Web UI Testing Documentation

Objective

To automate and validate core functionalities of a web-based e-commerce application using Selenium WebDriver and Python (with Pytest). This project tests login, homepage navigation, and shopping cart features.

Tools & Technologies Used

- Python
- Selenium WebDriver
- Pytest
- WebDriver Manager
- Page Object Model (POM)
- ChromeDriver

Project Structure

project_root/
  test/
    test_main.py
  pom/
    page/
    login_page.py
    home_page.py
    cart_page.py

Test Workflow Overview

1. Login Tests
2. Home Page Navigation
3. Cart Functionality

Test Cases Breakdown

test_login:
  - Checks multiple login scenarios.

test_home:
  - Tests menu, cart, and sort actions.

test_cart:
  - Adds/removes items and completes checkout.

Test Cases

1. Login Page

	A	B	C	D	E	F	G	H
1	Project name: Web UI testing With selenium and python Module:Login page Created By: Sachin Budhathoki: Reviewed By: Date: 2025/04/07			URL: https://www.saucedemo.com/				
2	Test ID	Test Case/Condition	Precondition	Test Step	Test Data	Expected Result	Actual Result	Remarks
3	TST-01	Verify login succeds when entered valid username and password	User must be in login page	1. goto the url 2. enter username and password 3.click login	Username: problem_user Password: secret_sauce	user should be able to login and home page should appear	user logged in and home page appeared	Pass
4	TST-02	Verify login fails when entered invalid username and password	User should not get log in and a message should appear	1. goto the url 2. enter username and password 3.click login	Username: visual Password: secret_sauce	User should not be able to login to the page	login failed and a error message is displayed	Pass
5								

2. Home Page

	A	B	C	D	E	F	G	H
6	Project name: Web UI testing With selenium and python Module:Home page Created By: Sachin Budhathoki: Reviewed By: Date: 2025/04/07							
7	Test ID	Test Case/Condition	Precondition	Test Step	Test Data	Expected Result	Actual Result	Remarks
8	TST-01	Verify the menu button shows menu when clicked	User must be logged in and should be in home page	1. goto the url 2. enter username and password 3.click login 4. click the menu buttom	Username: standard_user Password: secret_sauce	user should get login and menu button should show menu options	User get login and the menu options get displayed	Pass
9	TST-02	Verify the cart option gets click	User must be logged in and should be in home page	1. goto the url 2. enter username and password 3.click login 4. click the cart button	Username: standard_user Password: secret_sauce	user should get login and the cart page should open	user get logged in and the cart page is displayed	Pass
10	TST-03	Verify that the page gets scroll smoothly	User must be logged in and should be in home page	1. goto the url 2. enter username and password 3.click login 4. scroll the page to the buttom	Username: standard_user Password: secret_sauce	the page should get scroll properly	the page scrolled properly	Pass

3. Cart Page

	A	B	C	D	E	F	G	H
13	Test ID	Test Case/Condition	Precondition	Test Step	Test Data	Expected Result	Actual Result	Remarks
14	TST-01	Verify that the add cart button add the item to cart	User must be logged in and should be in home page	1. goto the url 2. enter username and password 3.click login 4. click add to cart	Username: standard_user Password: secret_sauce	user should get login and the item should be display to cart	the item is displayed in the cart	Pass
15	TST-02	Verify that the remove button remove the added item from cart	User must be logged in and should be in home page and item is already added to cart	1. goto the url 2. enter username and password 3.click login 4. click add to cart 5. click remove button	Username: standard_user Password: secret_sauce	the item should get remove from the cart	the item is removed from the cart	Pass
16	TST-03	Verify that the checkout information can be fill up	user should have added items in cart and should click to the checkout	1. goto the url 2. enter username and password 3.click login 4. click add to cart 5. click the cart button 6. click checkout	Username: standard_user Password: secret_sauce first name:sachin last name: budhathoki Zip code: 224	the details should be fillup in the textbox provided	the details entered	Pass
17	TST-04	verufy that the goto to home button return to the home after checkout	user should have checked out	1. click finish 2. click goto home button		the user should be able to return to the home page	user returned to home page	Pass

Page Object Model (POM) Usage

- login_page: login functions

- home_page: navigation elements

- cart_page: cart and checkout

Error Handling & Validation

Login test includes try-except with 'product' in page check and assertions for test pass/fail.

Test Results Summary

test_login (valid) - Passed

test_login (invalid) - Failed

test_home - Passed

test_cart - Passed

Author

Sachin Budhathoki

QA Training Program

April 2025