

Basic Selenium Course Content

Duration: 7 weeks

PART - A

Duration: 2 weeks

-->Introduction to Automation

-->What?

-->When?

-->Why?

**Automation Tool Types?

**Advantages and Disadvantages of Automation

-->Introduction to Selenium

-->Components of Selenium

-->Introduction to Selenium WebDriver Version 3

-->Introduction to Selenium WebDriver Version 4

-->Java Selenium Architecture

***Practicals

-->Launching Empty Browsers

-->WebDriver Methods(13 Methods)

-->Locators

-->Types Of Locators(8 Types)

-->WebElements Methods

PART - B

Duration: 2 Weeks

Advance Scenarios:

-->Handling AutoSuggestion

-->Handling KeyBoard Strokes

-->Handling Mouse Over Action

-->Handling Dropdown/ListBox

-->Handling ScrollBar

-->Handling Synchronization Issues

-->Handling Multiple WebElements

***Popup:

-->Alert Popup

-->Hidden division popup

-->Browser Native Popup

-->Calendar Popup

-->Frames Popup

-->FileUpload Popup

-->FileDownload Popup

-->Window/child browser popup

PART - C

Duration: 2 weeks

-->framework

****DDT(Data Driven testing)**

-->What is DDT?

-->Advantages of DDT

****POM(Page Object Model)**

*****What is POM?**

-->Advantages of POM?

****TestNG**

-->What is TestNG?

-->Why TestNG?

-->Types Annotation

-->Types of Execution

-->Advantages of testNG

*****Introduction to Maven**

*****Introduction to Github**

*****Introduction to jenkins**

Mock: 1 week

Testing: It is a process of identifying bugs.

OR

--->Verifying the application features functionality working as per customer expectation or not.

-->Testing can be done in two ways:

1: Manual testing

2: Automation Testing

****Manual Testing:** Checking each and every functionality of an application manually without using any tool.

-->Disadv. of Manual testing

1: It is a time consuming process

2: It requires more man power

3: It is a tedious and monotonous job

4: It is less accurate(Susceptible human error)

****Automation Testing:** Testing the functionality of an application by using automation tool. OR

-->Converting Manual test cases into Automation Test script with the help of tools.

****Advantages of Automation Testing**

1: It reduces project time

2: It reduces project cost

3: More Accurate

- 4: Better Quality Software
- 5: Require less manpower

***Types of Testing:

- 1: Functional Testing: Here we check application functionality
- 2: Non-Functional Testing: Here we check application stability,efficiency, reliable or not

***Automation Tools Name : Selenium,QTP,cypress, Appium, Test complete, Sahi, Sahi Pro etc

Ques: When we should start with Automation Testing?

--> It will start when feature are stable(After few build)

Ques: What type of testing performed in Automation?

-->Regression Testing

B01 A(50) B(40) C(80)
B02 A(50) B(40) C(80) D(20) E(40)
B03 A(50) B(40) C(80) D(20) E(40) F(70) G(50)
B04 A(50) B(40) C(80) D(20) E(40) F(70) G(50) H(50)

MTE----->ATE (execute A, B feature)

ATE will write Test Script for STABLE feature

MTE will keep on testing UNSTABLE & NEW feature

**Automation Tool: It is a software which is used to test another software.

****Selenium****

-->It has introduced by "Jason Huggins" in 2004.

--> It is a most powerful tool which is used to test Web Based Application only.

-->It is a collection of in-built libraries.

Advantages of selenium

- 1: Its an open source
- 2: It supports multiple language(Java, python, javascript,php, ruby etc)
- 3: It supports Multiple Browser(Chrome,Firefox, Edge..etc)
- 4: It supports multiple OS(windows,MAC).
- 5: It supports Cross Browser Testing
- 6: It can easily integrate with other tools.

Disadvantages of Selenium

- 1: We can't automate captcha field, OTP, image, barcode, video etc
- 2: We Cannot handle desktop or window pages
- 3: It can automate only web based application

***Essential software for selenium:

- 1: Selenium Java

2: Browser like Chrome, Firefox

3: IDE: Eclipse

Ques: What is the latest version of selenium?

--> selenium 4.26.0 but we will be using 4.22.0/4.23.0

Note: seleniumhq.org --->click on download

***Selenium Components/Selenium Variant/Selenium Flavours:

1: Selenium IDE

2: Selenium RC

3: Selenium Grid

4: Selenium WebDriver