WriteUp:

This is an automated test script developed in Java using Selenium WebDriver and TestNG to validate the order placement process on an e-commerce website. The test aims to ensure that users can successfully add products to the cart, proceed to checkout, provide their details, and receive a confirmation message after placing the order.

Test Scenario:

Launch the web browser and navigate to the e-commerce website (https://www.saucedemo.com/).

Log in with valid credentials by entering the username "standard user" and password "secret sauce".

Add the first available product to the shopping cart from the products page.

Click on the shopping cart icon at the top right corner to view the cart items.

Proceed to the checkout page by clicking the 'Checkout' button.

Enter the user's shipping details, including first name, last name, and postal code.

Click the 'Continue' button to move to the final order summary page.

Click the 'Finish' button to complete the order placement process.

Verify that the confirmation message "Thank you for your order!" is displayed.

Page Object Model (POM) Design: The test script follows the Page Object Model (POM) design pattern, where each web page is represented by a separate Page Object class. The Page Object classes encapsulate the locators and methods for interacting with the web elements on their respective pages. This approach enhances code modularity, reusability, and maintainability.

Test Validation: The test script includes a validation step to ensure the successful placement of the order. It verifies that the confirmation message "**Thank you for your order!**" is displayed on the final order summary page. The test uses TestNG's Assert to check the presence of the expected text. If the text is found, the test case passes. In case of any discrepancies, the test fails and displays a corresponding failure message.

Conclusion: The automated test script ensures the smooth functioning of the order placement process on the e-commerce website. By leveraging Selenium WebDriver and TestNG, the script provides a robust and scalable solution for continuous testing and quality assurance. The Page Object Model design pattern improves maintainability and readability, making the test script a valuable asset for regression testing and ensuring a seamless user experience during the order placement process.