

SDET Coding Exercise

This coding exercise is designed to assess a candidate's coding skills, problem-solving ability, testing knowledge, and familiarity with software development practices. The challenge involves automating a UI workflow with few automated test cases.

Scenario:

You are tasked with automating a demo e-commerce website. You need to write 4 UI automated tests.

1. Successful Login
2. Failed Login
3. Happy Path workflow
4. Multiple scenarios workflow

Refer the next page for the manual steps for the above tests.

Requirements:

You may use any web automation framework (Preferred ones: Selenium) + programming language (Preferred ones : C#) .

Evaluation Criteria:

- Correctness: Automated tests should accurately represent the manual workflow.
- Code Quality: Clean, well-structured, and maintainable code is valued.
- Efficiency: Solutions that are optimized in terms of time and space complexity are often preferred.

Tips for Success:

- Read Carefully: Understand the exercise requirements and constraints before you start coding.
- Plan: Spend some time planning your approach before diving into coding.
- Assume: If unsure of any of the manual steps, feel free to make your own assumption.
- Test Your Code: Thoroughly test your solution to ensure it works as expected.
- Comment and Document: Add comments to explain your thought process and code functionality.

Other Recommendations (Preferred but not mandatory)

- Use Page Object Model
- Keep test data separate from the tests
- Setup tests to run on more than one browser
- Identify bugs (if any) along the way

Manual steps



A. Test case 1 (Successful Login)

1. Navigate to <https://www.saucedemo.com/>
2. Enter Login Credentials: Username: "standard user"; Password: "secret sauce"
3. Click "Login"

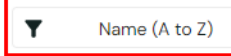


B. Test case 2 (Failed Login)

1. Navigate to <https://www.saucedemo.com/>
2. Enter Login Credentials: Username: "locked out user"; Password: "secret sauce"
3. Click "Login"

C. Test case 3 (Happy Path Workflow)

1. Login to <https://www.saucedemo.com/>
2. Click "Add to Cart" button for "Sauce Labs Bike Light" on "Products" page
3. Click "Cart" icon on "Products" page 
4. Click "Checkout" button on "Your Cart" page
5. Fill the "Checkout: Your Information" page (Random data).
6. Click "Continue" button
7. Click "Finish" button on "Checkout: Overview" page
8. Click "Menu" Icon on top left of the header 
9. Click "Logout" button

D. Test case 4 (Multiple scenarios Workflow)

1. Login to <https://www.saucedemo.com/>
2. Change the Product Sort to "Price (low to high)" on "Products" page 
3. Assert if the Selected (Displayed) Item on the Product Sort is "Price (low to high)"
4. Capture all prices from the product page and Assert if it is in ascending order.
5. Click "Add to Cart" button for "Sauce Labs Fleece Jacket" and "Sauce Labs Onesie"
6. Check if "Remove" button enabled for "Sauce Labs Fleece Jacket" and "Sauce Labs Onesie"
7. Capture price of "Sauce Labs Fleece Jacket" from "Products" page
8. Capture price of "Sauce Labs Onesie" from "Products" page
9. Capture value from "Cart Icon" on the top right and assert is its "2". 
10. Click "Cart" icon
11. Capture price of "Sauce Labs Fleece Jacket" from "Your Cart" page
12. Capture price of "Sauce Labs Onesie" from "Your Cart" page
13. Assert price values from step 7 and step 11
14. Assert price values from step 8 and step 12
15. Click "Remove" button for "Sauce Labs Onesie" on "Your Cart" page
16. Capture quantity of "Sauce Labs Fleece Jacket" from "Your Cart" page
17. Capture value from "Cart Icon" on the top right from "Your Cart" page
18. Assert quantity values from step 16 and step 17
19. Click "Checkout" button on "Your Cart" page
20. Fill the "Checkout: Your Information" page (Random data).
21. Click "Continue" button
22. Capture "Item total" from "Checkout: Overview" page and Assert it with price from step 7
23. Click "Finish" button on "Checkout: Overview" page
24. Capture "Thank you for your order" text from "Checkout Complete" page and Assert it
25. Click "Menu" Icon on top left of the header 
26. Click "Logout" button