

Comprehensive Test Summary Report

Saucedemo Web Application Testing Project

Date: May 10, 2025

1. Executive Summary

This report provides a comprehensive overview of the testing activities conducted for the Saucedemo web application. The testing effort included both manual test cases executed by five team members and automated test scripts focusing primarily on sorting functionality.

Project Overview Statistics

Metric	Count
Total Manual Test Cases	44
Total Reported Bugs	22
Total Automation Scripts	3
Team Members	5

2. Manual Testing Summary

2.1 Overall Manual Execution Metrics

Metric	Count	Percentage
Total planned test cases	44	100%
Total executed test cases	44	100%
Test cases coverage percentage	-	100%
Total reported bugs	22	-
Bug to Test Case ratio	-	50%

2.2 Test Cases by Assignee

2.2.1 Abdullah Mahmoud Kamel Abdulatif

Issue Key	Summary	Status
DEPIR-65	G3_Product Sorting_Verify the sorting by Name (A-Z) & (Z-A) functionality	To Do
DEPIR-66	G3_Product Sorting_Verify the sorting by Price (Low to High) & (High to Low) functionality	To Do
DEPIR-69	G3_Product Sorting_Sorting items with identical price	To Do
DEPIR-70	G3_Product Sorting_Sorting mode after page refresh	To Do

Bugs Reported: 3

Test Cases Assigned: 4

2.2.2 Belal Wael Nasr Mohamed

Issue Key	Summary	Status
DEPIR-32	G3_Login_Check login with valid credentials	To Do
DEPIR-35	G3_Login_User try to login using Invalid Credentials	To Do
DEPIR-36	G3_Login_Check error message while using invalid credentials	To Do
DEPIR-44	G3_Logout_Check logout button functionality	To Do
DEPIR-48	G3_View Product List_ Check if All Products have an image and right description	To Do
DEPIR-61	G3_Add Product to Cart_ Check Adding product to cart with updating the number of items	To Do
DEPIR-76	G3_Add Product to Cart_ Check if All products can be added to the cart	To Do
DEPIR-79	G3_Add Product to Cart_ Ensure Cart Counts Resets after logout	To Do

Bugs Reported: 5

Test Cases Assigned: 8

2.2.3 Nourhan Ayman

Issue Key	Summary	Status
DEPIR-33	G3_Login_Check if accepted user [locked_out_user] could login	To Do
DEPIR-37	G3_Login_ User tries to login and leaves Password Field Blank	To Do
DEPIR-38	G3_Login_ User tries to Login Using spaces at the end in Username field	To Do
DEPIR-41	G3_Login_Check Case sensitivity in Password Field	To Do
DEPIR-45	G3_Logout_Verify user session termination across browser tabs after logout from one tab	To Do
DEPIR-46	G3_View Product List _ check sorting functionality	To Do
DEPIR-49	G3_Product View list_check responsive layout on different screen sizes	To Do
DEPIR-52	G3_View Product List_ check if images Does not match the Product for "problem_user"	To Do
DEPIR-73	G3_Login_Check Error Message accuracy when logging in with invalid password	To Do
DEPIR-75	G3_View Product List_ Check if The Price of the same Products changes by changing the user	To Do
DEPIR-77	G3_Add Product to Cart_ Check if the same Product can be added Multiple Times	To Do
DEPIR-80	G3_Logout_Check logout button Visibility	To Do
DEPIR-81	G3_Logout_ check access Restriction to inventory After Logging out	To Do
DEPIR-320	G3_Add Product to Cart_Cart Persistence Across Tabs After Login	To Do
DEPIR-322	G3_Add Product to Cart_Remove Product from Cart using remove button in cart page	To Do

Bugs Reported: 5

Test Cases Assigned: 15

2.2.4 Noureen Alaa

Issue Key	Summary	Status
DEPIR-238	G3_Check Out _ Verify that purchase process is successful	To Do
DEPIR-240	G3_Check Out _validation of required fields with empty output during checkout process	To Do
DEPIR-243	G3_Check out _verify a validation an appropriate message displays when the first field is empty	To Do
DEPIR-244	G3_Check out _Verify a validation special characters are entered in required fields	To Do
DEPIR-246	G3_Check out _Verify a validation special characters are entered in first name field	To Do
DEPIR-271	G3_Check out _Verify that the final price is calculated correctly in checkout page	To Do
DEPIR-273	G3_Check out _Verify the products and the address shown in review page match what displayed in add to cart page	To Do
DEPIR-274	G3_Check out _verify checkout page performance under load	To Do
DEPIR-277	G3_Check out _Verify that costumer data is hidden in required fields (of check out process)	To Do
DEPIR-279	G3_Check out _Verify validation when field contains only white space characters	To Do
DEPIR-281	G3_Check out _Check error message displays when zip code is longer than (zip+4)	To Do
DEPIR-295	G3_Check out _write invalid emails in required fields of checkout page	To Do
DEPIR-297	G3_Check out _write numbers in required fields of checkout page	To Do
DEPIR-299	G3_remove products form the cart_ verify the product removed successfully from the cart	To Do
DEPIR-300	G3_remove products form the cart_ verify the product removed successfully (one by one)from the cart	To Do
DEPIR-302	G3_remove products form the cart_ remove product from the cart and verify that the cart is updated successfully	To Do
DEPIR-303	G3_remove products form the cart_ verify removed the only product makes the cart icon disappear	To Do

Issue Key	Summary	Status
DEPIR-305	G3_remove products form the cart_ verify the user can continue shopping after removing product	To Do

Bugs Reported: 9

Test Cases Assigned: 18

2.2.5 Youssef Khaled Samir

Issue Key	Summary	Status
DEPIR-223	G3_Order History_ Missing Order History Page After Checkout	To Do

Bugs Reported: 0

Test Cases Assigned: 1

2.3 Test Case Distribution by Functional Area

Functional Area	Test Cases	Percentage
Login/Logout	13	29.5%
Product View/Sorting	9	20.5%
Shopping Cart	10	22.7%
Checkout Process	11	25.0%
Order History	1	2.3%
Total	44	100%

3. Bug Report Analysis

3.1 Overall Bug Metrics

Priority	Count	Percentage
Highest	5	22.7%
High	9	40.9%
Medium	4	18.2%
Low	1	4.5%
Lowest	3	13.6%
Total	22	100%

3.2 Bugs by Functional Area

3.2.1 Login/Logout Functionality (8 bugs)

Issue Key	Summary	Priority	Assignee
DEPIR-34	G3_Login_ Accepted [locked_out_user] User cannot logged in successfully	High	DEPI R2
DEPIR-39	G3_Login_Error message isn't specific and has text instead of emoji	Medium	DEPI R2
DEPIR-40	G3_Login_Error message displayed when login using valid username but with adding space at the end	High	DEPI R2
DEPIR-43	G3_Login_Error message isn't accurate what is the reason of the error	Medium	DEPI R2
DEPIR-91	G3_Logout_Logging out in one tab does not auto-terminate session in other open tabs even after refresh	High	DEPI R2
DEPIR-92	G3_Logout_Access is not Restricted to inventory After Logging out	Highest	DEPI R2
DEPIR-321	G3_Add Product to Cart_Cart Is not persistent Across Tabs After Login	High	DEPI R2

3.2.2 Product View/Sorting (5 bugs)

Issue Key	Summary	Priority	Assignee
DEPIR-50	G3_View Product List_ Images Does not match the Product for "problem_user"	Highest	DEPI R2
DEPIR-67	G3_Product Sorting_Rating system & the sorting function related to it	Lowest	Abdullah Mahmoud
DEPIR-68	G3_Product Sorting_Malfunction in sorting system	Lowest	Abdullah Mahmoud
DEPIR-71	G3_Search Product_Option to search for a product isn't available/visible	Low	Abdullah Mahmoud

3.2.3 Shopping Cart (3 bugs)

Issue Key	Summary	Priority	Assignee
DEPIR-62	G3_Add Product to Cart_ Only some products can be added to the cart for "problem_user"	Highest	DEPI R2
DEPIR-63	G3_Add Product to Cart_ Can't add the same Product Multiple Times for "standard_user"	High	DEPI R2
DEPIR-64	G3_Add Product to Cart_ Cart Counts does not Resets after logout	High	DEPI R2

3.2.4 Checkout Process (7 bugs)

Issue Key	Summary	Priority	Assignee
DEPIR-241	G3_Check out _validation on empty required fields during checkout process	Medium	(Unassigned)
DEPIR-242	G3_Check out _validation of required fields with empty output during checkout process	Medium	DEPI R2
DEPIR-245	G3_Check out _Verify a validation special characters are entered in required fields	Medium	(Unassigned)
DEPIR-247	G3_Check out _Verify a validation special characters are entered in first name field	High	DEPI R2
DEPIR-278	G3_Check out _Verify that costumer data is hidden in required fields (of check out process)	Highest	DEPI R2
DEPIR-280	G3_Check out _Verify validation when required field contains only white space	Highest	DEPI R2
DEPIR-282	G3_Check out _Check error message displays when zip code is longer than (zip+4)	Highest	DEPI R2
DEPIR-296	G3_Check out _write invalid emails in required fields of checkout page	High	DEPI R2
DEPIR-298	G3_Check out _write numbers in required fields of checkout page	High	DEPI R2

3.3 Bug Analysis Summary

- **Highest Risk Areas:** Checkout process validation and security, with 5 Highest priority bugs
- **Most Defective Area:** Login/Logout functionality (8 bugs, 36.4% of total bugs)
- **Potential Security Issues:** Customer data visibility during checkout (DEPIR-278)
- **Data Integrity Issues:** Cart persistence across tabs (DEPIR-321)

4. Automation Testing Summary

4.1 Automation Execution Metrics

Metric	Count	Percentage
Total planned test scripts	17	100%
Total executed test scripts	17	100%
Test automation scripts coverage percentage	-	100%
Total passed test scripts	11	64.7%
Total failed test scripts	6	35.3%

4.2 Automated Test Scripts Detail

Script Name	Purpose	Status
testLogin.java	Login by using valid credentials to check that the system would allow valid users to login or not.	Pass
logoutBtnVisibilityTest.java	check the Visibility of the logout Button	Pass
logoutTest.java	Check if logout button redirects the user to login page.	Pass
accessRestructedTest.java	Try accessing catalog page after logout	Fail
sessionTermination.java	when the user is logged in, in two tabs and then logout from one tab then when refreshing the other tab, it should redirect to login page and the user is logged out	Fail
testAddAllProductsToCart.java	Not all Products can be added to the cart	Fail
testRemoveAllProductsFromCart.java	verify the product removed successfully from the cart	Pass
CartPersistenceTest.java	Verify that the cart retains added products when logged in from a new tab	Fail
removeBtnOfCartPageTest.java	check the functionality of the remove button in the cart page	Pass
CartBtnVisibilityTest.java	check the visibility of the add/remove button in the cart page	Pass
checkAllProductsHaveValidImageAndDescription.java	The images should be visible and correct to all products	Fail
removefromcart.java	verify the product removed successfully (one by one) from the cart	Pass
Checkout1.java	Ensure the checkout process completed successfully	Pass
Checkout2.java	Verify the system behavior when numbers are entered in required fields	Fail
ProdSort.java	Verify sorting functionality (A-Z, Z-A, Low-High, High-Low) with expected values	Pass
SortModeReset.java	Verify sorting mode persistence after page refresh	Pass
SortPerform.java	Verify sorting performance with multiple iterations (50 random sorts)	Pass

4.3 Automation Coverage Areas

Currently, the automation framework covers:

- **Login/Logout:** Valid long credentials, visibility and functionality of logout button, redirect to login page after logout
- **Session Management:** Session termination across tabs, restricted page access after logout
- **Shopping cart functionality:**
 - Add all products to cart
 - Remove products from cart (individual and all at once)
 - Cart persistence across tabs
- **Cart UI Validation:** Product image and description visibility
- **Checkout Process:** validation of form completion and success state
- **Product sorting functionality:**
 - Sorting by A–Z, Z–A, Low–High, High–Low
 - Verification of correct order after sorting

4.4 Future Automation Opportunities

The following areas have been identified for future automation:

- **Cross-browser Compatibility:** Test functionality across different browsers
- **API Testing:** Backend functionality and data validation

5. Visual Representation of Test Results

5.1 Test Case Distribution by Assignee

Test Case Distribution by Assignee

Noureen Alaa:	18 (41%)
Nourhan Ayman:	15 (34%)
Belal Wael:	8 (18%)
Abdullah Mahmoud:	4 (9%)
Youssef Khaled:	1 (2%)

5.2 Bug Distribution by Priority

Bug Priority Distribution

Highest:	5 (23%)
High:	9 (41%)
Medium:	4 (18%)
Low:	1 (5%)
Lowest:	3 (14%)

5.3 Bug Distribution by Functional Area

Bug Distribution by Functional Area

Login/Logout:	8 (36%)
Checkout Process:	7 (32%)
Product View/Sort:	4 (18%)
Shopping Cart:	3 (14%)

6. Conclusion and Recommendations

6.1 Key Findings

- Critical Security Issues:** There are serious concerns about customer data visibility during checkout.
- User Experience Issues:** Login/logout functionality has multiple bugs that affect the user experience.
- Core Functionality:** The product sorting functionality works well as demonstrated by automated tests.
- User-Specific Issues:** Special handling for "problem_user" shows inconsistent behavior across the application.

6.2 Recommendations

1. High Priority Fixes:

- Address the highest priority security concern regarding customer data visibility during checkout
- Fix logout functionality to properly terminate sessions across tabs
- Resolve product image inconsistencies for "problem_user"

2. Testing Strategy Improvements:

- Expand automated testing to cover login, cart, and checkout processes
- Implement cross-browser testing
- Add API/backend testing to complement UI testing

3. Feature Enhancements:

- Implement product search functionality
- Add proper validation to checkout fields
- Consider implementing a rating system for products

6.3 Overall Assessment

The testing effort has identified significant issues across the application, particularly in checkout security and login/logout functionality. While the core product browsing and sorting features function correctly, the user experience is hampered by inconsistencies and security concerns.

The automated testing framework has proven effective for verifying product sorting functionality but needs expansion to cover other critical areas of the application.
