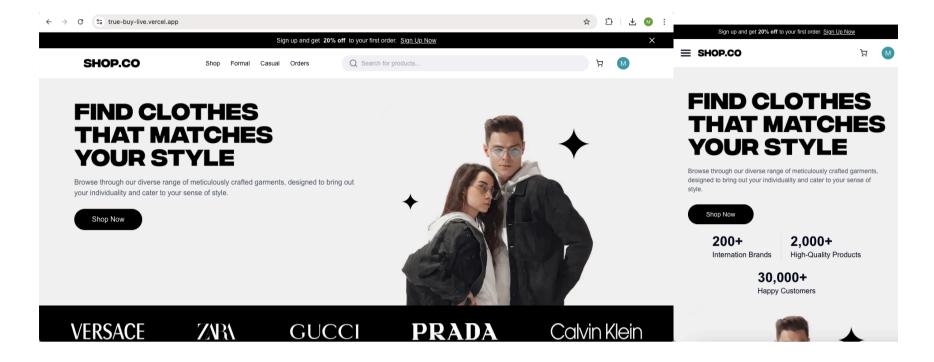
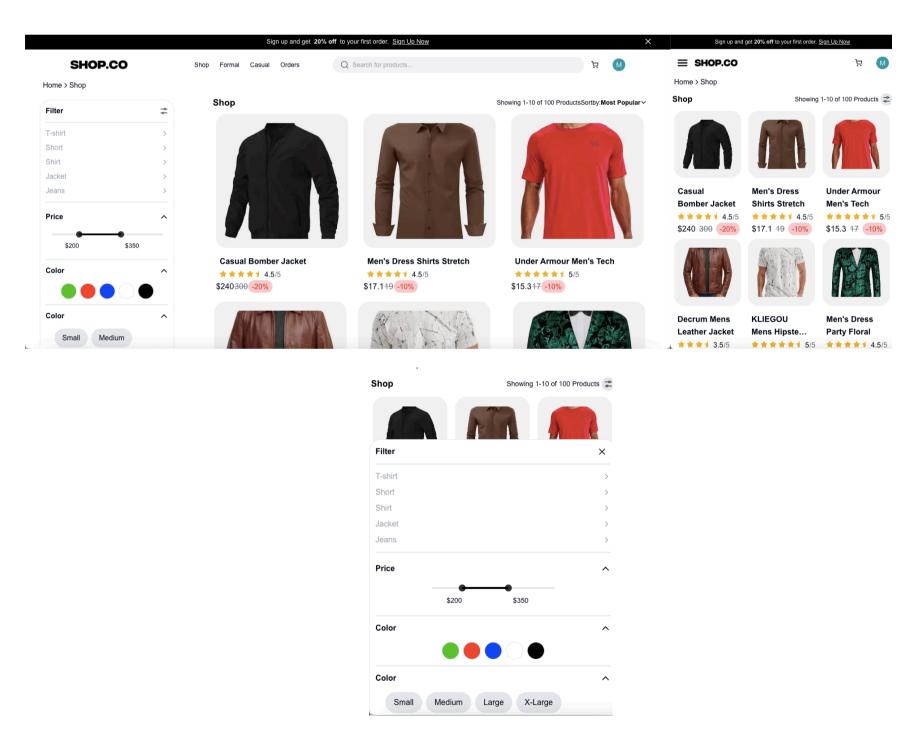
# Day 5 - Testing and Backend Refinement - True Buy

### **Functional Deliverables**

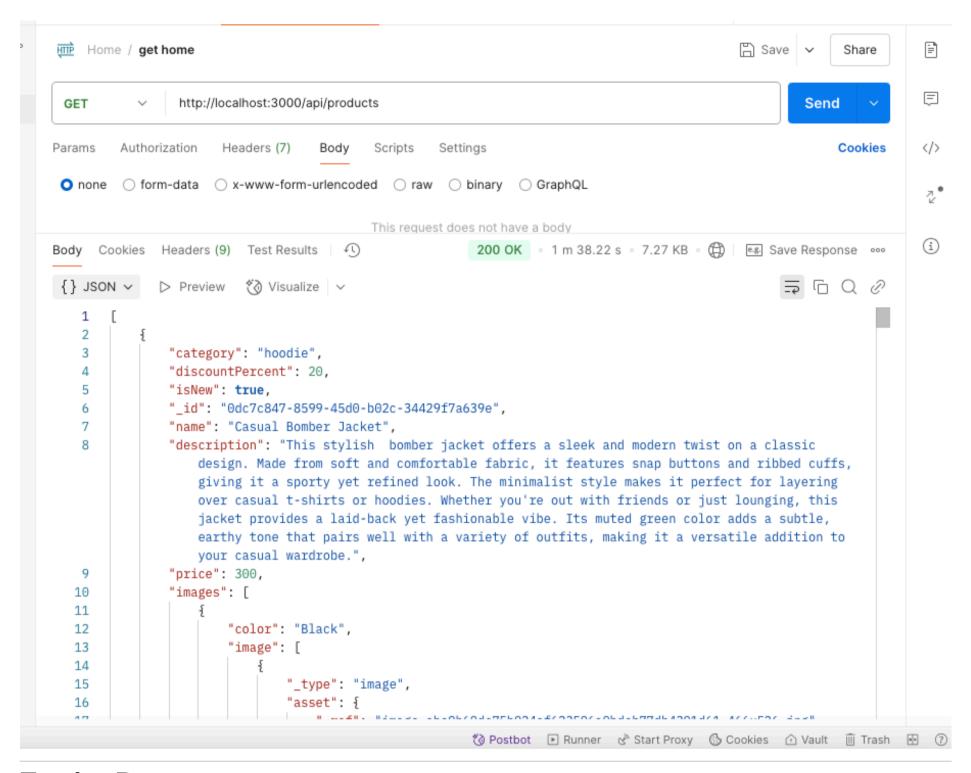
#### **Screenshots:**





• Functional and responsive components.

• Logs or reports from testing tools (e.g. Postman).



### **Testing Report**

Refer to the CSV report file for the detailed test cases, which include:

- Test Case ID: A unique identifier for each test case.
- Test Case Description : A concise explanation of what is being tested .
- **Test Steps**: Step-by-step procedure to execute the test case.
- $\hbox{\bf .} \ \textbf{Expected Result} \colon The \ anticipated \ outcome \ of \ the \ test \ case \ .$
- Actual Result: The observed outcome of the test case.
- **Status**: Marked as "Passed," "Failed," or "Skipped."
- Severity Level: Issues categorized as High, Medium, or Low.
- $\hbox{\bf .} \ \textbf{Assigned To}: \ Name \ of the \ person \ responsible \ for \ fixing \ issues \ (if \ applicable).$
- **Remarks**: Additional notes or comments for clarity.
- The testing report has been submitted in CSV format, as per the provided structure.

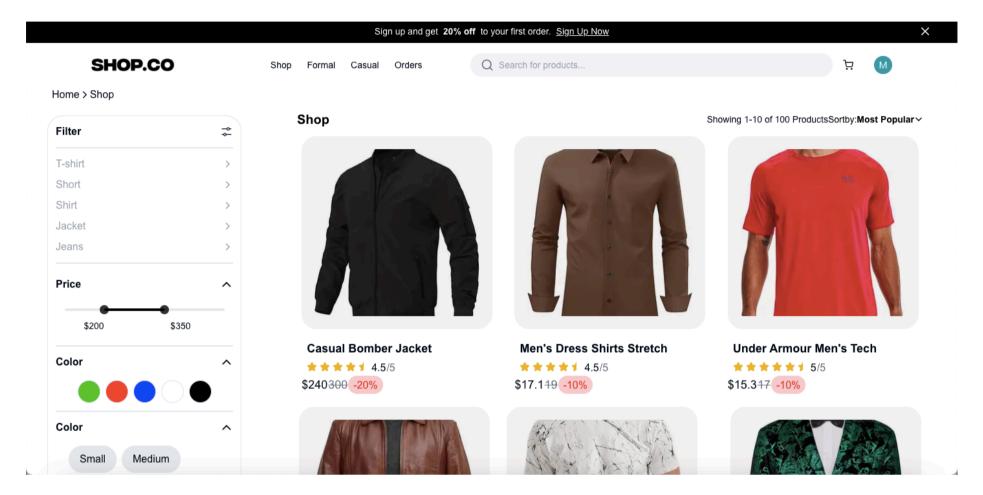
#### **Documentation**

#### **Test Cases Executed and Their Results**

### 1. **Product Listing Functionality**:

。 **Status**: Passed

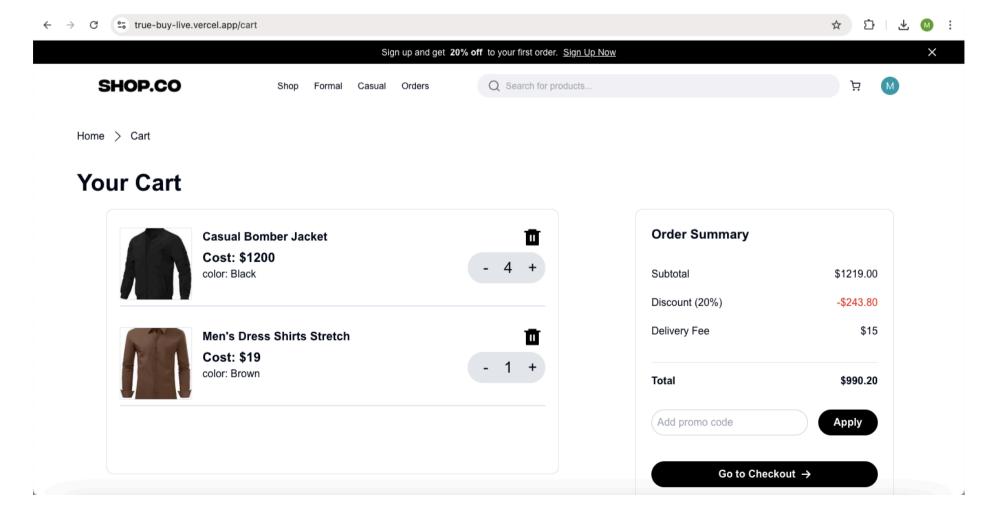
Details: Successfully fetched product data from Sanity API and displayed it on the website.



### 2. Cart Functionality:

。 **Status**: Passed

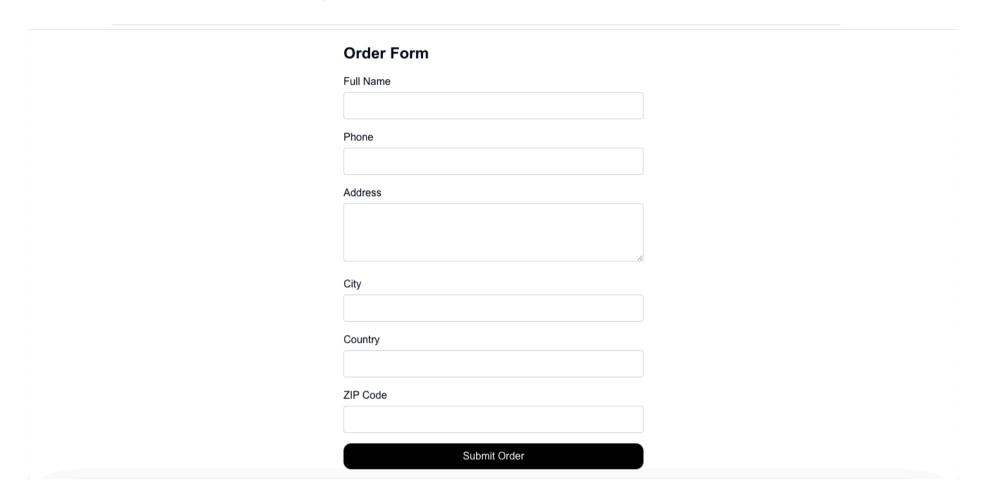
Details: Implemented using local storage; products are successfully added to the cart and persist between sessions.



### 3. Checkout Process:

。 **Status**: Failed (In Progress)

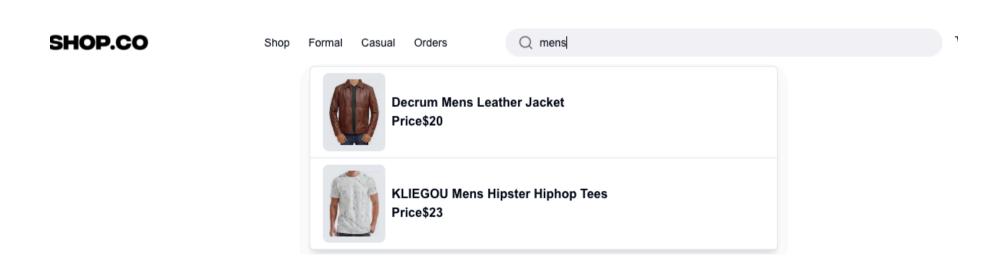
o **Details**: Currently non-functional but under refinement.



# 4. **Search Functionality**:

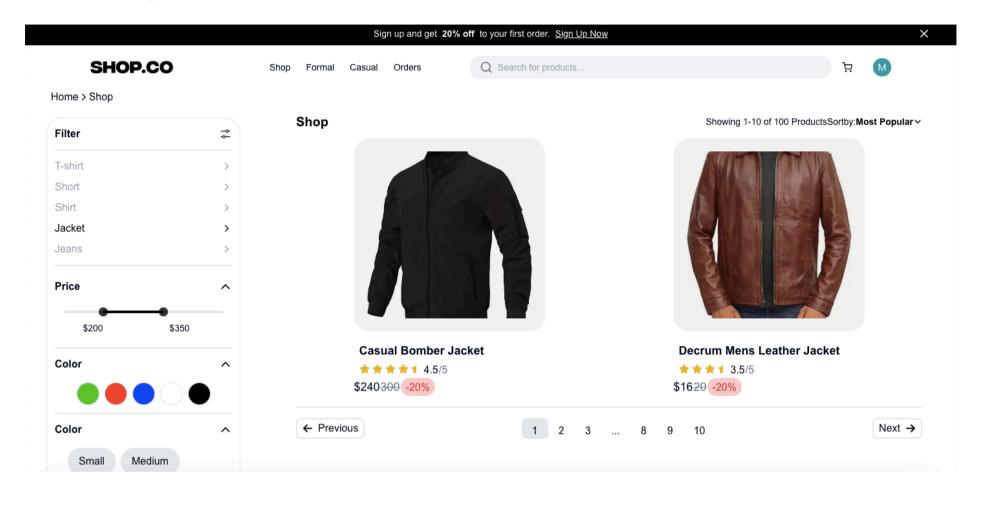
。 **Status**: Partial Success

Details: Basic search functionality works but needs improvement in accuracy.



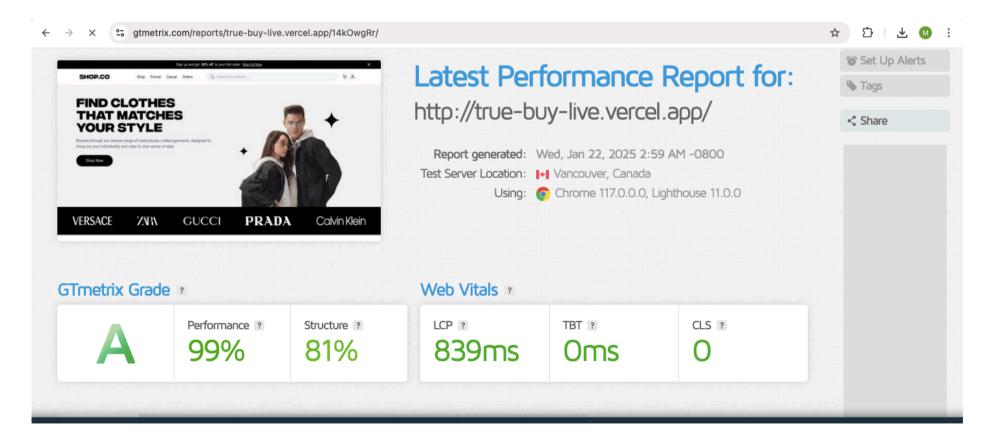
#### 5. Product Filters:

- 。 **Status**: Partial Success
- Details: Filtering is functional but needs optimization for better user experience.



### **Performance Optimization Steps**

- GTmetrix Analysis:
  - **Performance Score**: 99%.
  - Optimized images, minimized JavaScript, and utilized browser caching for better load times.



#### • Web Vitals:

。 **LCP**: 839ms.

。 **TBT**: 0ms.

。 **CLS**: 0.

# **Performance Optimization Steps Taken**

- Implemented lazy loading for images to improve LCP.
- Minimized JavaScript bundle size.
- Integrated Clerk for optimized and secure authentication flow.

# **Security Measures Implemented**

- Used Clerk for user authentication, ensuring secure sign-up /sign-in processes.
- · Validated all API inputs to prevent injection attacks.
- HTTPS enforced for secure data transmission.

# **Challenges Faced and Resolutions Applied**

- Challenge: Filtering functionality not producing accurate results.
  - 。 **Resolution**: Debugging query logic; optimization in progress.
- Challenge: Checkout functionality incomplete.
  - 。 **Resolution:** Planned fixes for final implementation phase.