American International University-Bangladesh (AIUB)
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Section: B
Software Quality and Testing

A Report
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Introduction and Software Test Plan
for
Demo Project – SauceInventory

https://www.saucedemo.com/

American International University Bangladesh

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Introduction:

This project focuses on performing a Selenium IDE simulation on the Sauce Demo site, available at https://www.saucedemo.com/. The Sauce Demo site is a sample web application designed to provide a controlled environment for testing various e-commerce functionalities, such as product browsing, user authentication, and shopping cart operations. By utilizing Selenium IDE, a popular tool for browser automation, this project aims to simulate user interactions with the Sauce Demo site to verify its performance and behavior under different conditions. The simulation will involve conducting a series of automated tests to validate core functionalities, identify potential issues, and ensure that the website functions as intended across different scenarios. This report will document the objectives, methodology, and outcomes of the simulation, providing insights into the reliability and usability of the Sauce Demo site.

Description:

This simulation project aims to conduct a series of automated tests on the SauceInventory demo site using Selenium IDE to validate its key functionalities, particularly those related to user authentication, interface accuracy, and navigation control. The first test involves performing a **successful login test** to ensure that users with valid credentials can access their accounts without errors. This test will verify that the login mechanism works correctly, securely directs users to their dashboards, and displays appropriate welcome messages.

Next, the **assert text test** will be performed to validate that specific text elements, such as headings, error messages, and button labels, appear correctly on the web

pages. This test ensures that users receive accurate feedback and instructions throughout their interactions, which is vital for usability and clarity.

The **wrong user login test** is designed to confirm that the system appropriately handles invalid login attempts by blocking unauthorized access and displaying clear error messages. This test will check whether the platform maintains robust security protocols and provides a proper user experience when incorrect credentials are entered.

Finally, the **control flow test** will be conducted to examine the website's navigation and response under various scenarios. This test will simulate different user actions, such as moving between pages, performing multiple operations in sequence, and handling unexpected inputs, to ensure that the website's flow remains logical, consistent, and resilient.

Together, these tests aim to validate the core functionalities of the SauceInventory demo site, identify any potential issues, and ensure a secure, seamless, and user-friendly experience for all visitors.

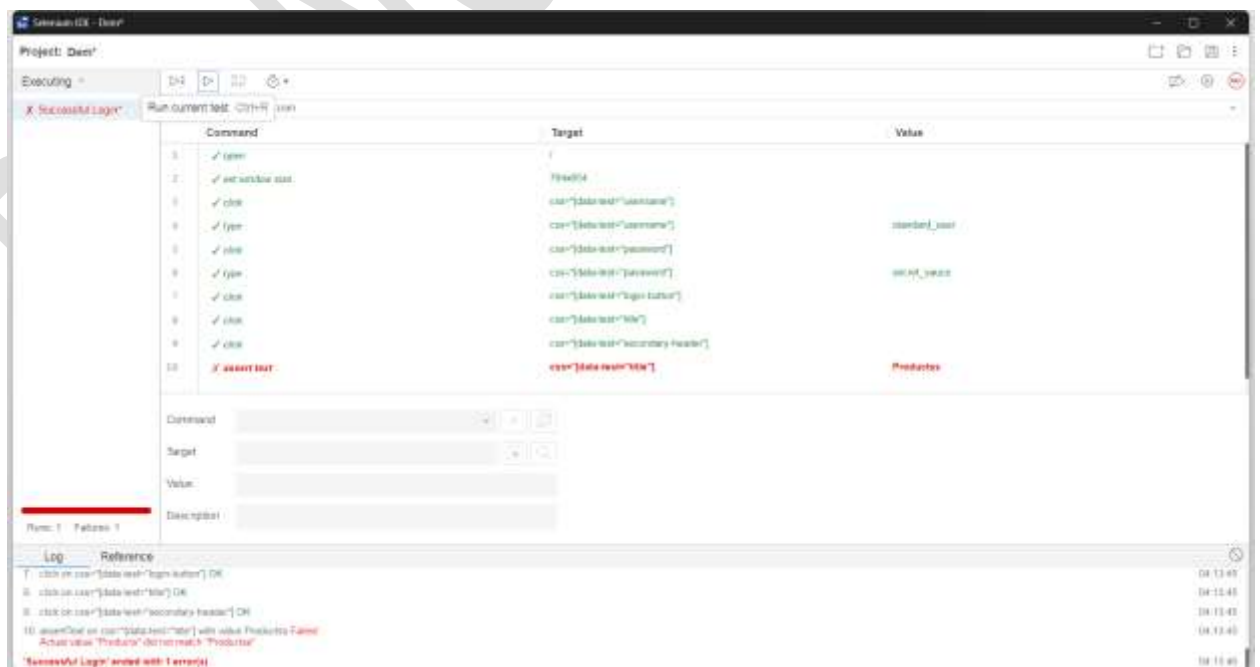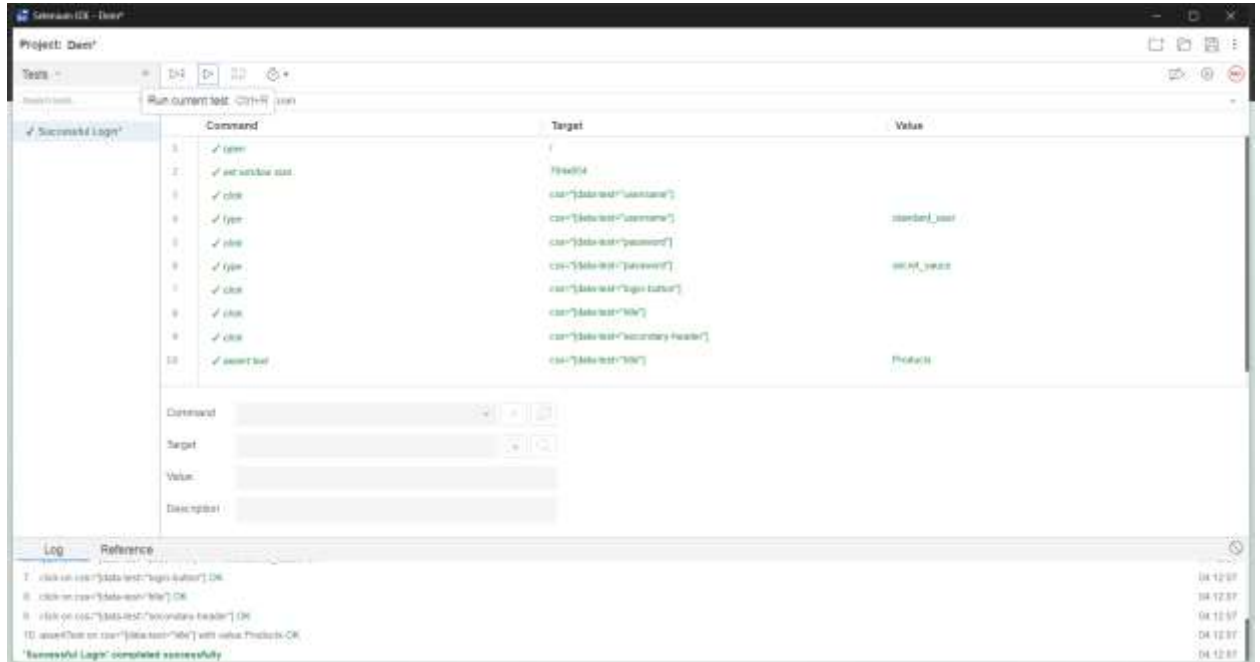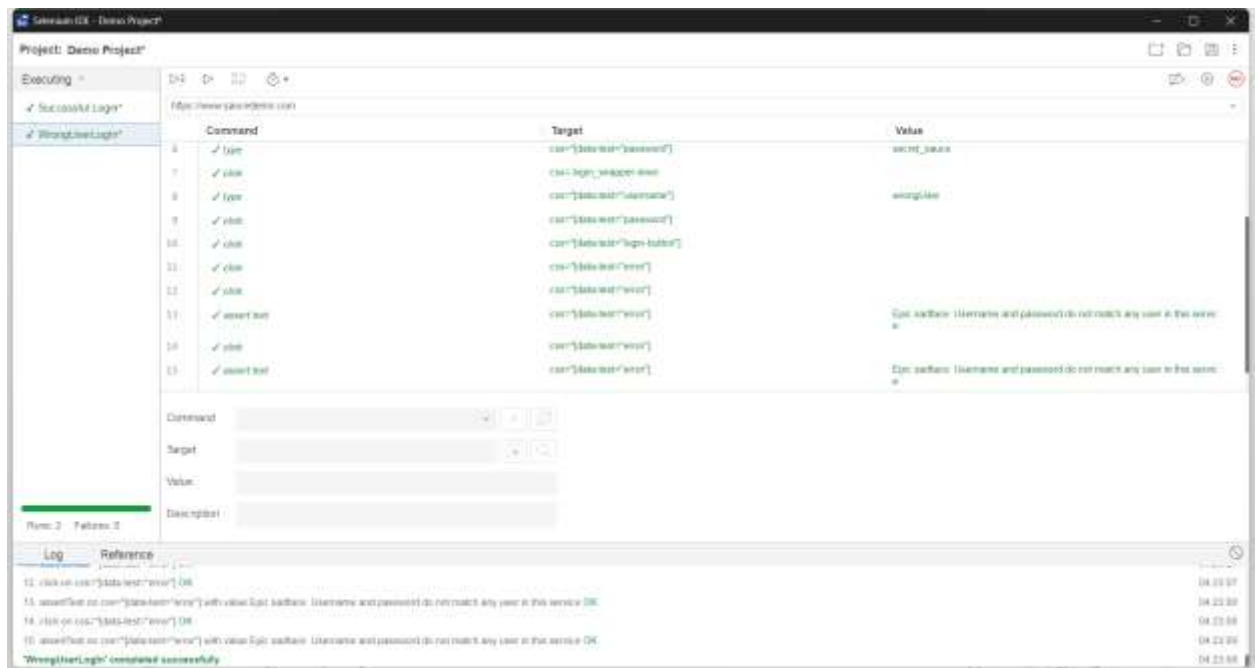Starting window of Selenium IDE Extension:
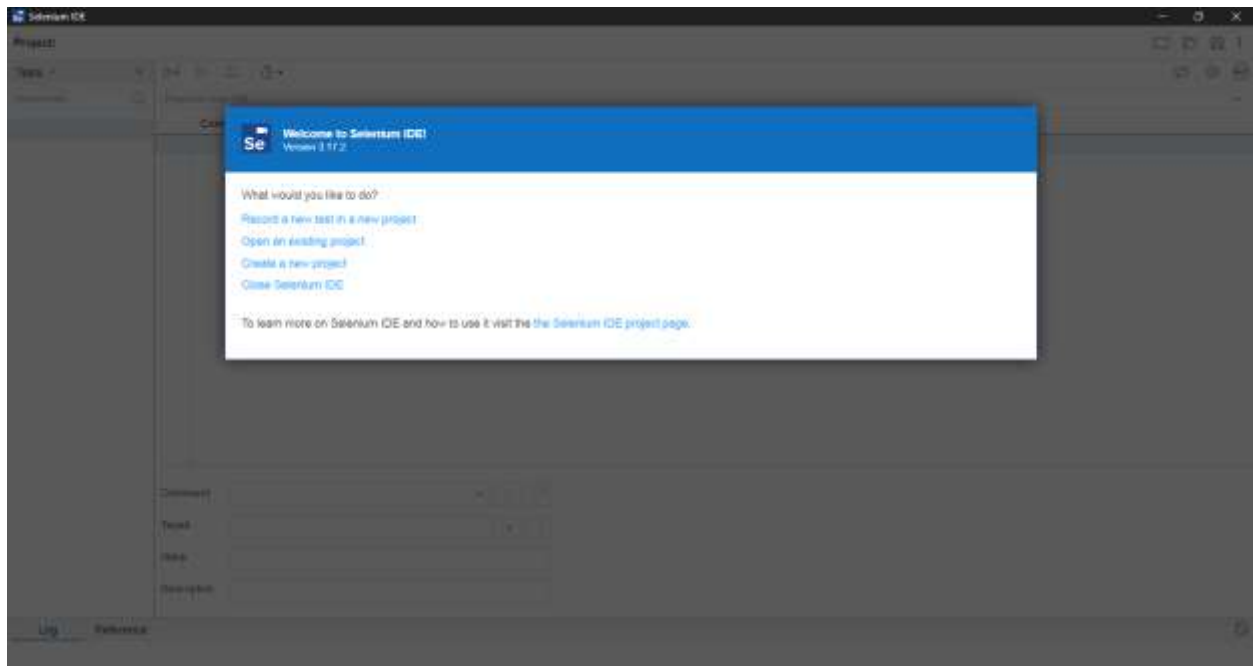
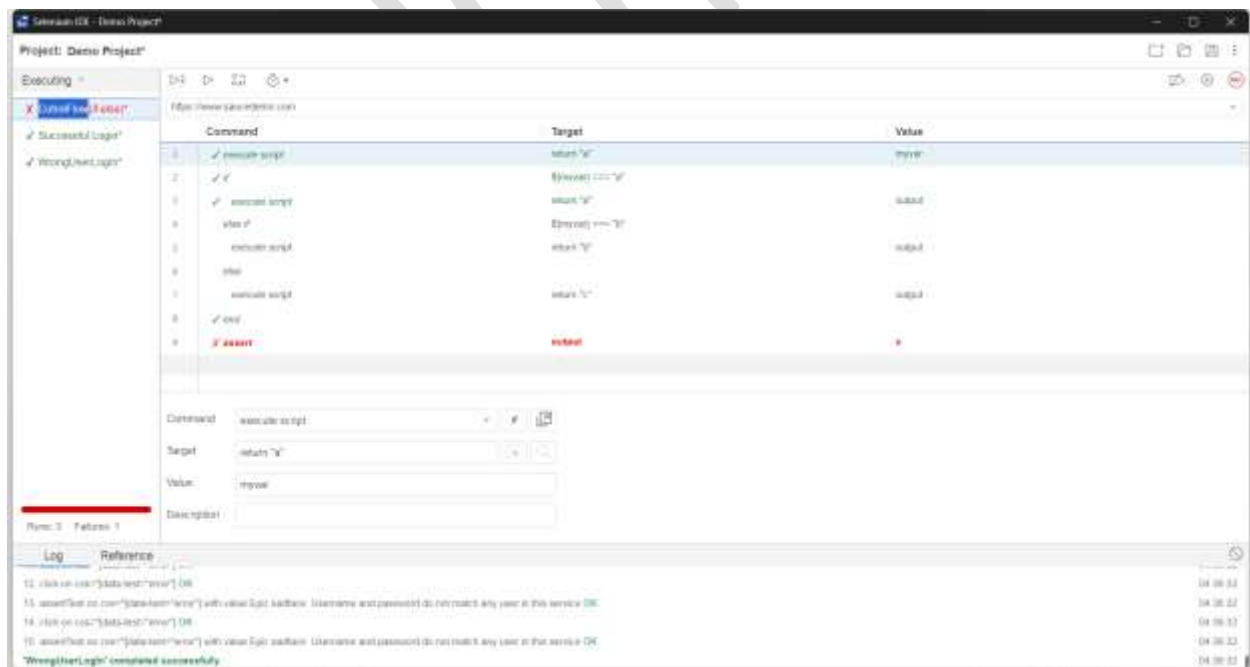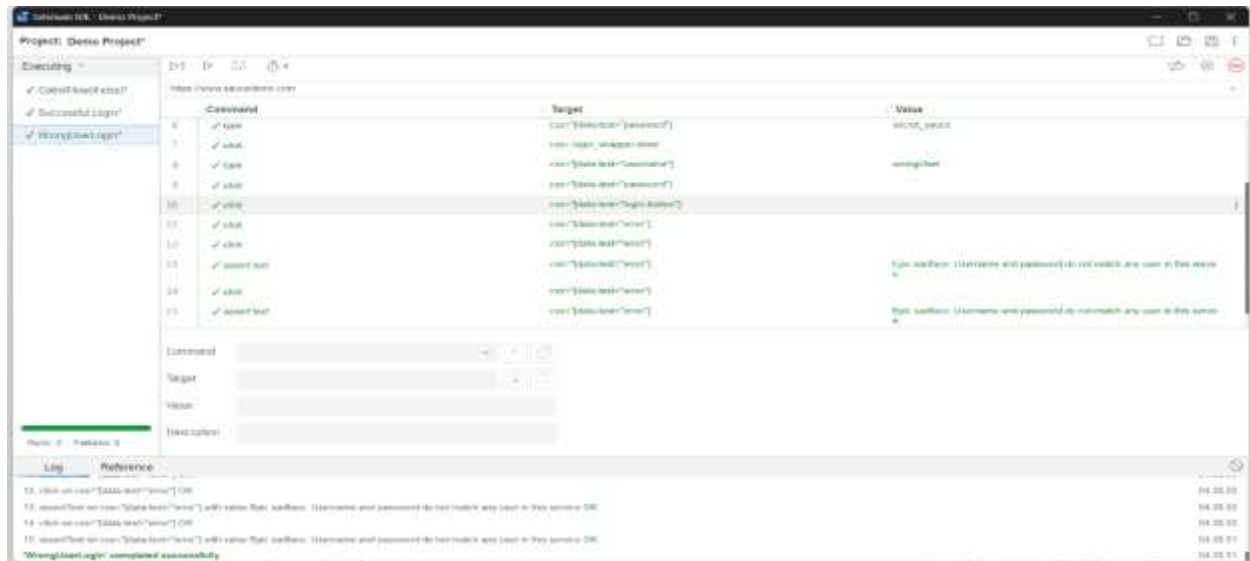Setup A new test project:
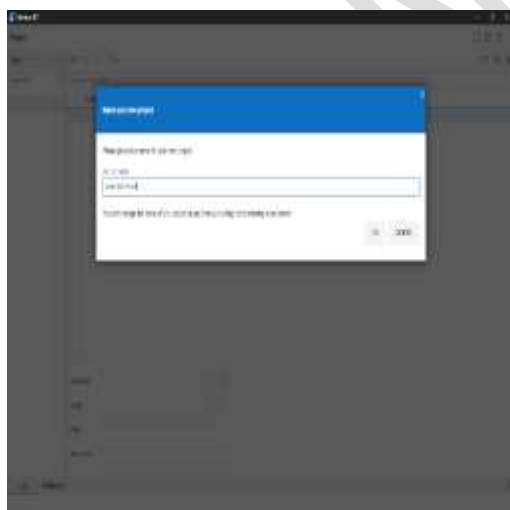
Test Cases:

1. Successful Login

2.Wrong User Login

3.Control Flow(if-elseif-else)

Conclusion:

The Selenium IDE simulation conducted on the SauceDemo site successfully verified several key functionalities critical to the user experience. The tests included a successful login test, which confirmed that registered users could log in to their accounts correctly, ensuring the integrity of the authentication system. The assert text test validated that specific text elements, such as welcome messages and error prompts, appeared as expected on the interface, demonstrating proper communication of information to users. The wrong user login test was effective in confirming that the system appropriately handled invalid login attempts by displaying accurate error messages and preventing unauthorized access, thereby reinforcing the platform's security measures. Finally, the control flow test verified that the site correctly navigated through different scenarios, such as navigating from the login page to the home page and back, indicating that the website's flow and navigation were consistent and logical.

Overall, the successful completion of these tests demonstrates that the core functionalities of the SauceInventory demo site are reliable, secure, and user-friendly. The simulation did not identify any significant defects or issues, suggesting that the site is well-prepared for real-world usage. However, continuous testing and monitoring are recommended to maintain the site's robustness against any future updates or changes.