**Project Name**

Sace lab demo project

**Introduction**

This project provides a Java test automation framework utilizing Maven for build management, TestNG for test execution, and Extent Reports for comprehensive and visually appealing test results.

**Prerequisites**

* **Java Development Kit (JDK):** Ensure you have the latest JDK installed. Download and install it from the official Oracle website: <https://www.oracle.com/java/technologies/downloads/>
* **Maven:** Download and install Maven from the official Apache Maven website: <https://maven.apache.org/download.cgi>
* **TestNG:** Download the TestNG JAR file from the official website: <http://testng.org/testng-eclipse/download.html>

**Installation**

1. **Clone or Download the Project:** Obtain the project files from your preferred version control system (e.g., Git) or download the project as a ZIP archive.
2. **Set Up Maven:** Configure your environment variables (PATH) to include the Maven installation directory.

**Test Strategy for sauce demo App**

1. **Scope:**
   1. Products module
   2. Cart module
   3. Product details module
2. **Test Approach:**
   1. Test planning: the SRS will be reviewed and try to find any gaps in the requirement to be addressed in the early stage
   2. Test design: the tests will be developed based on the requirements of the sauce app
   3. Test execution: Tests will be executed manually and tests with high priority will be automated
3. **Testing types:**
   1. Only functional testing will be covered
4. **Testing tools:**
   1. Selenium- Java will be used for automation
   2. Jira will be used as testing management tool
5. **Configuration:**
   1. Operating system: Windows 11
   2. Browser: Chrome

**Test cases for sauce lab demo App**

**Test id**: 001 (automated)

**Test title**: Verify user can add product to the cart

**Preconditions**:

1. User is logged in with valid account
2. There are products created by the admin

**Steps:**

1. Open the products page
2. Find any product and click on add to cart

**Expected results:**

1. Product is added successfully and remove button is displayed

**Test id**: 002 (automated)

**Test title**: Verify user can remove product to the cart

**Preconditions**:

1. User is logged in with valid account
2. There are products created by the admin
3. A product is added before to the cart

**Steps:**

1. Open the products page
2. Find the product already added in the precondition
3. Click on remove button

**Expected results:**

1. Product is removed successfully and add to cart button is displayed

**Test id**: 003

**Test title**: Verify product details are displayed correctly in the products page

**Preconditions**:

1. User is logged in with valid account
2. There are products created by the admin

**Steps:**

1. Open the products page
2. Find any product and check the details listed in the products page

**Expected results:**

1. product title is displayed successfully
2. product description is displayed successfully
3. product picture is displayed successfully
4. product price is displayed successfully

**Test id**: 004

**Test title**: Verify product details are displayed correctly in product details page

**Preconditions**:

1. User is logged in with valid account
2. There are products created by the admin

**Steps:**

1. Open the products page
2. Click on a product
3. Check the details listed

**Expected results:**

1. product title is displayed successfully
2. product description is displayed successfully
3. product picture is displayed successfully
4. product price is displayed successfully

**Test id**: 005 (Automated)

**Test title**: Verify the products added to the cart are listed successfully in the cart page

**Preconditions**:

1. User is logged in with valid account
2. There are products created by the admin

**Steps:**

1. Open the products page
2. Add more than 1 product to the cart
3. Open the cart page and check the products in the cart

**Expected results:**

1. The products added to the cart are listed successfully

**Test id**: 006

**Test title**: Verify the products added to the cart can be removed from the cart page

**Preconditions**:

1. User is logged in with valid account
2. There are products created by the admin

**Steps:**

1. Open the products page
2. Add more than 1 product to the cart
3. Open the cart page
4. Click on remove button for a product

**Expected results:**

1. The product is removed successfully from the cart

**Test id**: 007

**Test title**: Verify the number on cart badge is increased when products are added

**Preconditions**:

1. User is logged in with valid account
2. There are products created by the admin

**Steps:**

1. Open the products page
2. Add 2 products to the cart
3. Check the number displayed on the cart badge

**Expected results:**

1. The number displayed on the cart badge should be 2 as the products added are 2

**Test id**: 008

**Test title**: Verify the products added to the cart can be removed from the cart page

**Preconditions**:

1. User is logged in with valid account
2. There are products created by the admin

**Steps:**

1. Open the products page
2. Add 2 products to the cart
3. Remove one of the added products
4. Check the number displayed on the cart badge

**Expected results:**

1. The number displayed on the cart badge should be 1 as only 1 product is in the cart