Day 4 – Dynamic Frontend Components Report for Shop.CO

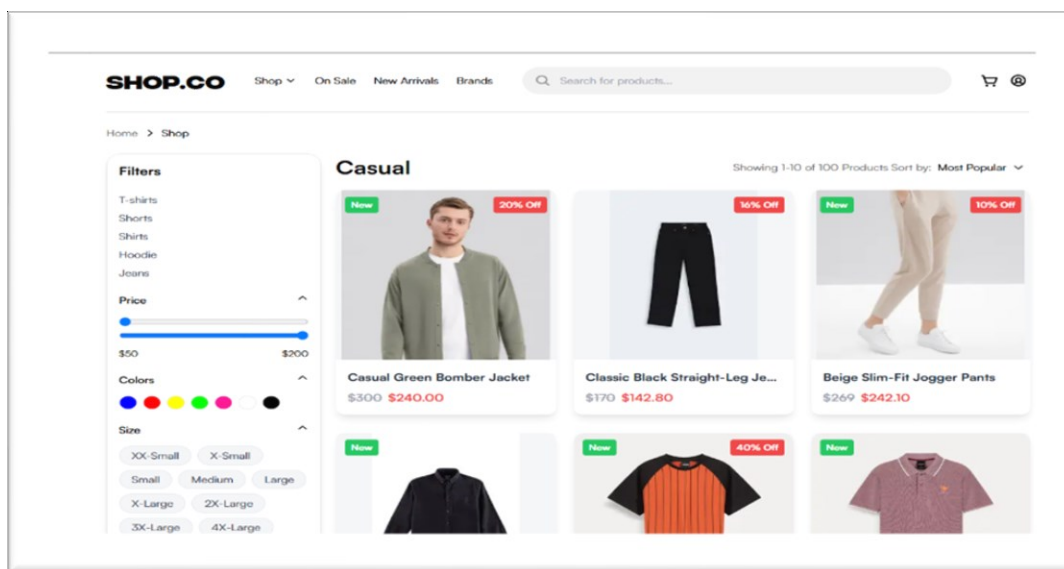**(Prepared by Abdul Rafay)**

1.Introduction

This report is about the creation of dynamic and responsive frontend components for my e commerce web Shop.co, focusing on:

1. Displaying products dynamically.
2. Displaying product Listing Page
3. Adding Product Detail Page
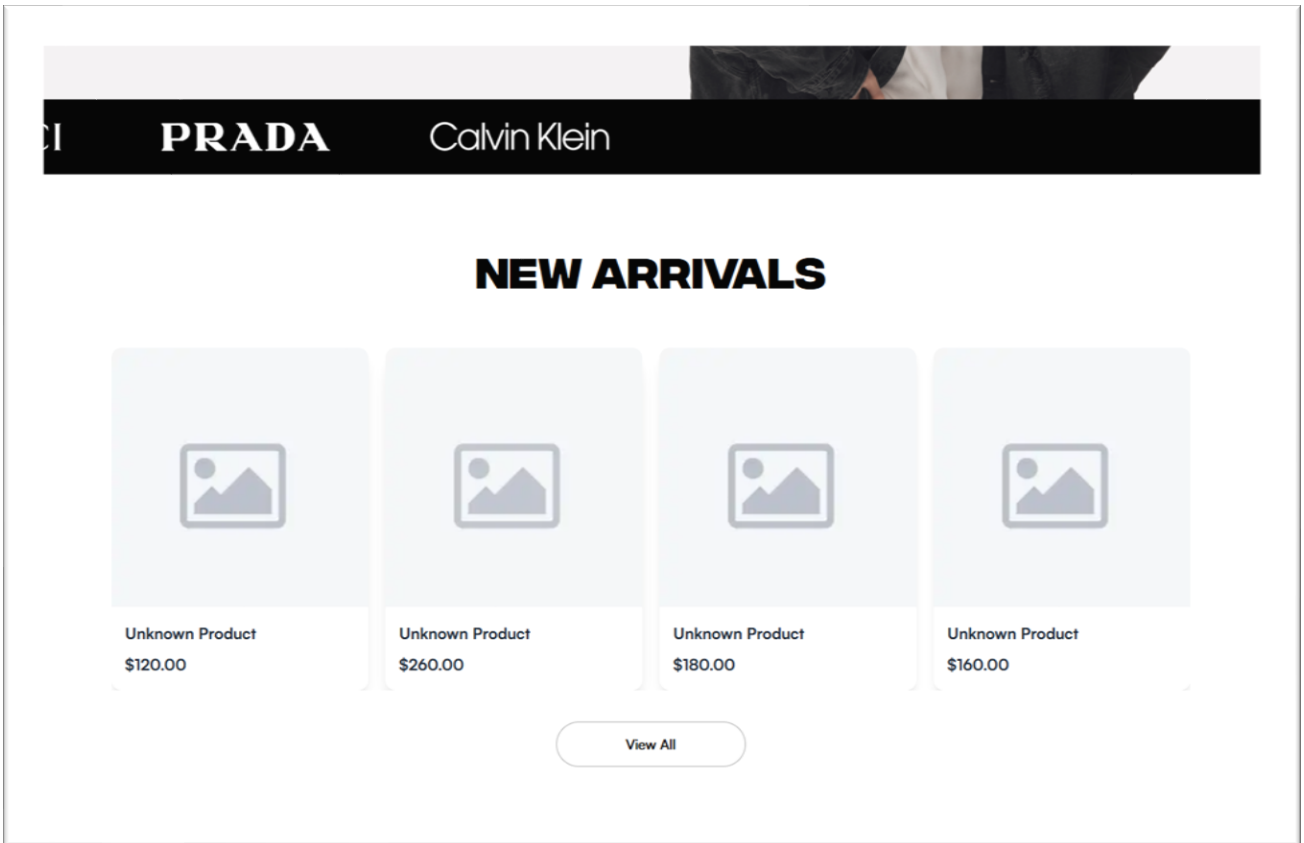4. Building a functional cart for managing orders.

Components Overview

Step 1: Product Listing

1. Dynamically fetched product data from the API.
2. Displayed products in a responsive grid layout with names and prices.
3. Added **new** and **discount** tags on specific products

4. Added Fall back if in case there is not data

Step 2: Product Detail Page

1. Created a detailed view for each product with dynamic routing.

2. Added an "**Add to Cart**" button.

3. Button for **sizes** and **colors**

POLO WITH CONTRAST TRIMS

★★★★☆ 4.0/5

$194 $242 -20%

This graphic t-shirt which is perfect for any occasion. Crafted from a soft and breathable fabric, it offers superior comfort and style.

Select Colors

Choose Size

| Small | Medium | Large | X-Large |

− 1 + Add to Cart

Step: 3. Category Component:

1. Fetch categories dynamically from the data source.
2. Allow filtering of products by selected categories
3. Categories Like **New Arrivals** & **Top Selling** as shown in pictures

NEW ARRIVALS

T-shirt with Tape Details ★★★★★ 4.5/5 $120

Skinny Fit Jeans ★★★★ 3.5/5 $208 $260 -20%

Chechered Shirt ★★★★★ 4.5/5 $180

Sleeve Striped T-shirt ★★★★ 4.5/5 $112 $160 -30%

View All

TOP SELLING

Vertical Striped Shirt ★★★★★ 5.0/5 $186 $232 -20%

Courage Graphic T-shirt ★★★★ 4.0/5 $145

Loose Fit Bermuda Shorts ★★★ 3.0/5 $80
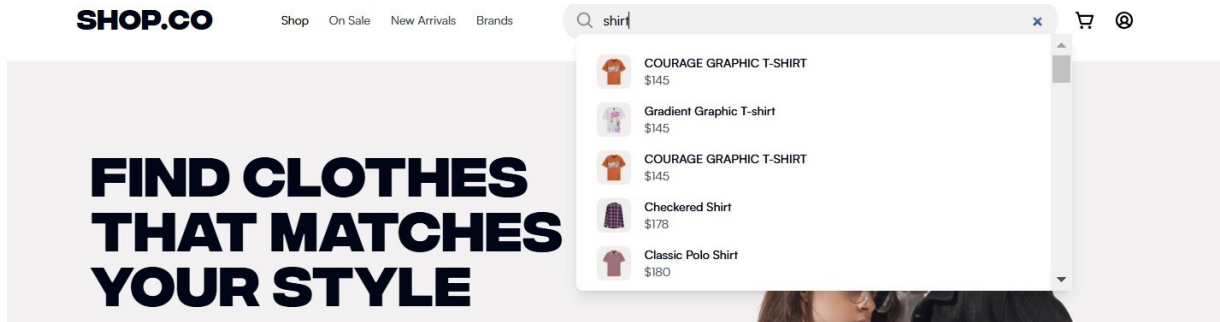
Faded Skinny Jeans ★★★★ 4.5/5 $210
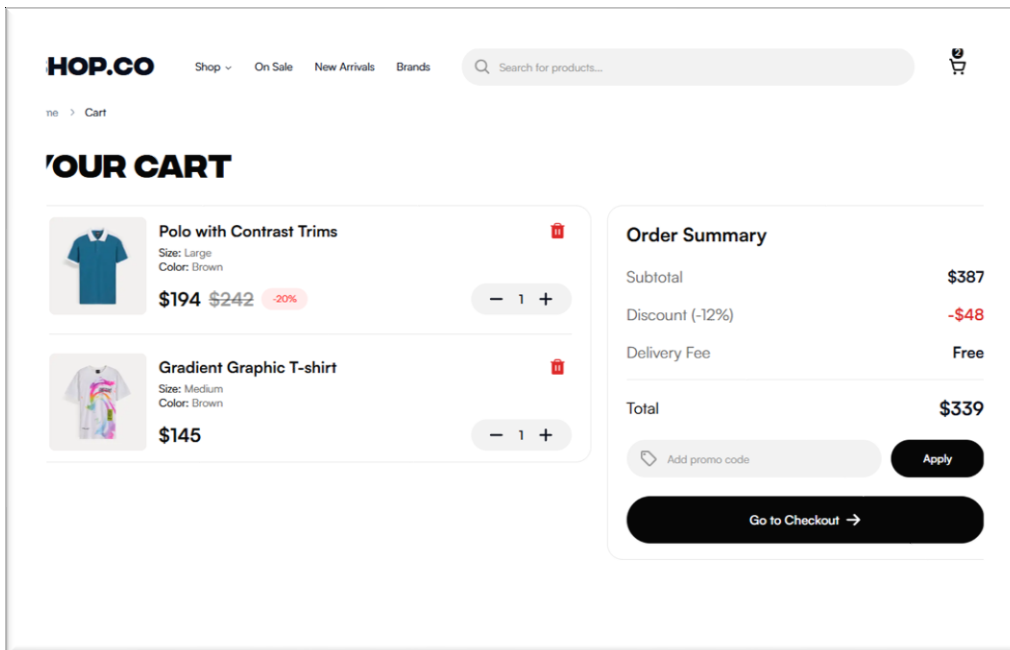
View All

Step 4: Search Bar and Filters

- Designed a search bar to filter products in real time.

- Integrated category filters fetched from the API.

Step 5: Cart Functionality

1. Enabled users to add/remove products in the cart.
2. Implemented dynamic cart updates and a checkout button.

3. Use library **Zustand** for state management

When user Click on Add to Cart Button with selection of colors ,sizes and product quantity items successfully added in shopping Cart!

Self-Validation Checklist.

Frontend Component Development

✔ Dynamic product listing

✔ Product detail page functionality

✔ Category filter component

✔ Search bar functionality

✔ Cart functionality (add/remove items)

✘ Checkout functionality

✘ Login/SignUp Page

Styling and Responsiveness

✔ Responsive grid layout for product listings

✔ Consistent UI design across all pages

✔ Mobile responsiveness

Code Quality

✔ Modular and reusable components

✔ Clean and organized code structure

✔ Proper use of state management and data binding

✔ Optimization for performance and loading speed

Documentation and Submission

✔ Clear documentation for each component

✔ Steps for setting up and running the application
✔ Code comments and explanations

✔ Submission before the deadline

Final Review

✔ All functionality tested (products, cart, checkout)

✔ UI/UX reviewed for user-friendliness

✔ No bugs/issues identified in the development

Professional Practices Emphasized

✔ Modular and reusable component design

✔ State management and dynamic data binding

✔ Responsive and user-friendly UI design

✔ Thorough documentation for code and processes

Conclusion

The dynamic frontend components were successfully built, enhancing the user experience with responsive layouts, dynamic filtering, and cart functionality. Screenshots validate the completed work.

Author: Abdul Rafay

Roll No: 00299941

Slot: Saturday 2 to 5