

〈/〉 Sauce Demo Website Test Automation

Made By: Ahmed Osama Mohamed Sultan

Under The Supervision of Dr.Amany Shousha & Eng.Sara Eldaly



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Swag-Labs Web Test Automation







What is Web Test Automation?



What is Web Test Automation?

Web test automation involves the use of specialized tools and frameworks to automate the testing of web applications.

Instead of manually executing repetitive test cases, automation allows us to streamline the testing process, saving time and improving efficiency.

Web test automation is vital in modern software development, enhancing the speed, accuracy, and reliability of testing processes.







Why is Web Test
Automation Important?



Why is Web Test Automation Important?

Efficiency and Speed

Repeatability

Regression Testing

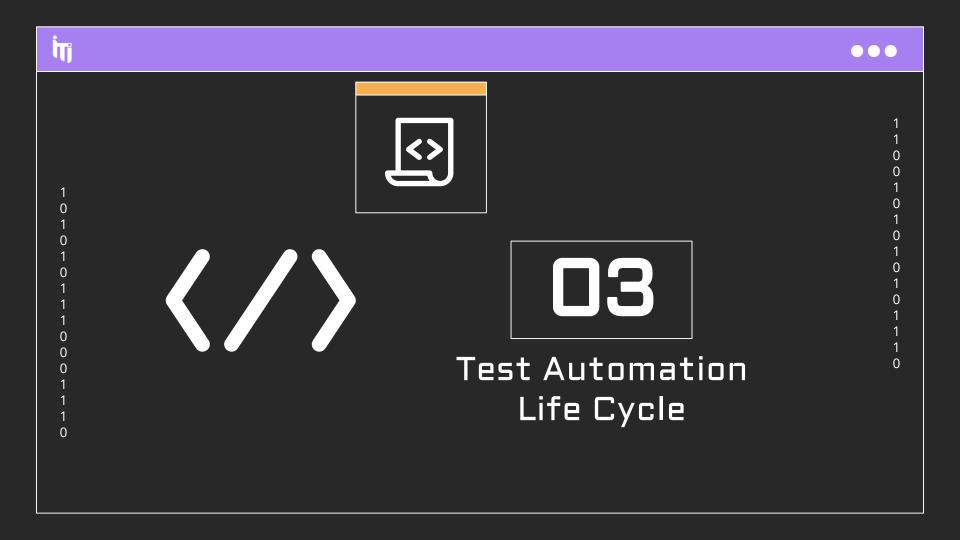
Scalability

Parallel Execution

Faster Feedback

Continuous Integration and Continuous Delivery (CI/CD)

Consistency and Accuracy





Test Automation Life Cycle

Automated Testing Lifecycle

Stage 1

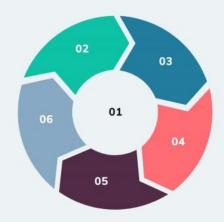
Establish the scope of test automation

Stage 2

Select the right automation tool

Stage 3

Plan, design and strategise



Stage 4

Set up the test environment

Stage 5

Test the execution scripts

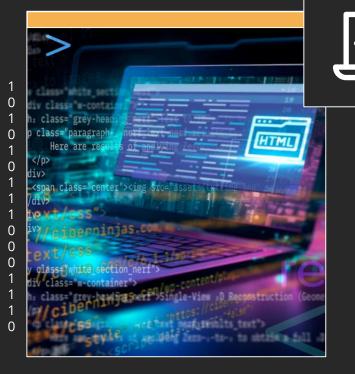
Stage 6

Examine and maintain tests

Strutegise

tests







Key Components of Web Test Automation





Key Components of Web Test Automation

Testing Frameworks

Programming Languages

Automation Tools

Test Data

Version Control

Continuous Integration (CI) Tools

Reporting and Logging

(TestNG)

(Java)

(Selenium)

(Excel Sheets)

(Git)

(Jenkins)

(Allure Report)







Challenges and Best Practices



Challenges and Best Practices

Keeping test scripts maintainable

Dealing with dynamic web

elements

Ensuring the reliability of tests across different environments

Flakiness of Tests

Skill Set and Training

Costs and ROI

Best Practices

Creating modular and reusable test scripts

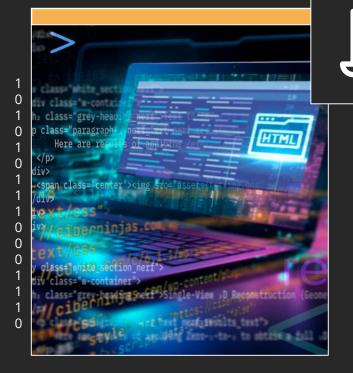
Keep tests independent and can be executed in any order

Regular maintenance of test suites

Choosing test cases that are suitable for automation

Use Explicit Waits







Swag-Labs Web Test Automation

Demo URL:

https://www.saucedemo.com/



Swag-Labs Web Test Automation

About the Project

Web Test Automation using Selenium

Programming Language - Java

Design Pattern - Page Object Model

IDE - IntelliJ

Testing Framework - TestNG

Test Data - Json Files

Reporting and Logging - Allure Report / emailable-report





Swag-Labs Web Test Automation

Most Common Exceptions

NoSuchElementException

TimeoutException

ElementNotInteractableException

ElementClickInterceptedException

NoAlertPresentException





Swag-Labs Web Test Automation

Full User Journey Steps

- $\binom{0}{0}$ 1) Log in
- 2) Choose a product from Homepage
- 3) Redirected to Product page
- 4) Customize the product
- 5) Add Product to Cart
- 6) Redirected to Cart page
- 7) Check that product added to cart
- 8) Redirected to Checkout page
- 9) Fill checkout information
 - 10) Overview page
 - 11) Finishing Page.





<//> <//> Any Questions?//>



Thank You

