

QA Internship Assignment Solution

Sauce Demo (Swag Labs) –
<https://www.saucedemo.com/v1/>

Part 1: Test Case Design

Test Case ID	Description	Preconditions	Test Steps	Expected Result
TC_CART_01	Verify adding a single product	User is logged in	1. Browse products 2. Click 'Add to Cart' 3. Open cart	Product appears with correct details.
TC_CART_02	Verify adding multiple products	User is logged in	1. Add multiple products 2. Open cart	All products listed with correct details.
TC_CART_03	Verify increasing product quantity	Product added to cart	1. Go to cart 2. Increase quantity	Quantity updates correctly.
TC_CART_04	Verify decreasing product quantity	Product added (qty > 1)	1. Go to cart 2. Decrease quantity	Quantity decreases and total updates correctly.
TC_CART_05	Verify removing a product	Product added to cart	1. Go to cart 2. Click Remove	Product is removed from the cart.
TC_CART_06	Verify empty cart message	Cart is empty	1. Go to cart page	Message 'Your cart is empty' displays.
TC_CART_07	Verify cart summary calculation	Products added to cart	1. Go to cart 2. Verify subtotal, tax, total	Summary matches products plus tax and shipping.
TC_CART_08	Verify persistence after logout	1 product in cart	1. Logout 2. Login again 3. Open cart	Cart items persist.
TC_CART_09	Verify checkout button	At least 1 product in cart	1. Go to cart 2. Click Checkout	Redirects to checkout page.
TC_CART_10	Verify out-of-stock product	Product marked out-of-stock	1. Try adding product	Error is shown or the item is not added.

Part 2: Bug Report

Bug ID	Title	Steps to Reproduce	Expected Result	Actual Result	Severity	Priority
BUG_CHEC KOUT_01	Valid coupon code rejected with 'Invalid coupon' error	1. Login and add products to cart 2. Proceed to checkout 3. Enter valid coupon WELCOME10 4. Click Apply	A 10% discount is applied.	Error message 'Invalid coupon' is displayed.	High	High

Part 3: Test Data

Test Data ID	Product	Quantity	Price	Date	Special Case
TD_ORDER_01	Backpack	1	\$29.99	2025-09-01	Normal order.
TD_ORDER_02	T-Shirt	2	\$15 each	2025-09-05	Multiple quantity.
TD_ORDER_03	Shoes, Jacket	1 each	\$50, \$70	2025-09-06	Multiple products.
TD_ORDER_04	Laptop	1	\$500	2025-09-07	Returned/refunded.
TD_ORDER_05	Phone Cover	3	\$10 each	2025-09-08	Multiple orders from same user.

Part 4: Exploratory Testing

Scenario ID	Description
EXP_01	Search by full product name: Ensures exact matching.
EXP_02	Search by partial keyword: Verifies fuzzy search functionality.
EXP_03	Apply price filter: Confirms correct filtering based on price.
EXP_04	Filter by category: Validates the category filter.
EXP_05	Invalid input (e.g., special characters): Checks error handling.

Part 5: Automation (Selenium Python Example)

A Python script using the Selenium library is provided to automate a test case.

```
from selenium import webdriver
from selenium.webdriver.common.by import By

driver = webdriver.Chrome()
driver.get("https://www.saucedemo.com/v1/")

# Login steps
driver.find_element(By.ID, "user-name").send_keys("standard_user")
driver.find_element(By.ID, "password").send_keys("secret_sauce")
driver.find_element(By.ID, "login-button").click()

# Add a product to the cart
driver.find_element(By.XPATH, "//button[text()='Add to cart']").click()

# Verify cart count
cart_count = driver.find_element(By.CLASS_NAME, "shopping_cart_badge").text
assert cart_count == "1", "Cart count mismatch!"

print("Test Passed: Product added to cart successfully.")
driver.quit()
```