SauceDemo Web Application - Test Plan

1. Introduction

The purpose of this document is to define the test plan and test cases for the SauceDemo application. Both manual testers and automation engineers will use these cases for validation. The automation suite is built using Playwright + TypeScript with the Page Object Model (POM) design.

2. Objectives

- Verify critical user flows: Login, Inventory, Cart, Checkout, and Logout.
- Ensure data-driven testing with reusable test data.
- Provide tests that are repeatable manually and by automation.

3. Scope

In Scope:

- Functional testing of login, cart, checkout, and logout flows.
- Positive & negative test scenarios.
- Cross-browser execution.

Out of Scope:

- Performance testing
- Mobile-native app testing
- API-level testing

4. Test Approach

- Automation: Playwright tests mapped to test cases.
- Manual Execution: QA testers can follow step-by-step actions and expected results.
- Data Management: Users, products, and checkout data are stored in JSON files.
- Reports: Playwright HTML and Allure Reports.

5. Test Environment

- Application under test: https://www.saucedemo.com/
- Browsers: Chrome, Firefox, WebKit
- Test Data:
- Standard User: standard_user / secret_sauce
- Products: Sauce Labs Backpack, Sauce Labs Bike Light, etc.
- Checkout Info: { firstName: 'John', lastName: 'Doe', postalCode: '12345' }

6. Entry & Exit Criteria

Entry Criteria:

- Test environment ready
- Test data prepared
- POM automation framework configured

Exit Criteria:

- All critical test cases executed
- All high-severity defects resolved or deferred

7. Test Cases

ID	Feature	Test Case	Steps	Expected Result
TC-001	Login	Login with valid user	Navigate to login Enter standard_user/secret_sauce Click Login	User is redirected to Inventory page
TC-002	Login	Login with locked out user	Navigate to login Enter locked_out_user/secret_sauce Click Login	Error message displayed: 'Epic sadface: Sorry, this user has been locked out.'
TC-003	Inventory	Add product from landing page	Login Click Add to cart for 'Backpack'	Cart badge = 1
TC-004	Inventory	Remove product from landing pag	ge1. Add 'Backpack' 2. Click Remove	Cart badge disappears
TC-005	Cart	View cart products	Add 'Bike Light' Open cart	'Bike Light' is displayed in cart
TC-006	Cart	Remove product from cart	Add 'Bike Light' Open cart Click Remove	Cart is empty
TC-007	Checkout Info	Fill checkout form	Add product Proceed to checkout Enter John Doe/12345 Continue	User navigates to Checkout Overview
TC-008	Checkout Info	Missing First Name validation	Add product Proceed to checkout Leave First Name empty Continue	Error message: 'Error: First Name is required'
TC-009	Checkout Info	Canceling checkout	Add product Proceed to checkout Click Cancel	User is redirected back to cart
TC-010	Checkout Overview	Verify product in overview	Add 'Backpack' Complete checkout info On Overview page	'Backpack' is listed in overview
TC-011	Checkout Overview	Cancel from overview	On Overview page Click Cancel	User is redirected back to inventory
TC-012	Checkout Complete	Finish checkout	Add 'Backpack' Fill checkout info Finish	Success message: 'Thank you for your order!'
TC-013	Checkout Complete	Back home	On checkout complete page Click Back Home	User redirected to inventory
TC-014	Menu	Logout via menu	Login Open menu Click Logout	User is redirected to Login page
TC-015	Menu	Reset App State	Add products Open menu Click Reset App State	Cart is cleared

8. Traceability Matrix

Feature	Test Cases	Automation
Login	TC-001, TC-002	Yes
Inventory	TC-003, TC-004	Yes
Cart	TC-005, TC-006	Yes
Checkout Info	TC-007, TC-008, TC-009	Yes
Checkout Overview	TC-010, TC-011	Yes
Checkout Complete	TC-012, TC-013	Yes
Menu	TC-014, TC-015	Yes