**Project Documentation**

**Project Planning :**

Overview

This project involves testing the **Swag Labs** web application, an e-commerce platform designed for product browsing, adding items to a cart, and completing purchases.  
The main goal is to ensure that the application is fully functional, stable, and reliable through both **manual** and **automated testing**.

Scope

The testing covers:

* **Functional Testing** – login, logout, product filtering, add-to-cart, checkout.
* **UI/UX Testing** – verifying layout, design consistency, and responsiveness.
* **Performance Testing** – ensuring fast page loads and smooth transactions.
* **Automation Testing** – using Selenium to automate regression test cases.

Objectives

* Identify defects before product release.
* Verify that all core features work correctly.
* Build reusable, maintainable automated test scripts.
* Deliver detailed reports on test results and coverage.

Deliverables

* Test Plan Document
* Test Cases (Manual & Automated)
* Bug Reports
* Test Execution Report
* Automation Framework (Selenium + TestNG)
* Final Project Presentation

**Stakeholder Analysis :**

| **Stakeholder** | **Role** | **Interest** | **Influence** | **Responsibilities** |
| --- | --- | --- | --- | --- |
| Team Leader | Project coordination | High | High | Oversees progress, ensures deadlines are met |
| Manual Testers | Execute test cases manually | Medium | Medium | Log defects, validate UI and functionality |
| Automation Testers | Develop Selenium scripts | High | High | Automate key features and regression tests |
| Project Supervisor / Instructor | Reviewer | High | High | Provides feedback and evaluates progress |
| End Users | Website users | High | Low | Benefit from bug-free and reliable application |

**UI/UX Design Analysis :**

**Purpose**

The UI/UX analysis ensures that Swag Labs provides an intuitive, attractive, and smooth user experience.

**Observations**

| **Area** | **Description** | **Expected Behavior** |
| --- | --- | --- |
| Login Page | Simple username & password fields | Should display clear validation messages for invalid input |
| Product Page | Grid-based product list | Each product card must show name, price, and “Add to Cart” button |
| Cart Page | Displays selected items | User can update quantity or remove items |
| Checkout Page | Form for shipping details & payment | Should display total price and confirmation message after purchase |
| Responsive Design | Adjusts to screen sizes | Should render correctly on both desktop and mobile browsers |

**UX Principles Checked :**

* Consistency: Same font, button style, and color palette.
* Feedback: Buttons and actions provide visual responses.
* Clarity: Labels, forms, and icons are easy to understand.
* Accessibility: Text readable and buttons large enough to click.
* Efficiency: Minimal steps to complete a purchase.

**Tools & Technologies :**

| **Category** | **Tool / Technology** |
| --- | --- |
| Automation | Selenium WebDriver |
| Programming Language | Java (with TestNG) |
| Test Management | Jira / Excel |
| Version Control | Git & GitHub |
| Reporting | Extent Reports / Allure |
| Browser Testing | Chrome, Edge |

**Conclusion :**

This project ensures the Swag Labs application meets both functional and user experience standards.  
By combining manual and automated testing, the team achieves a balance of deep inspection and efficiency.  
The outcome will be a complete testing framework with reliable, maintainable, and reusable scripts aligned with real-world QA standards.