**Test plan – SwagLab**

**V1.0**

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| **Approvals** | | | |
| **Name** | **Title** | **Signature** | **Escalation** |
| **Name1** | **Test Manager** |  |  |
| **Name2** | **Project manager** |  |  |
| **NameX** | **Business Manager** |  |  |

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### Objective

The objective of Swaglabs online apparel website in the UK is to provide a user-friendly, convenient shopping experience for customers looking to purchase clothing and accessories. The platform aims to offer a wide variety of styles, from casual to formal wear, catering to diverse customer preferences. Key objectives include high-quality product offerings, seamless user experience, personalized recommendations, and efficient logistics for quick delivery and easy returns. Company aims to build a competitive online portal for user to buy products online.

The project aims to deliver a comprehensive website for shopping with high quality and enabling seamless user experience.

### Document Scope

This document includes the complete plan of actions for the testing delivery of the website. The objective aims to verify the functionality, usability, reliability, and security of the [SauceDemo](https://www.saucedemo.com/v1/index.html) website. The plan will focus on essential functionalities including login, product viewing, cart management, and checkout processes to ensure an optimal user experience and alignment with requirements.

### Scope of Testing

System testing

**[Describe System testing scope here]**

Functional testing objective

This test plan covers functional testing on major modules of SauceDemo, including:

* Login functionality with different user credentials.
* Product catalogue interaction and filtering.
* Shopping cart management.
* Checkout process to complete a transaction.
* UI responsiveness across different devices and browsers.

### Test Approach

Testing will be planned based on the overall test strategy documented and will follow the schedule as per the programme framework will align with the overall project schedule and timelines which is agreed by the programme management and business. The approach will focus on different type based on core user flows, including login, product selection, cart management, and checkout as the major features to be tested. Project align with the agile scrum delivery model and the testing strategy will follow the same approach, tools and techniques.

### User stories

Few of the major user requirements are described below



### Testing types

Testing will focus on the below phases.

1. Functional testing
2. System testing
3. Regression testing
4. Usability testing
5. Cross browser testing
6. Security testing

### Functional testing

Functional testing will focus on the below test areas.

* **Login and Authentication**: Test valid, invalid, and edge-case login scenarios to verify correct behavior, error handling, and security.
* **Product Browsing**: Ensure that all products display correctly and that product filters, sorting, and categorization work as expected.
* **Cart Functionality**: Validate that users can add/remove items, update quantities, and view correct prices in the cart.
* **Checkout Process**: Test checkout steps (address input, payment selection, order confirmation) for smooth and error-free completion.
* **Input Validation and Boundary Testing**: Check for field length constraints, valid data types, and boundary values for forms.

### System testing

Once the components are tested individually, system testing will be carried out with the support of module integration test plan.

### Regression testing

There will be regular regression tests on core functionalities to ensure that any new updates or bug fixes do not introduce new issues. Major regression testing will be planned in each cycle depending on the entry and exit criteria of functional and integration tests based on planned sprint releases.

### End to End testing

Complete end to end focus on critical flows (for example login → product selection → cart → checkout) to ensure that the site enables users to complete end-to-end actions smoothly.

### Usability Testing

Ensure the consistency in UI elements, button functionality, layout alignment, and overall user-friendliness on various devices

### Cross-Browser and Cross-Device Testing

Testing will ensure the application responsiveness and compatibility across different desired browsers (Chrome, Firefox, Safari, Edge) and other devices (Windows, mac & phones iOS, Android).

### Performance Testing

Performance testing will follow the NFT test plan scheduled conducted separately by the NFT team. It will ensure load, stress testing to check how the website performs under heavy traffic, especially on critical pages like login, product pages, and checkout

### Security Testing

Security testing will ensure vulnerabilities like user authentications and sensitive data across different browsers and networks.

### Test Schedule

Test schedule will be planned based on the project plan and the availability of the test environment readiness. Each test phases are organised and planned based on the development test approach and availability of the test artefacts.

### Out of Scope

The following areas / items are out of scope for testing in XXX phases.

### Test Execution Strategy

* **Smoke Testing**: Will be conducted in each sprint to verify the website’s critical functions are working after deployment.
* **Sanity Testing**: will be performed where ever necessary and also after environment refreshes after bug fixes or minor changes to check those did not introduce additional defects.
* **Exploratory Testing**: will allow testers to perform additional tests to explore the site to capture additional defects which does not pop up during the normal planned test scenarios.

### Testing Tools and framework

* **Test Management**: JIRA& Confluence is a preferred vendor for overall company project management, so will use the JIRA for test management for tracking test cases, progress, and defects.
* **Test Automation**: Test automation will use Selenium -Java- TestNG framework based on the initial discussion with the project management to ensure seamless compatibility platform and code compatibility and also based on the regression and E2E tests expected. This has been also considered based on the Testing maintenance for the future enhancement. Test team will use additional free to use tools and techniques if required which we approach the testing phase planning.
* **API Testing**: can use the freeware’s like POSTMAN or proprietary catalogues provided by dev team
* **Performance Testing**: Will use the selected performance tools based on the NFT test strategy
* **Security testing:** can use the common tools like ZAP, DNS Dumpster for vulnerability and performance monitoring.

### Reporting and Documentation

* **Test Reports**: JIRA test execution reports including test case outcomes, pass/fail status, and defect details. All test documents will be updated and shared using Confluence as a central test repository.
* **Defect Tracking**: JIRA will track all the Log all defects in a tracking tool like JIRA, categorized by severity and priority.
* **Daily Status Updates**: Provide daily progress reports during the testing cycle to all stakeholders.

### Entry / Exit Criteria

 This section will detail the joint entry & Exit criteria for different testing phases.

**Entry Criteria**

Functional testing

The Scope and resourcing of Functional Test has been agreed

System Component testing has executed >90% of the planned system testing and achieved at least an 80% pass rate.

[Add all entry rule]

**Exit Criteria**

The exit criteria will be based on the testing cycles and test phases

Functional testing

[Add the exit criteria for all test phases here]

### Environment Scope

Scope of test environments and its use, availability, schedule, data, other 3rd party dependency, set up and connectivity is described here.

### Test Data

Brief test data strategy

How to create test data

How the test data requested

How the test data will be utilized

How the test data will be destroyed

Adherence to IT Live Data Compliance

### Defect Management

Defect manage process is described here , use of JIRA , Defect life cycle, resolution dependencies, etc.

### RAID

All Testing Risks, Assumptions, Issues and Dependencies, will be captured in standard RAID process flow and will be documented and updated in particular intervals specified by the company norms.

### Test Management & Reporting

The test phase will be managed using the AGILE DELIVERY model approach

Daily Testing standups and other ceremonies will follow the scrum approach.

A JIRA test execution dashboard will provide daily metrics regarding test progress versus plan and defects and will be updated [time]

A biweekly senior management meeting to discuss priority issues and escalations apart from the scrum ceremonies

A daily defect summary report will be sent by the defect management team.

### Test Governance

deliverables produced in support of formal test governance mentioned here

### Glossary

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