Basic-Selenium
Course Content:

PART-A:
Duration- 2 Weeks
-->INtroduction to Automation
-->What?
-->When?
-->Why?
-->Automation Tool Types?
-->Advantages and Disadvantages of Automation

***Introduction to Selenium'
***Comnponents Of Selenium
***Introduction to Selenium WerbDriver Version 3
***Introduction to Selenium WebDriver Version 4
***Java Selenium Architecture

###Practicals:
-->Launching Empty Browsers
-->WebDriver Methods
-->Locators
-->types of Locators
-->WebElement Methods

PART-B:
Duration: 2 Weeks

***Advance Scenarios:
-->Handling Autosuggestion
-->handling Keyboard Strokes
-->Handling Mouse Hover Action
-->Handling Dropdown/Listbox
-->Handling Scrollbar
-->Handling SYnchronization Issues
-->Handling Multiple WebElements

***Popup:
-->Alert Popup
-->Hidden Division Popup
-->Frame Popup
-->Calendar Popup
-->FileUpload Popup
-->Browser Native Popup
-->Window 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 of 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 bug.
OR
Verifying the feature functionality is working as per customer expectation or not.

-->Testing can be done in two ways:
1: Manual Testing
2: Automation Testing

1: Manual Testing: Checking each and every functionality of an application manually without using any tool.
**Disadvantages of Manual Testing:
1: It is a time consuming process
2: It requires More Man Power
3: It is tedious and monotonous job
4: It is less accurate(susceptible for human error)

2: Automation Testing: Testing the functionality of an application by writting test script using Automation Tool
OR
-->Converting Manual test cases into Automation Test Script with the help of tools.

**Automation Tools: It is a software which is used to test another software.
**Automation Tools name are: Selenium,QTP,Cypress, Test Complete, Appium,sahi,Sahi pro, Playwright etc

**Advantages of Automation Testing:
1: It reduces Project Time.
2: It reduces project Cost
3: More Accuracy
4: Requires less ManPower
5: Better Quality Software

Ques: When we should start with Automation testing?
--> It will start when feature are stable(After few Build)

Ques: What type of testing perform in Automation?
-->Regression Testing

MTE--->ATE
ATE(Automation Test Engg.) by referring to Test Case--> Writes Test Script for STABLE features.
MTE(Manual Test Engg.) will keep on doing the testing of UNSTABLE + NEW feature
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SELENIUM
-->It has introduced by "JASON HUGGINS" in 2004.
-->It is a most powerful tool used to test Web Based Application only.
-->It is a collection of in-built libraries.

**Advantages of Selenium:
1: Its an Open Source Tool
2: It supports Multiple Languages(Java, python.javascript, PHP, Ruby etc)
3: It supports Multiple Browser(Firefox,Chrome,Edge)
4: It supports Multiple OS(Linux,window,mac)
5: It supports cross browser testing
6: It can easily integrate with other tools

**Disadvantages of Selenium:
1: We can't automate Captcha,OTP,image,barcode etc
2: We cannot handle desktop or window pages
3: It can automate only web based application
4: 100% Automation is not possible
5: Skilled Labour
6: NO customer Support

***Essential Software for Selenium:
1: Selenium Java
2: Browser like: Chrome,Firefox
3: IDE: Eclipse