

SauceDemo QA Project – Test Plan

1. Introduction

This document defines the test approach and scope for validating the **functional behavior and user interface** of a simple e-commerce web application.

The objective is to ensure that core user flows operate correctly and that input handling follows expected functional rules.

2. Test Objectives

- Validate core functional flows of the application
- Verify correct behavior of user interface elements
- Ensure form fields accept, validate, and handle user input correctly
- Identify functional defects in navigation and form submission
- Establish a base for UI test automation using Selenium with Java

3. Test Scope

3.1 In Scope

- Checkout information page
- Input fields (First Name, Last Name, Zip Code)
- Buttons functionality (Continue, Cancel)
- Page navigation between Cart and Checkout
- Error message display behavior

3.2 Out of Scope

- Performance testing
- Security testing
- API / backend testing
- Database validation
- Payment processing

4. Test Strategy

4.1 Test Level

- System Testing
(Testing the complete web application from an end-user perspective)

4.2 Test Types

The following test types will be applied:

- Functional Testing: Verify that application features behave according to expected functionality.
- UI Testing: Validate buttons, fields, labels, and navigation flow.
- Input Validation Testing: Verify behavior when valid and invalid data is entered into form fields.
- Negative Testing: Ensure the application handles incorrect or unexpected input gracefully.

4.3 Test Approach

- Manual testing will be used to:
 - Explore functionality
 - Identify defects
 - Design test scenarios
- Automated testing will be used to:
 - Automate stable and repetitive UI scenarios
 - Verify regression behavior

4.4 Automation Strategy

- Tool: Selenium WebDriver
- Language: Java
- Framework: TestNG
- Build Tool: Maven
- Browser: Chrome

Automation scope includes:

- Successful checkout navigation
- Cancel button behavior
- Form submission scenarios

5. Test Environment

- Operating System: Windows
- Browser: Google Chrome
- Application Type: Web Application
- Automation Tools: Java, Selenium WebDriver, TestNG, Maven

6. Entry and Exit Criteria

6.1 Entry Criteria

- Application is accessible
- Test environment is ready
- Test data is defined

6.2 Exit Criteria

- All planned test cases are executed
- Critical defects are logged
- Test Summary Report is completed

7. Test Deliverables

- Test Plan
- Test Cases
- Bug Reports
- Test Summary Report
- Automated Test Scripts

8. Risks and Constraints

Risks

- Limited functionality may restrict test coverage
- Minimal input validation implemented in the application

Constraints

- No access to backend or database
- Testing limited to UI behavior only

9. Approval

This test plan serves as the baseline for all testing activities related to this project.