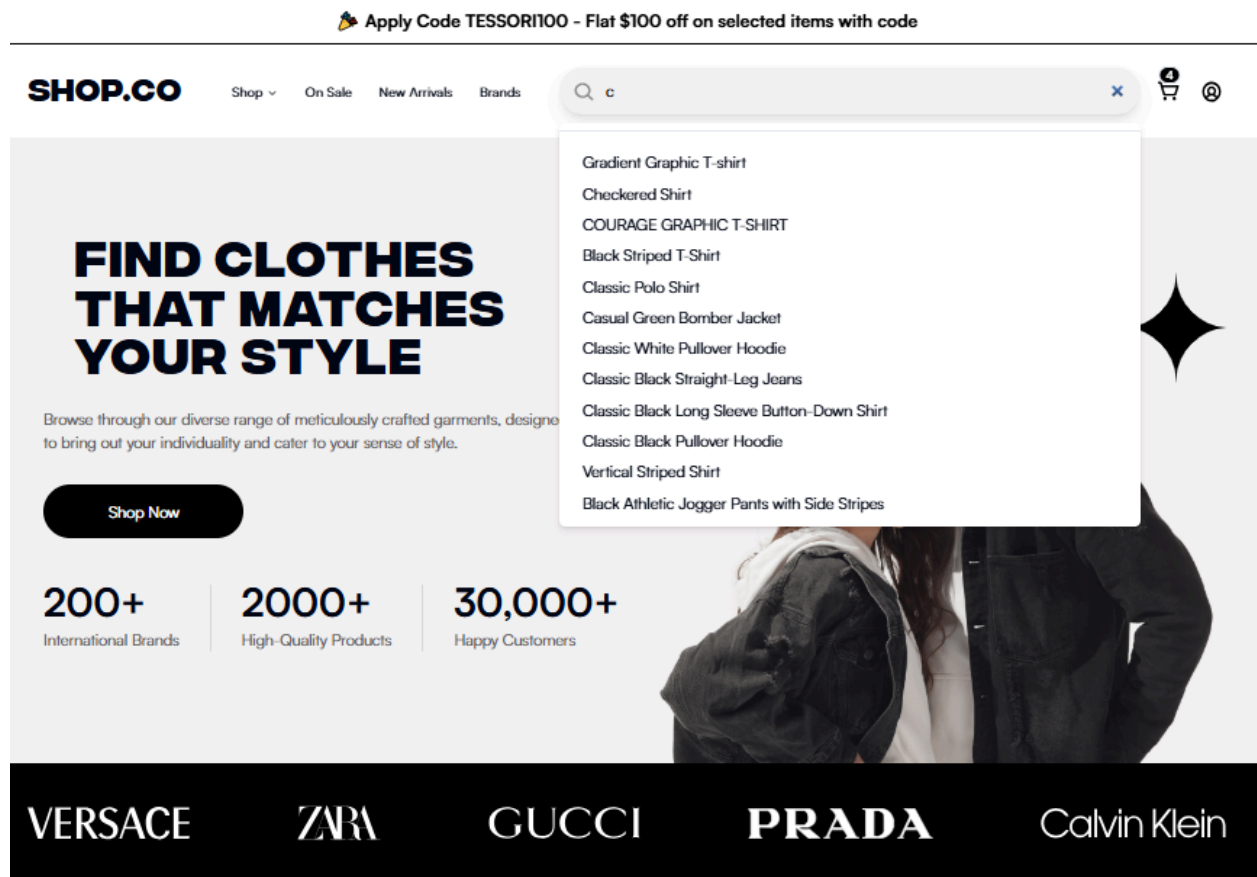
```

<div className="border-t my-2" />

{/* Dynamic Product Results */}
<div className="px-4 py-2">
  {filteredProducts.length > 0 ? (
    filteredProducts.map((product) => (
      <Link
        key={product._id} // Use the unique product ID as the
        href={` /shop/product/${product._id}`}
        onClick={handleCloseDropdown} // Close dropdown on click
        className="block px-2 py-1 hover:bg-gray-100 rounded
        cursor-pointer"
      >
        {product.name}
      </Link>
    ))
  ) : (
    <div className="text-gray-500 px-2 py-1">No products
    found</div>
  )}
</div>
</div>
)}
</div>

```

Output:



5. Checkout Component

Code:

```
const checkoutSchema = z.object({
  name: z.string().min(2, "Name must be at least 2 characters long"),
  email: z.string().email("Invalid email address"),
  address: z.string().min(5, "Address must be at least 5 characters long"),
  city: z.string().min(2, "City must be at least 2 characters long"),
  postalCode: z
    .string()
    .regex(/^\d{5}$/, "Postal Code must be exactly 5 digits"),
  cardNumber: z
    .string()
    .regex(/^\d{16}$/, "Card Number must be exactly 16 digits"),
```

```
    expiryDate: z
      .string()
      .regex(/^([0-9]|1[0-2])\.\d{2}$/, "Expiry Date must be in MM/YY
format"),
    cvv: z.string().regex(/^\d{3}$/, "CVV must be exactly 3 digits"),
  });

type CheckoutFormData = z.infer<typeof checkoutSchema>;

export default function CheckoutMain() {
  const [dialogOpen, setDialogOpen] = useState(false)
  const {
    register,
    handleSubmit,
    formState: { errors },
  } = useForm<CheckoutFormData>({
    resolver: zodResolver(checkoutSchema),
  });

  const onSubmit = (data: CheckoutFormData) => {
    console.log("Form Data:", data);
    setDialogOpen(true);
    alert("Checkout Successful!");
  };
}
```

Output:

Checkout

Billing Details

Name

Email

Address

City

Postal Code

Payment Details

Card Number

Expiry Date (MM/YY)

CVV

Your Cart Items

Black Striped T-Shirt	(qty) 1
LOOSE FIT BERMUDA SHORTS	(qty) 1
Gradient Graphic T-shirt	(qty) 1
Casual Green Bomber Jacket	(qty) 1
Total	\$2269.60

Buy & Place Order

6. Header Component

Code:

```
TopNavbar = () => {
  const { allProducts, addToProducts } = useCart();

  useEffect(() => {
    fetchProducts()
      .then((fetchedProducts) => addToProducts(fetchedProducts))
      .catch((error) => console.error('Failed to fetch products:',
error));
  }, []);

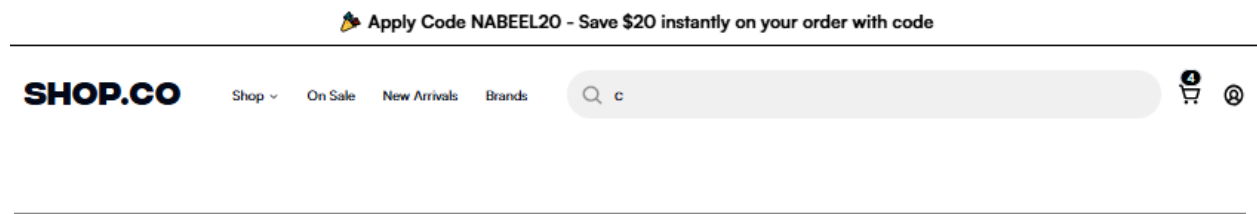
  return (
    <nav className="sticky top-0 bg-white border-t-2 border-black z-20">
      <div className="flex relative max-w-frame mx-auto items-center
justify-between md:justify-start py-5 md:py-6 px-4 xl:px-0">
        <div className="flex items-center">
          <div className="block md:hidden mr-4">
            <ResTopNavbar data={data} />
          </div>
          <Link
```

```

        href="/"
        className={cn([
            integralCF.className,
            "text-2xl lg:text-[32px] mb-2 mr-3 lg:mr-10",
        ])}
    >
        SHOP.CO
    </Link>
</div>
<NavigationMenu className="hidden md:flex mr-2 lg:mr-7">
    <NavigationMenuList>
        {data.map((item) => (
            <React.Fragment key={item.id}>
                {item.type === "MenuItem" && (
                    <MenuItem label={item.label} url={item.url} />
                )}
                {item.type === "MenuList" && (
                    <MenuList data={item.children} label={item.label} />
                )}
            </React.Fragment>
        ))}
    </NavigationMenuList>
</NavigationMenu>
<SearchBar products={allProducts} />
<div className="flex items-center">
    <Link href="/search" className="block md:hidden mr-[14px] p-1">
        <Image
            priority
            src="/icons/search-black.svg"
            height={100}
            width={100}
            alt="search"
            className="max-w-[22px] max-h-[22px]"
        />
    </Link>
    <CartBtn />
    <Link href="/#signin" className="p-1">
        <Image
            priority
            src="/icons/user.svg"
            height={100}
            width={100}
            alt="user"
            className="max-w-[22px] max-h-[22px]"
        />
    </Link>
</div>
</div>
</nav>
);
};

```

Output:



7. Footer Component

Code:

```
const Footer = () => {
  return (
    <footer className="mt-10">
      <div className="relative">
        <div className="absolute bottom-0 w-full h-1/2
bg-[#F0F0F0]"></div>
        <div className="px-4">
          <NewsletterSection />
        </div>
      </div>
      <div className="pt-8 md:pt-[50px] bg-[#F0F0F0] px-4 pb-4">
        <div className="max-w-frame mx-auto">
          <nav className="lg:grid lg:grid-cols-12 mb-8">
            <div className="flex flex-col lg:col-span-3 lg:max-w-[248px]">
              <h1
                className={cn([
                  integralCF.className,
                  "text-[28px] lg:text-[32px] mb-6",
                ])}
              >
                SHOP.CO
            </h1>
            <p className="text-black/60 text-md mb-9">
              We have clothes that suits your style and which you're
proud to
              wear. From women to men.
            </p>
            <div className="flex items-center">
              {socialsData.map((social) => (
                <Link
                  href={social.url}
                  key={social.id}
                  className="bg-white hover:bg-black hover:text-white
transition-all mr-3 w-7 h-7 rounded-full border border-black/20 flex
items-center justify-center p-1.5"
                >
                  {social.icon}
                </Link>
              ))}
            </div>
          </nav>
        </div>
      </div>
    </footer>
  )
}
```

```

        ))}
      </div>
    </div>
    <div className="hidden lg:grid col-span-9 lg:grid-cols-4
lg:pl-10">
      <LinksSection />
    </div>
    <div className="grid lg:hidden grid-cols-2 sm:grid-cols-4">
      <LinksSection />
    </div>
  </nav>

  <hr className="h-[1px] border-t-black/10 mb-6" />
  <div className="flex flex-col sm:flex-row justify-center
sm:justify-between items-center mb-2">
    <p className="text-sm text-center sm:text-left text-black/60
mb-4 sm:mb-0 sm:mr-1">
      Shop.co © 2000-2024 All Right Reserve
      <Link
        href=""
        className="text-black font-medium"
      >

    </Link>
    {", "}

  </p>
  <div className="flex items-center">
    {paymentBadgesData.map((badge, _, arr) => (
      <span
        key={badge.id}
        className={cn([
          arr.length !== badge.id && "mr-3",
          "w-[46px] h-[30px] rounded-[5px] border-[#D6DCE5]
bg-white flex items-center justify-center",
        ])}
      >
        <Image
          priority
          src={badge.srcUrl}
          width={33}
          height={100}
          alt="user"
          className="max-h-[15px]"
        />
      </span>
    ))}
  </div>
</div>
<LayoutSpacing />
</div>
</footer>
);

```

} ;

Output:

SHOP.CO

We have clothes that suits your style and which you're proud to wear. From women to men.

COMPANY

About

Features

Works

Career

HELP

Customer Support

Delivery Details

Terms & Conditions

Privacy Policy

FAQ

Account

Manage Deliveries

Orders

Payments

RESOURCES

Free eBooks

Development Tutorial

How to - Blog

Youtube Playlist

Shop.co © 2000-2024 All Right Reserve,

VISA

PayPal

Apple Pay

Google Pay

8. Related Products Component

Output:

Product Details

Rating & Reviews

FAQ's

Product specifications

Fabric composition

100% Cotton

Care instructions

Machine wash warm, tumble dry

Size type

Classic Fit

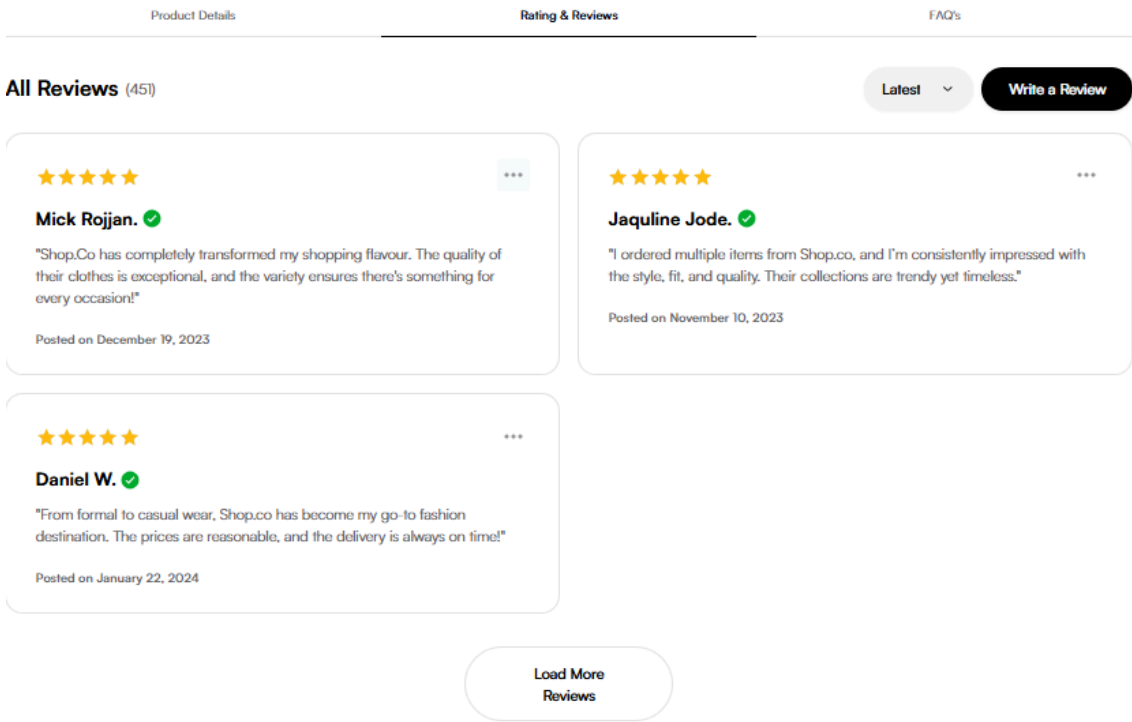
Color Design

Solid

YOU MIGHT ALSO LIKE

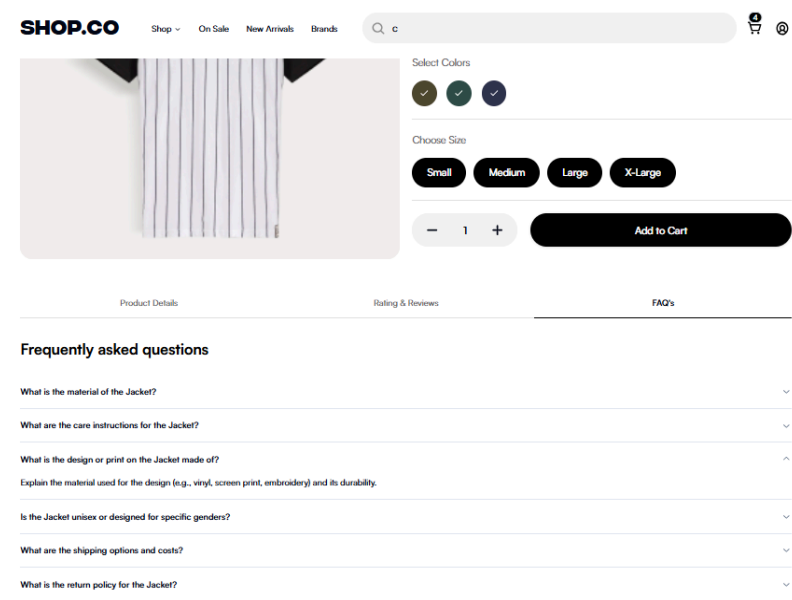
9. Reviews and Ratings Component

Output:



10. FAQ and Help Center Component

Output:

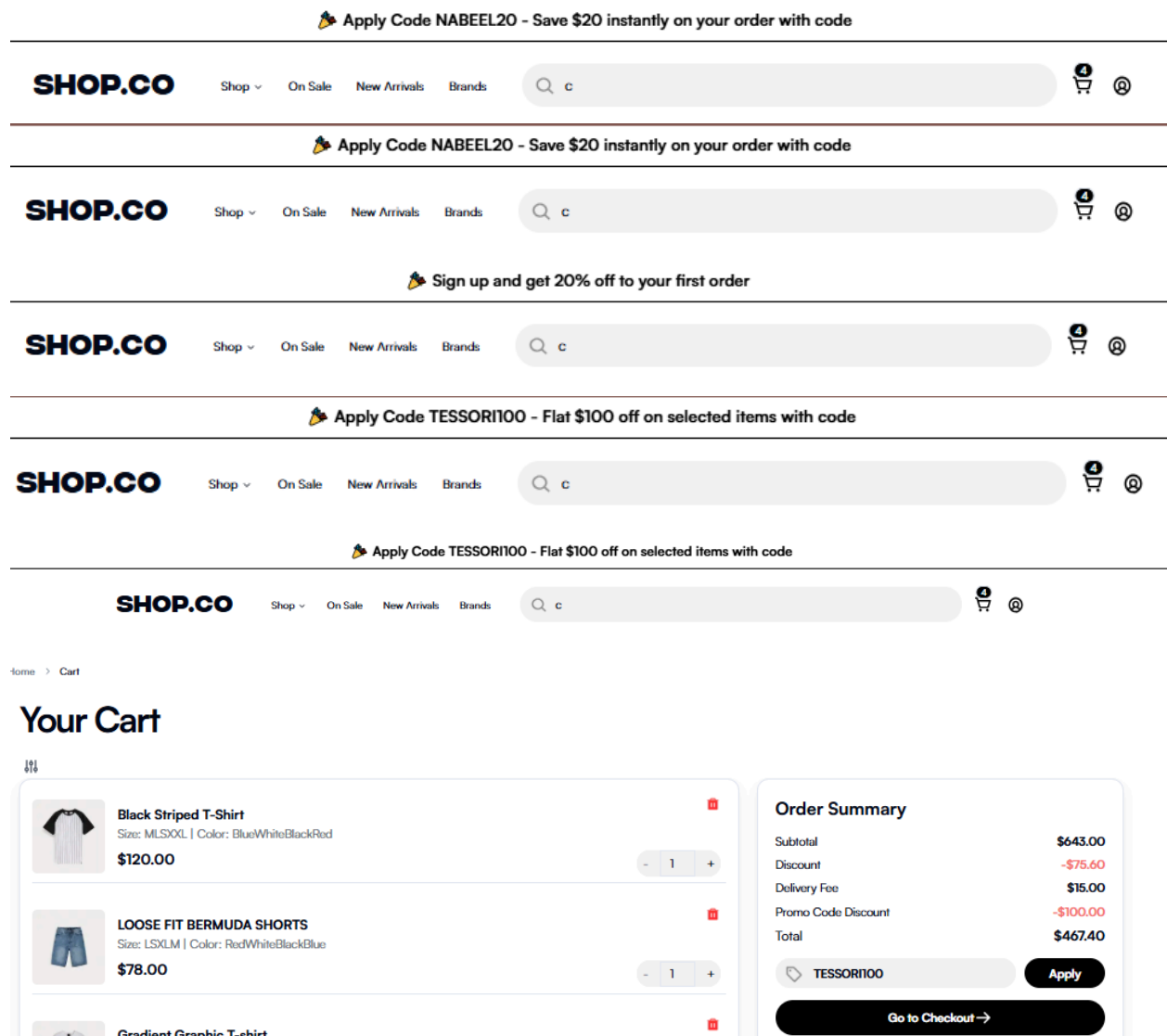


11. Discount and Promotion Component

Code:

// Code snippet for Discount and Promotion Component

Output:



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