QA Assessment Report for Sauce Demo Application

Tharushi Nimesha Divyanjalee

01/27/2025

QA Engineer

nimdivyanjalee@gmail.com

Table of Contents

1. Introduction 2
2. Functional Testing 3
2.1 Test Environment Setup 3
2.2 Test And Findings 3
01. Login Functionality 3
02. Product Display Functionality 5
03. Cart Function 9
04. Checkout Process 12
3. Performances Testing 14
3.1 Test Environment 14
3.2 Performance Issues Found 14
01. Slow Page Load on Login 14
02. Delayed Cart Update 15
4. Recommendations 16

1. Introduction

This report provides an overview of the QA testing conducted on the Sauce Demo application at https://www.saucedemo.com. The goal of this assessment was to identify any issues in the application's functionality and performance, focusing on areas like product display, adding items to the cart, and completing the checkout process.

The testing included:

- **Functional Testing**: To check if the features work as expected, such as logging in, viewing products, and managing the cart.
- **Performance Testing**: To evaluate how the application performs under different conditions, looking for delays or glitches.

The main objective was to ensure the application works smoothly and reliably for users while identifying any potential problems for improvement.

2. Functional Testing

2.1 Test Environment Setup

- **URL** : https://www.saucedemo.com

- **Login Credentials (Functional Testing)**:

  - **Username**: problem_user
  - **Password**: secret_sauce

2.2 Test And Findings

01. Login Functionality

- **Title**: Login with valid credentials
- **Description**: Check if the application accepts valid login credentials and navigates to the main page.
- **Steps to Reproduce**:
  1. Navigate to the login page.
  2. Enter username: problem_user
  3. Enter password: secret_sauce
  4. Click the login button.
- **Expected Result**: User is redirected to the inventory page.
- **Actual Result**: User is redirected to the inventory page.
- **Screenshots**:

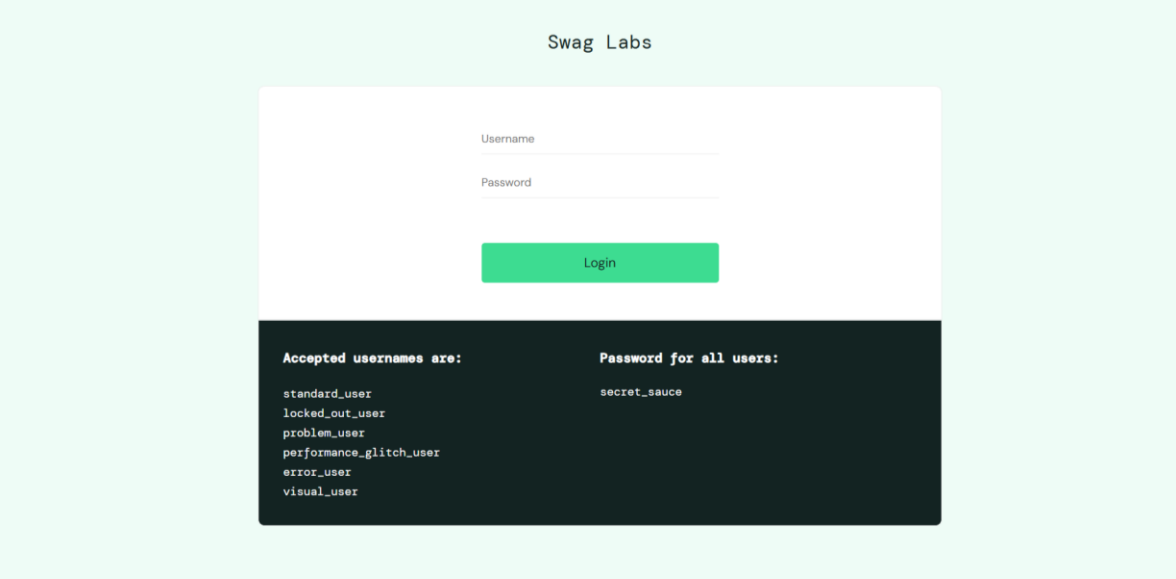

Figure 1: Login_Page.png

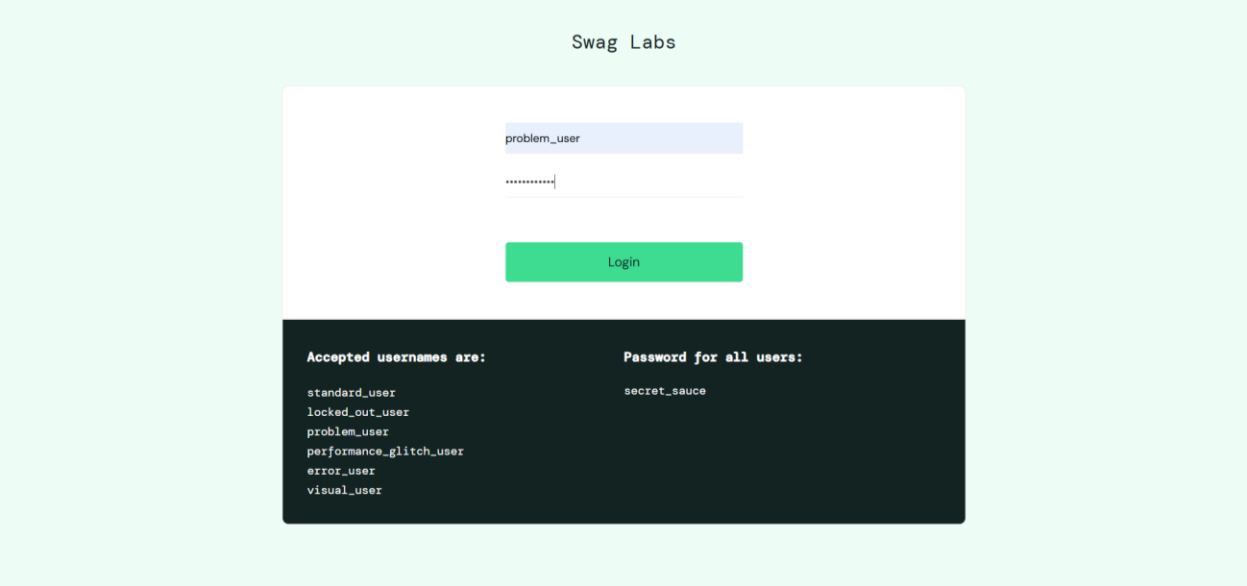

Figure 2: Login_Credentials_Entered.png

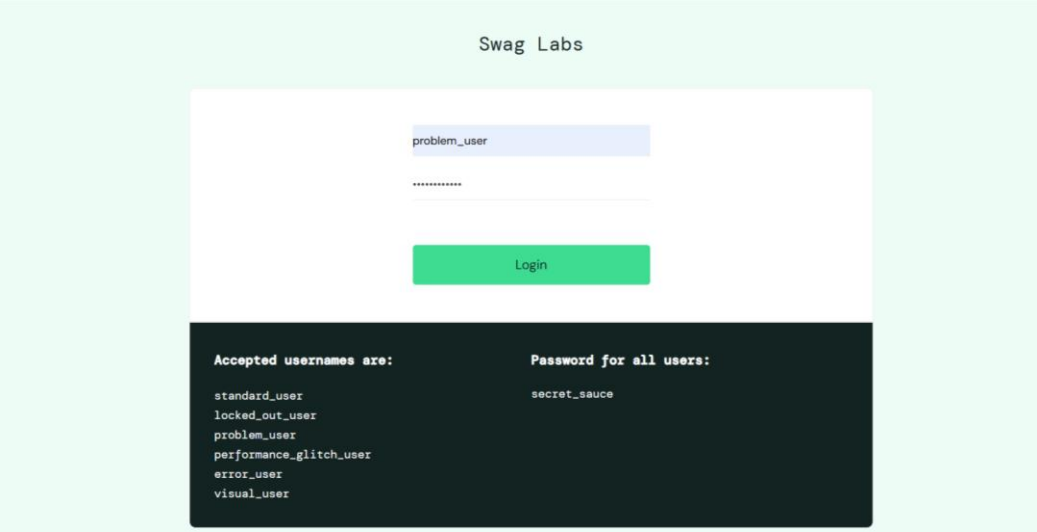

Figure 3: Login_Button_Clicked.png

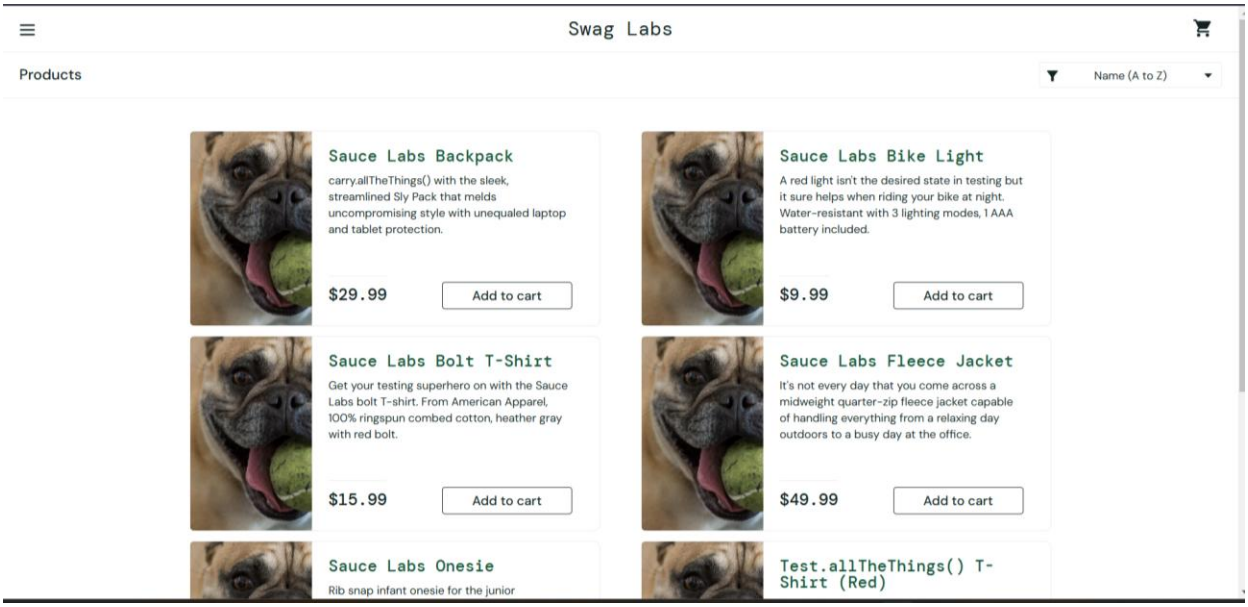

Figure 4: Inventory_Page_Success.png

02. Product Display Functionality

- **Title:** Product list is displayed correctly
- **Description:** Verify that all products are listed with proper details .
- **Steps to Reproduce**:

1. Log in with valid credentials.
2. Observe the product listing on the inventory page.

- **Expected Result:** All products are displayed with correct details.
- **Actual Result:**

Product Name In Inventory page	**Displayed Product Details**
Sauce Labs Backpack	Displayed Sauce Labs Fleece Jacket's details.
Sauce Labs Bike Light	Sauce Labs Bolt T-shirt
Sauce Labs Bolt T-shirt	Sauce Labs One-sie
Sauce Labs Fleece Jacket	as Item not Found
Sauce Labs One-sie	Test.allTheThings () T- Shirt
Test.allTheThings () T- Shirt	Sauce Labs Backpack

- **Screenshots:** [Include evidence].

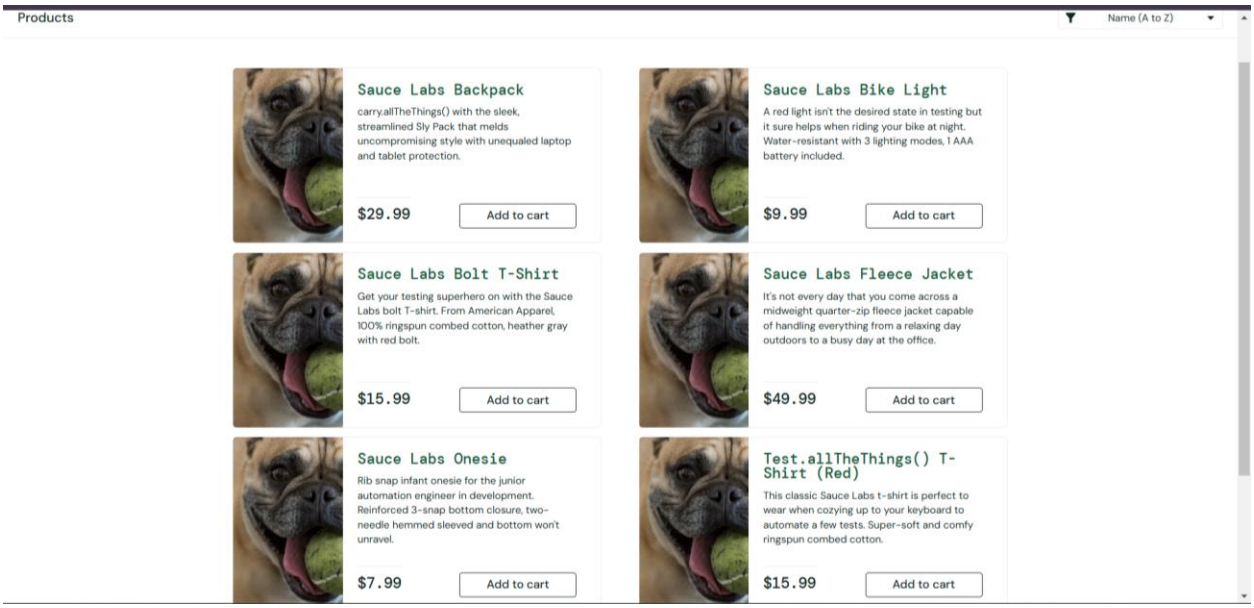

Figure 5: Product_List_Displayed.png

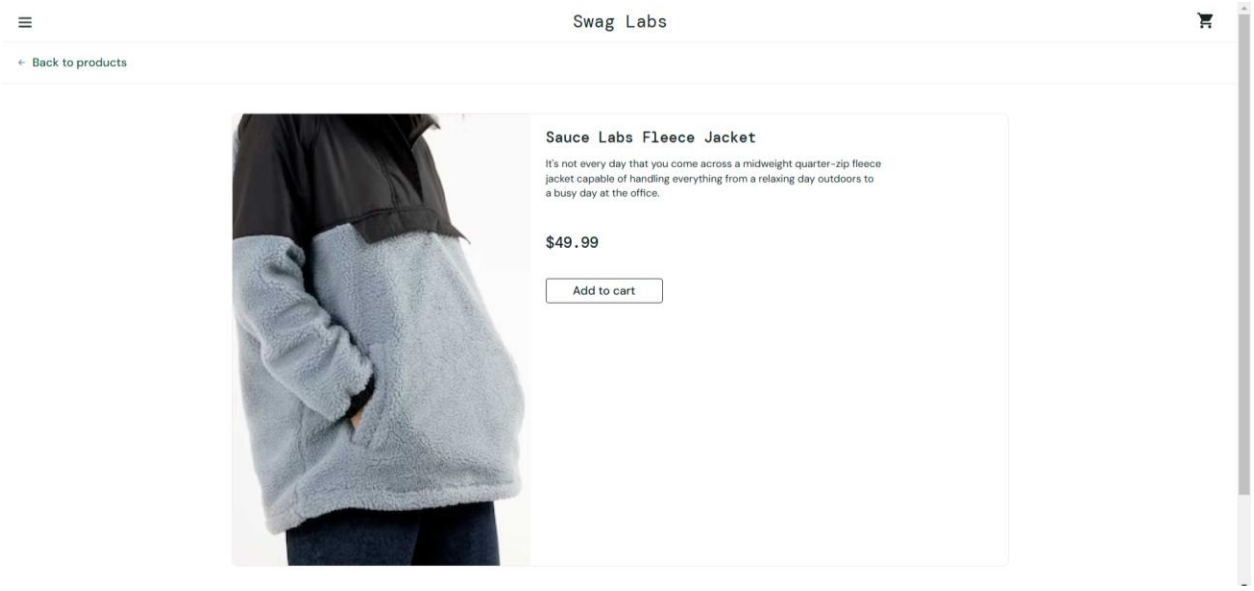

Figure 6: Product_Details_incorrect.png 01

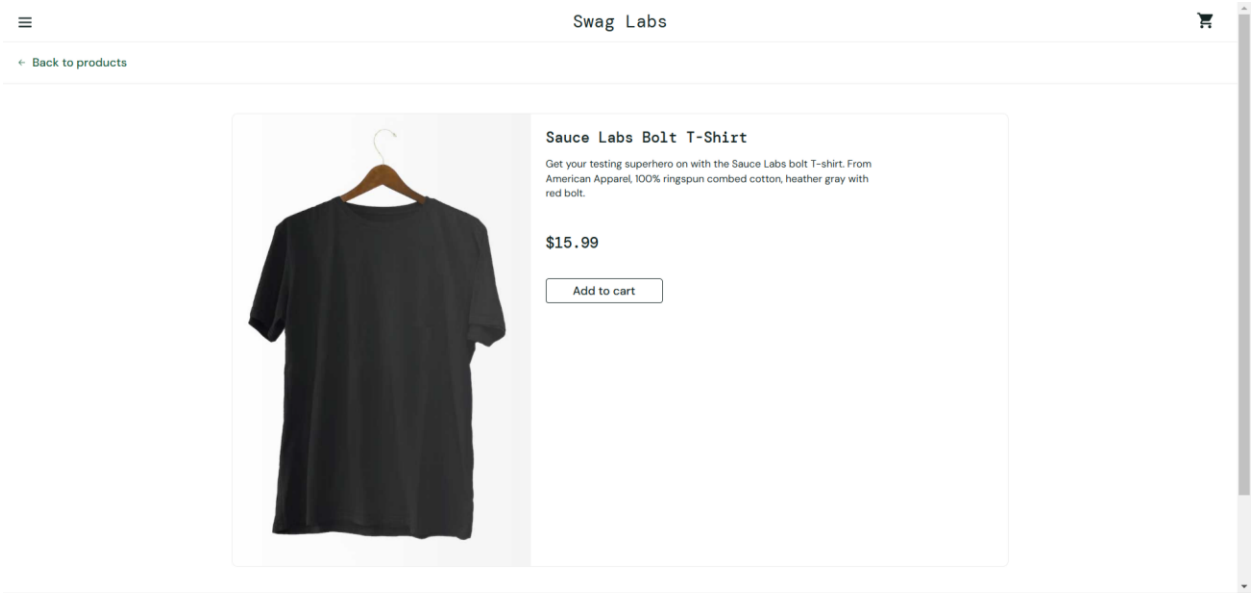

Figure 7: Product_Details_incorrect.png 02

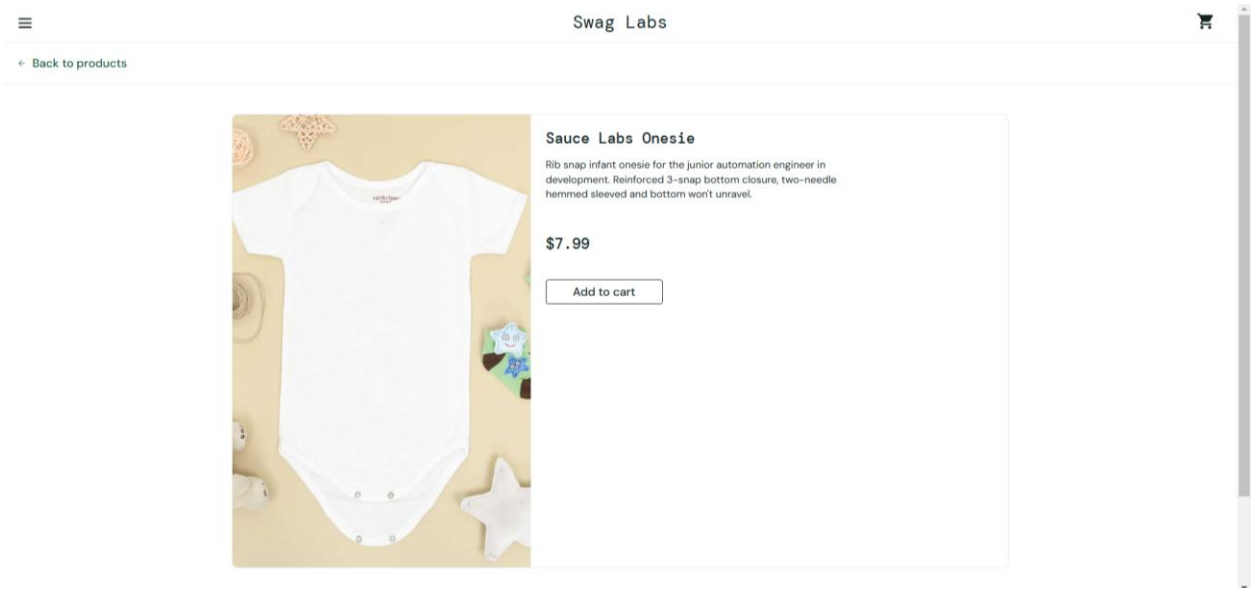

Figure 8: Product_Details_incorrect.png 03

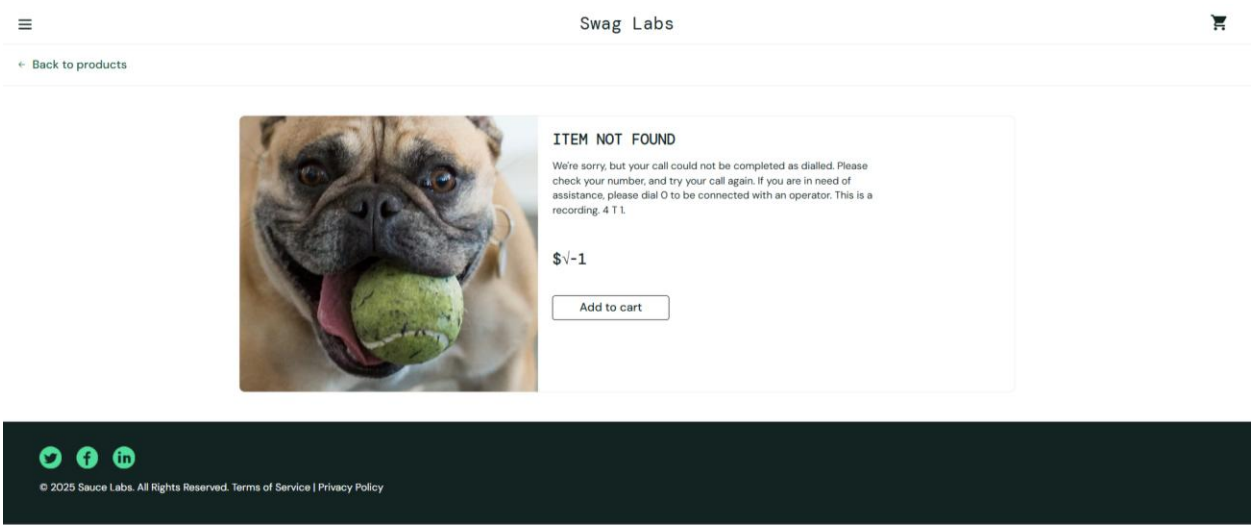

Figure 9: Product_Details_incorrect.png 04

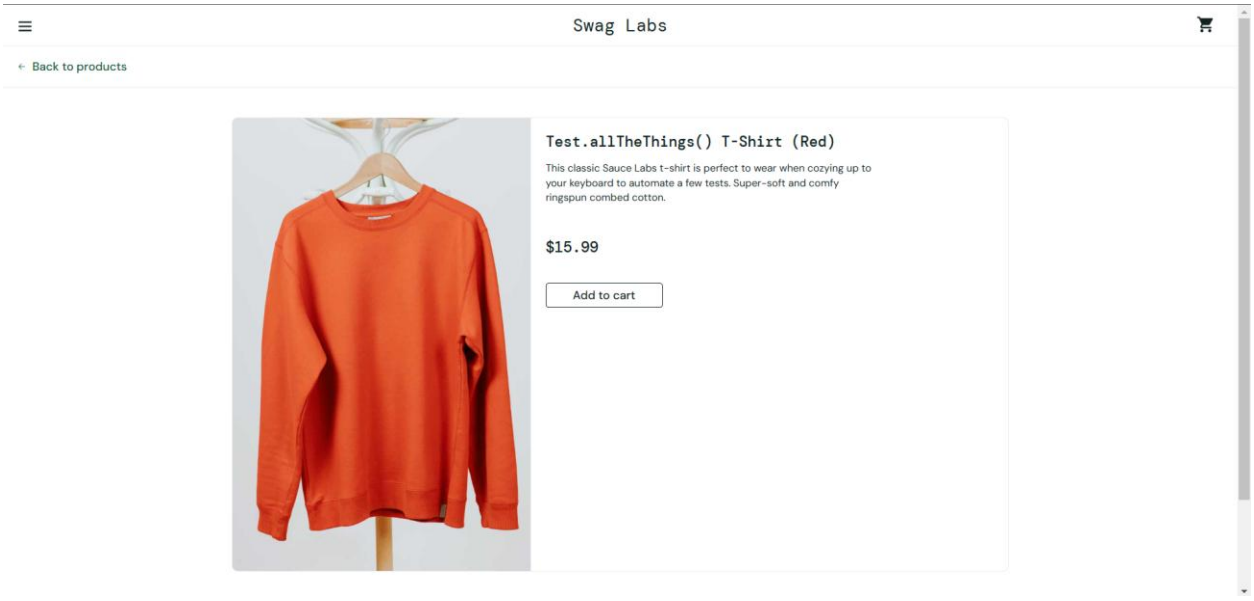

Figure 10 :Product_Details_incorrect.png 05

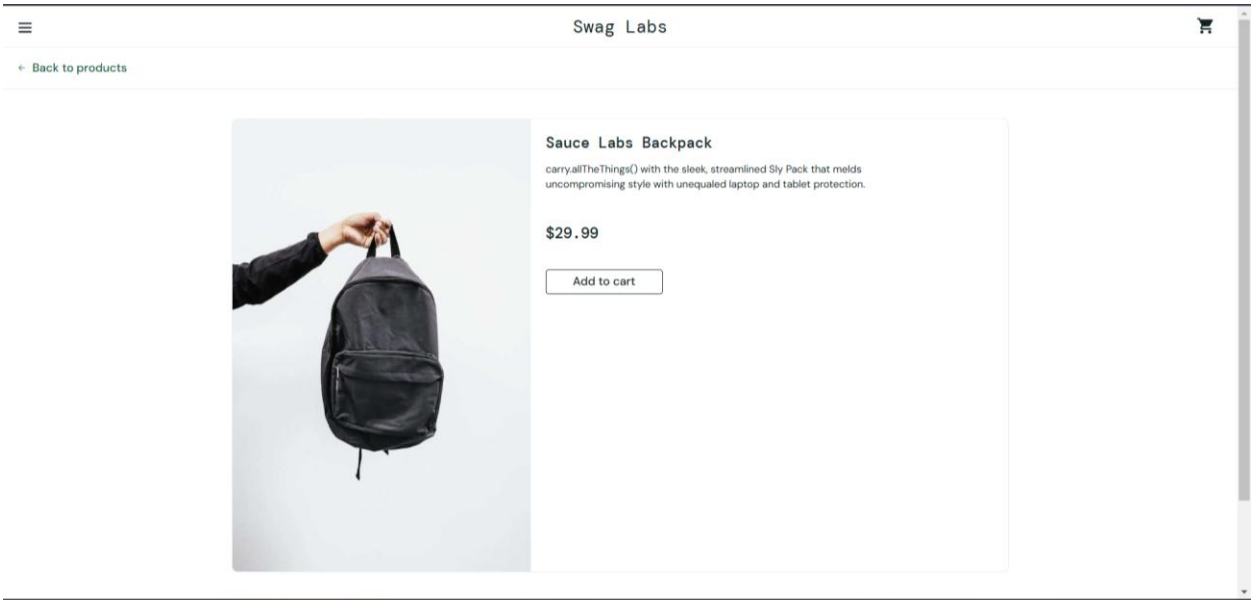

Figure 11: Product_Details_incorrect.png 06

03. Cart Function

- **Title**: Add to cart functionality
- **Description**: Validate that products can be added to the cart and are reflected correctly.
- **Steps to Reproduce**:

1. Log in with valid credentials.
2. Add a product to the cart.
3. Open the cart to verify the product is listed.

- **Expected Result** : Product appears in the cart.
- **Actual Result** : Product appears in the cart.
- **Screenshots**:

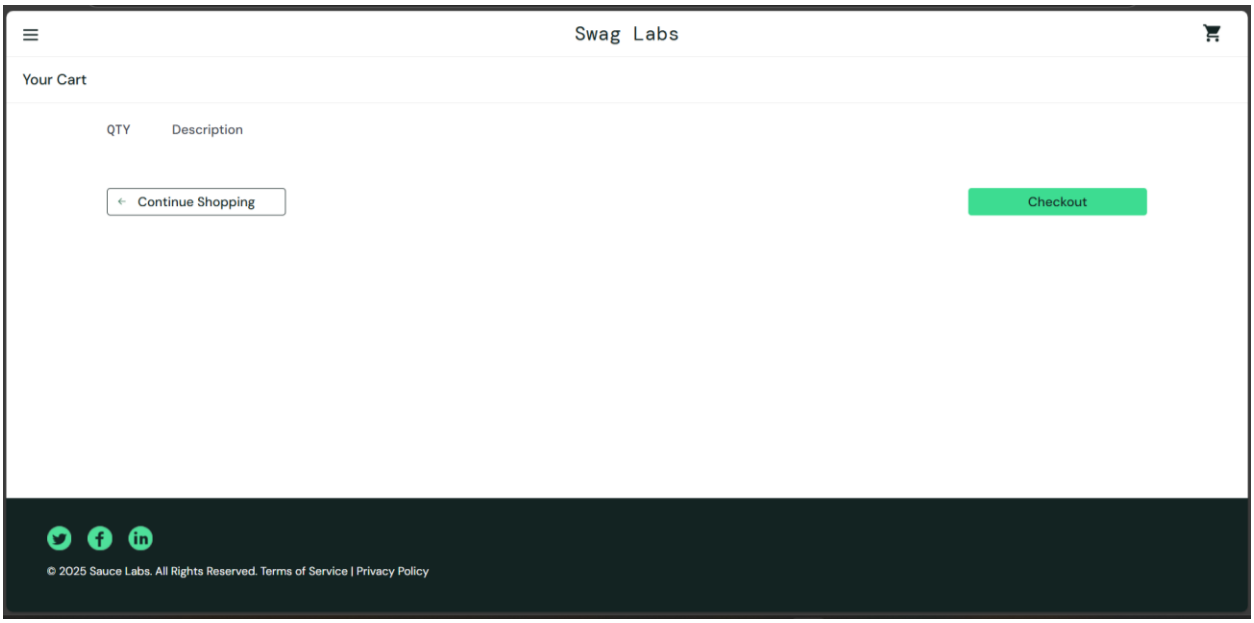

Figure 12: Empty Cart

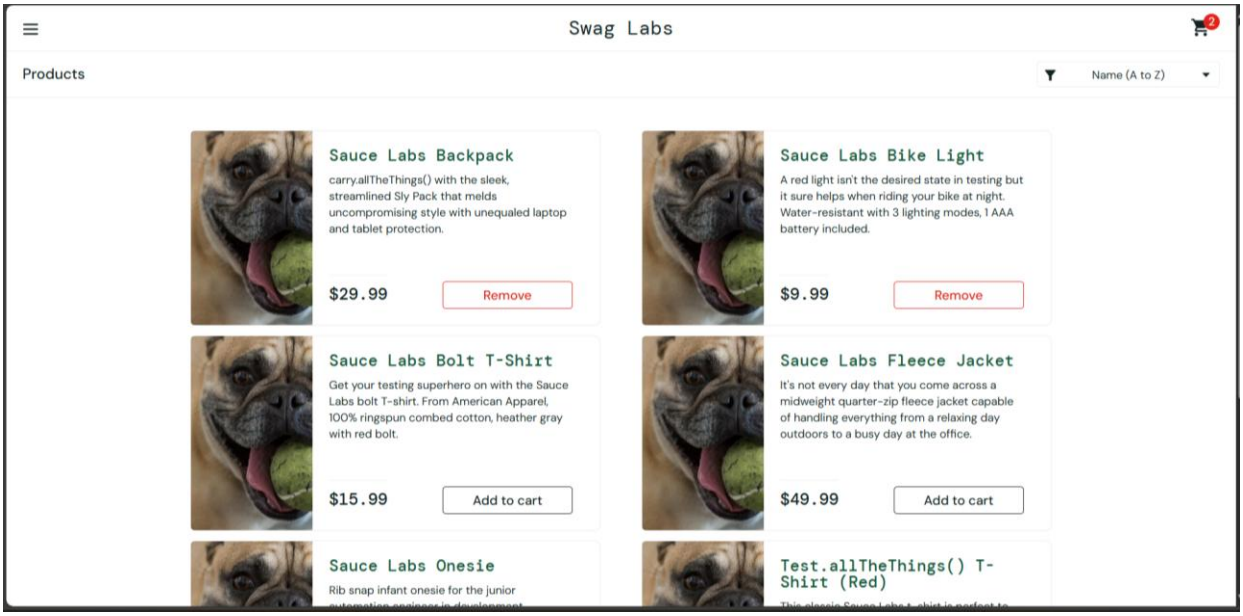

Figure 13: A screenshot showing the product added successfully to the cart.

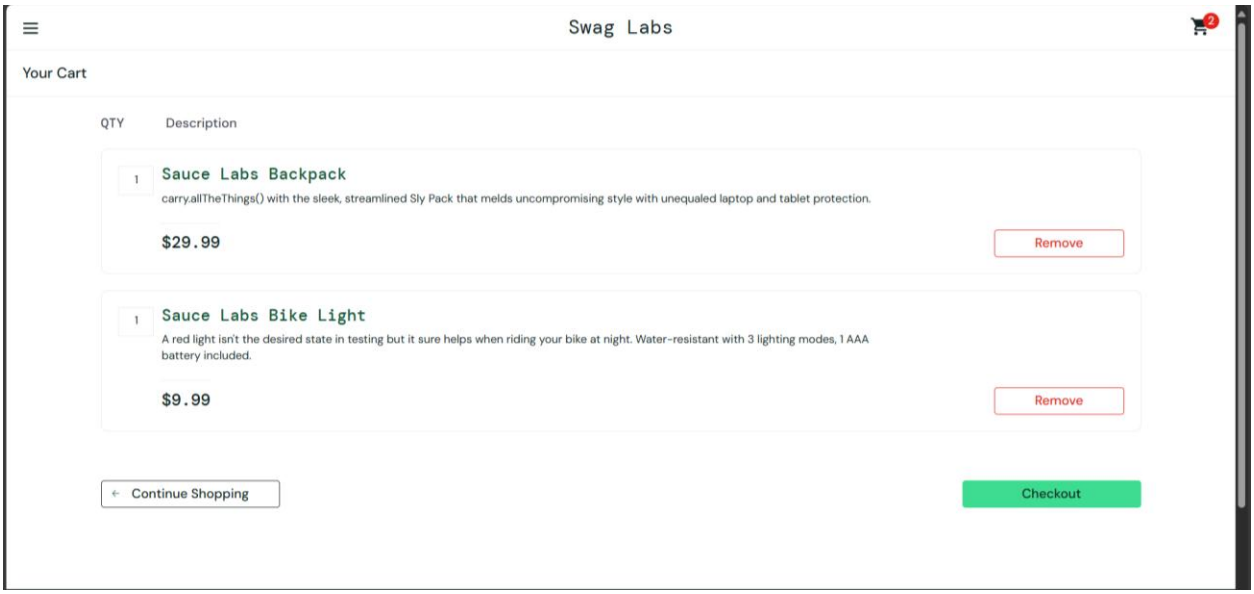

Figure 14 : A screenshot showing after the product added successfully to the cart page

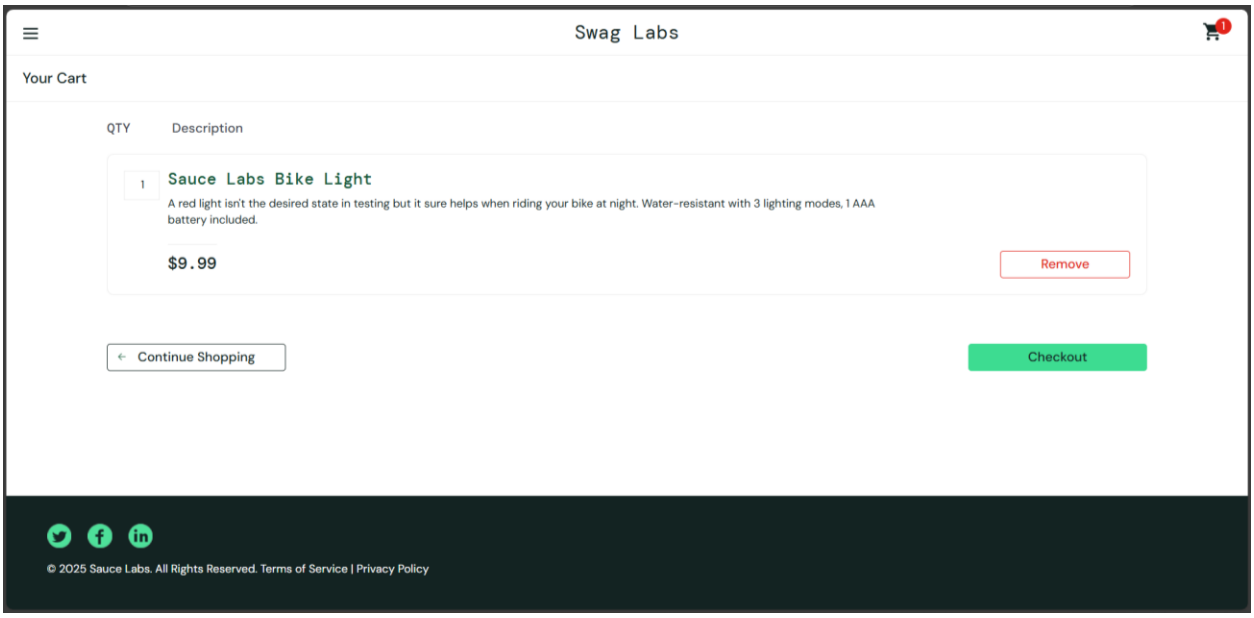

Figure 15 :A screenshot showing after the product remove successfully to the cart page

04. Checkout Process

- **Title:** Last Name Field Value Moves to First Name Field
- **Description:**

When entering details into the "Last Name" field, the entered value unexpectedly moves to the "First Name" field upon submission or interaction with the form.

- **Steps to Reproduce:**

01. Open the form page.

02. Enter a valid first name in the "First Name" field.

03. Enter a valid last name in the "Last Name" field.

04. Click submit or interact with another field.

- **Expected Result:**

Each field retains the entered value, and the "First Name" and "Last Name" fields display the corresponding data.

- **Actual Result:**

The value entered in the "Last Name" field appears in the "First Name" field, leaving the "Last Name" field blank.

- **Screenshots**

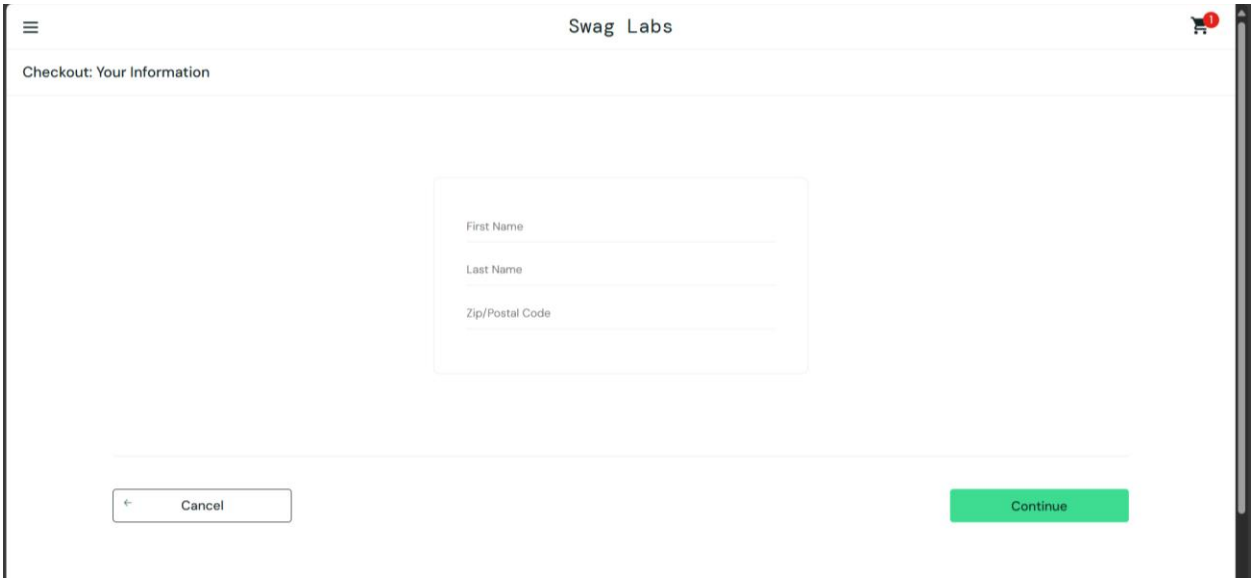

Figure 16: Navigate to the checkout page png

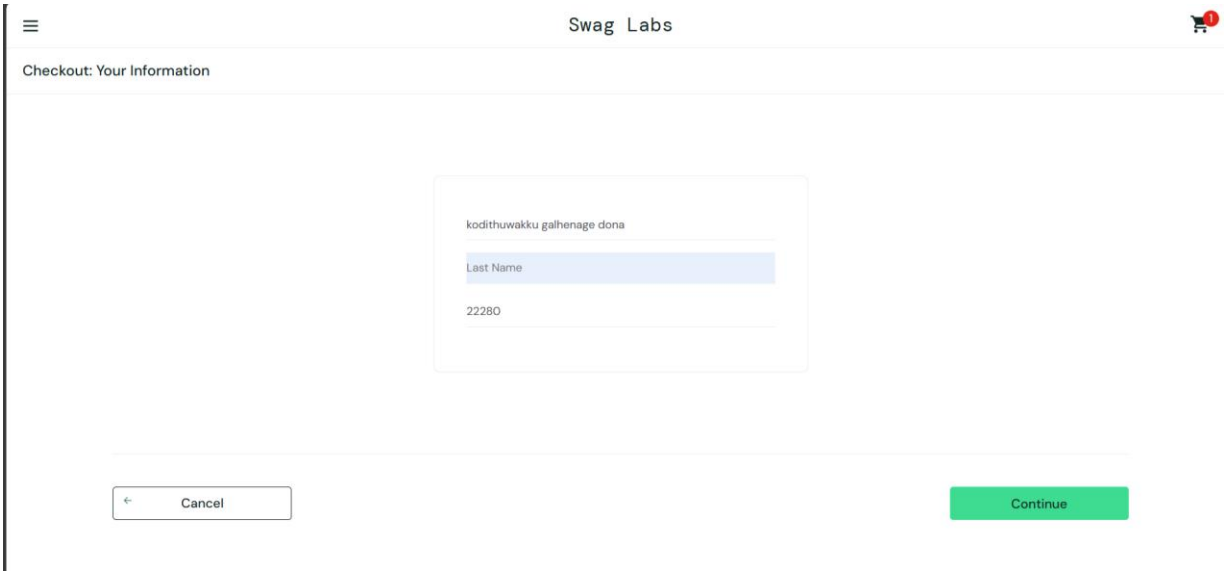

Figure 17: After entered required details

3. Performances Testing

3.1 Test Environment

- **Device:** Laptop -Victus by HP Gaming Laptop 15-fa 1xxx
- **Operating System:** [Windows 11 Home
- **Browser:** Chrome
- **Internet Speed:** 0.2Mpbs
- **Login Credentials Used:**
    - **Username:** performance_glitch_user
    - **Password:** secret_sauce

3.2 Performance Issues Found

01. Slow Page Load on Login

- **Description:** After entering credentials and clicking the login button, the page takes longer than expected to load.
- **Steps to Reproduce:**
    1. Open SauceDemo website.
    2. Enter the username performance_glitch_user and password secret_sauce.
    3. Click the "Login" button.
    4. Observe the delay before the inventory page loads.
- **Expected Result:** The login process should complete in under 2 seconds.
- **Actual Result:** The login process takes 6-7 seconds to complete.

- **Screenshots:**

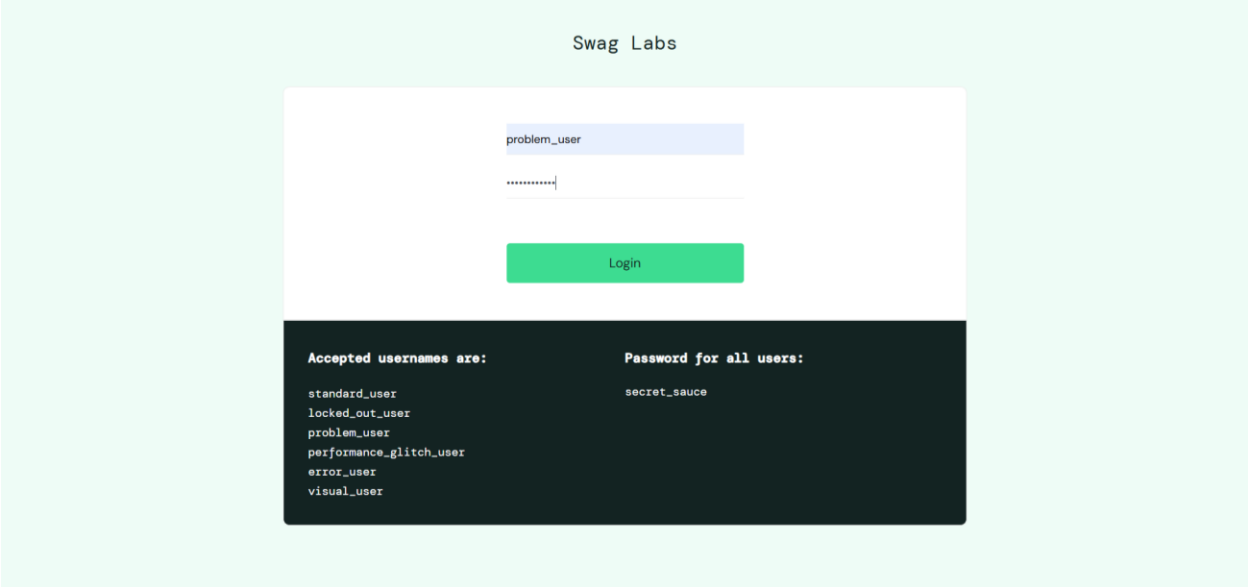

Figure 18: After entered login details png

02. Delayed Cart Update

- **Description:** Adding products to the cart takes several seconds before the cart icon updates.
- **Steps to Reproduce:**
    1. Log in to the SauceDemo application.
    2. Click "Add to Cart" on any product.
    3. Observe the cart icon.
- **Expected Result:** The cart icon should update immediately after adding a product.
- **Actual Result:** The cart icon updates after 5-6 seconds.

- **Screenshots:**

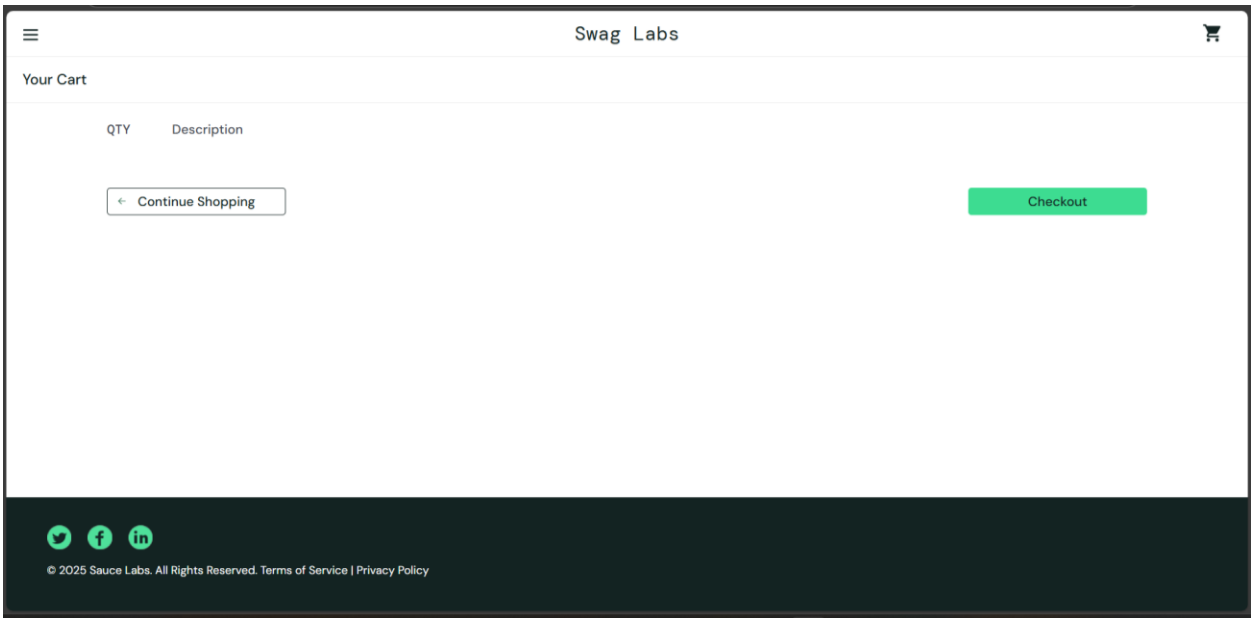

Figure 19: Cart page png

4. Recommendations

To improve both functionality and performance, several enhancements can be implemented. First, optimizing product display by reducing image sizes and enabling lazy loading will significantly decrease page load time. The checkout process can be improved by streamlining form validation and minimizing unnecessary API calls, which will reduce delays and improve the overall user experience. Additionally, enhancing the cart functionality by ensuring that large quantities of items do not slow down operations will contribute to a smoother transaction flow.

From a performance perspective, enabling browser caching, compressing static assets, and optimizing database queries will help improve response times. Implementing server-side optimizations, such as load balancing and content delivery networks (CDNs), will further enhance application speed and reliability. Regular load testing should be conducted to ensure the system performs well under different levels of user activity. By addressing both functional inefficiencies and performance bottlenecks, the application can deliver a seamless and efficient experience to users.