

# Test Plan

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## **SauceDemo E-Commerce Application**

**Version: 1.0**

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# 1. Introduction

## 1.1 Objective

The objective of this test plan is to define the strategy, scope, resources, and schedule for testing the **SauceDemo E-Commerce Application (Swag Labs)**. The goal is to ensure the application allows users to browse products, manage their cart, and complete purchases seamlessly across different user personas and environments.

## 1.2 Scope

### In-Scope:

- **Authentication:** Login functionality for all valid and invalid user scenarios.
- **Inventory Management:** Product listing, sorting, and details view.
- **Cart Functionality:** Adding, removing, and retaining items in the cart.
- **Checkout Process:** Information entry, tax/total calculation, and order completion.
- **Global Navigation:** Sidebar menu, logout, and footer links.
- **Cross-Browser Compatibility:** Chrome, Firefox, Edge (Latest Versions).

### Out-of-Scope:

- **Payment Gateway Integration:** The application uses mock payments; real credit card processing is out of scope.
- **User Registration:** No sign-up feature exists (pre-defined users only).
- **Backend Database Testing:** Direct database access is not available; validation is limited to frontend behavior and API responses.

# 2. Test Strategy

## 2.1 Testing Levels

- **Functional Testing:** Verifying that features (Login, Cart, Checkout) work according to requirements.
- **UI/UX Testing:** Ensuring layout, responsiveness, and visual elements (images, text) are displayed correctly.
- **Negative Testing:** Validating error handling for invalid inputs (e.g., empty fields, wrong passwords).

- **Compatibility Testing:** Verifying application behavior across different browsers and resolutions.
- **Performance Testing (Light):** Specifically testing the performance\_glitch\_user to ensure the system handles latency gracefully.

## 2.2 Test Data & User Roles

Testing will leverage the following pre-configured user accounts provided by the application:

| User Role                      | Purpose            | Key Test Focus   |
|--------------------------------|--------------------|--|
| <b>standard_user</b>           | Happy Path Testing | Verify normal flow: Login → Add to Cart → Checkout → Finish. |
| <b>locked_out_user</b>         | Negative Testing   | Verify "User Locked" error message prevents access.          |
| <b>problem_user</b>            | Edge Case Testing  | Verify handling of broken images and incorrect data mapping. |
| <b>performance_glitch_user</b> | Performance        | Verify system stability under high latency (5+ seconds).     |
| <b>visual_user</b>             | UI Testing         | Verify layout shifts and CSS responsiveness issues.          |

**Password for all users:** secret\_sauce

## 3. Test Environment

The testing will be conducted in the following environments:

- **Application URL:** <https://www.saucedemo.com/>
- **Hardware:** Windows 10/11 PC, macOS (Ventura/Sonoma).
- **Browsers:** Google Chrome (Latest), Mozilla Firefox (Latest), Microsoft Edge.
- **Network:** Standard broadband connection (simulating typical user speed).

## 4. Entry & Exit Criteria

### 4.1 Entry Criteria (When to start)

- Test Plan is reviewed and approved.
- Test Scenarios and Test Cases are documented.
- The Application URL is accessible.
- QA resources are assigned.

## 4.2 Exit Criteria (When to stop)

- 100% of "Critical" and "High" priority test cases have passed.
- No "Showstopper" or "Critical" severity bugs remain open.
- 95% Pass rate for "Medium" priority test cases.
- Test Closure Report has been signed off.

## 5. Test Schedule (Estimates)

| Phase            | Activity                                  | Estimated Duration | Responsibility |
|------------------|---|--------------------|----------------|
| <b>Planning</b>  | Requirement Analysis & Test Plan Creation | 1 Day              | QA Lead        |
| <b>Design</b>    | Test Case Creation & Review               | 2 Days             | QA Engineer    |
| <b>Execution</b> | Manual Test Execution (Cycle 1)           | 3 Days             | QA Team        |
| <b>Retesting</b> | Defect Fix Verification                   | 1 Day              | QA Team        |
| <b>Closure</b>   | Final Reporting & Sign-off                | 0.5 Days           | QA Lead        |

## 6. Risks & Mitigation

| Risk                              | Impact | Mitigation Strategy  |
|-----------------------------------|--------|--|
| <b>Environment Unavailability</b> | High   | Since it is a public demo site, downtimes are rare but possible. Testing will pause and resume upon availability.    |
| <b>Browser Caching Issues</b>     | Medium | Testers must clear cache/cookies or use Incognito mode between user role switches to prevent data bleed.             |
| <b>Limited Backend Access</b>     | Low    | Testing will focus heavily on Frontend and API Network responses (via DevTools) to compensate for lack of DB access. |

## 7. Deliverables

1. **Test Plan Document:** (This document).
2. **Test Case Suite:** Excel or Jira export containing all positive/negative scenarios.
3. **Defect Report:** Log of all bugs found (Critical/High/Medium/Low).
4. **Test Summary Report:** Final document summarizing pass/fail rates and recommendation for release.

## 8. Approval

**Approved By:** \_\_\_\_\_ (Project Manager)  
**Date:** \_\_\_\_\_

**Approved By:** \_\_\_\_\_ (QA Lead)  
**Date:** \_\_\_\_\_