### **Test Plan for SauceDemo.com**

#### **1. Test Plan Identifier**

**Test Plan Version:** v1.0  
**Project Name:** SauceDemo.com Testing Plan  
**Date:** 05-11-25

#### **2. Introduction**

SauceDemo.com is a demo e-commerce application that allows users to browse products, add them to a shopping cart, and complete purchases. The purpose of this test plan is to validate the application's functionality, usability, performance, and security across various platforms.

#### **3. Test Objectives**

* Verify that all features and workflows function as expected.
* Ensure the application is user-friendly and intuitive.
* Validate the application's performance under varying loads.
* Confirm compatibility across supported browsers and devices.
* Identify and resolve security vulnerabilities.

#### **4. Scope**

**In Scope:**

* Core features like login, product browsing, cart management, and checkout.
* Web application functionality on desktop and mobile browsers.
* Supported browsers (e.g., Chrome, Firefox, Safari, Edge).
* Backend integrations, such as payment gateways and databases.

**Out of Scope:**

* Mobile app testing (if applicable).
* Testing for unsupported or outdated browser versions.

#### 

#### **5. Test Items**

* **Login/Logout functionality**
* **Product catalog**: Sorting, filtering, and adding/removing items to/from the cart.
* **Shopping cart**: View items, modify quantities, and calculate totals.
* **Checkout process**: Entering customer details, completing purchases, and confirmation messages.
* **Error handling**: Invalid logins, missing information during checkout, etc.

#### **6. Test Types**

1. **Functional Testing**
   * Verify login/logout processes, product sorting, and checkout flows.
2. **Usability Testing**
   * Evaluate UI/UX elements for ease of use and intuitiveness.
3. **Performance Testing**
   * Test page load times, API response times, and stress testing for high traffic.
4. **Compatibility Testing**
   * Test across multiple browsers (e.g., Chrome, Firefox, Safari) and devices.
5. **Security Testing**
   * Validate data protection mechanisms, session handling, and encryption.
6. **Regression Testing**
   * Ensure that updates or fixes do not break existing functionalities.
7. **Integration Testing**
   * Verify that APIs, payment gateways, and database systems work seamlessly together.

#### **7. Test Environment**

* **Browsers:** Chrome, Firefox, Edge, Safari
* **Operating Systems:** Windows, macOS, Linux, iOS, Android
* **Tools:** Selenium, Postman, JMeter, Sauce Labs platform

#### **8. Test Data**

* **User Accounts:**
  + Valid: test\_user1 / secret\_sauce
  + Invalid: invalid\_user / wrong\_password
* **Checkout Information:**
  + Valid data: Sample names, addresses, and ZIP codes.
  + Edge cases: Missing/invalid details.

#### **9. Test Schedule**

|  |  |  |  |
| --- | --- | --- | --- |
| **Phase** | **Start Date** | **End Date** | **Responsible Team** |
| Test Plan Creation | [05-09-25] | [05-09-25] | QA Team |
| Test Case Design | [05-09-25] | [05-10-25] | QA Team |
| Test Execution | [05-10-25] | [05-10-25] | QA Team |
| Defect Reporting | [05-10-25] | [05-11-25] | QA Team |
| Test Summary Report | [05-11-25] | [05-12-25] | QA Team |

#### **10. Roles and Responsibilities**

* **Test Manager:** Oversee the testing process, allocate resources, and ensure deadlines are met.
* **QA Engineers:** Design, execute, and report test cases and defects.
* **Developers:** Fix reported issues and provide builds for testing.

#### **11. Entry and Exit Criteria**

**Entry Criteria:**

* Application is deployed in the test environment.
* Test data is prepared.
* All necessary tools and resources are available.

**Exit Criteria:**

* All critical and major defects are resolved.
* Test coverage is above 95%.
* Test summary report is approved.

#### **12. Risks and Mitigation Plan**

**Risks:**

* Delays in build availability.
* Lack of test data or environments.
* Resource constraints.

**Mitigation:**

* Plan for contingency environments.
* Prioritize critical functionalities during resource shortages.

#### **13. Deliverables**

* Test Plan Document
* Test Cases and Scenarios
* Test Execution Reports
* Defect Reports
* Final Test Summary Report