Automation with Selenium (including Basic Java)

Duration: 40-50 hours class room program

Prerequisites: No eligibility, course start right from installation. But knowledge of Java or Python could add advantage.

Lab – 30 hours lab sessions + 50 plus exercises

After the classes – Students will easily crack selenium interview and have advance knowledge of selenium Automation

Who should go for this course?

- Manual Engineers
- Quality Analysts
- Web Developers

Syllabus:

- **Introduction to Automation • What is automation testing**
  - • Advantages of Automation Testing
  - • How to learn any automation tool
  - • Types of Automation tools

  Basic Java - Core Java Fundamentals
  - • History of Java
  - • Features of java
  - • Java Programming Language Keywords
  - • Class and Object
  - • Data Types
  - • Array Declaration, Construction and Initialization
  - • Encapsulation
  - • Inheritance
  - • Polymorphism

  Flow Control, Exceptions, and Assertions
  - • Writing Code Using if and switch
  - • Statements
  - • Writing Code Using Loops
  - • Handling Exceptions

- Working with the Assertion Mechanism

Using the java.lang.String Class

- Using the java.lang.Math Class
- Using the equals() Method with

Object Orientation, Overloading and Overriding, Constructors

- Benefits of Encapsulation
- Overridden and Overloaded Methods

About Eclipse IDE

- Installing Eclipse
- Creating Simple Project in eclipse
- Eclipse and Selenium together
- Importing and Exporting
- Debugging using Eclipse
- Exploring Eclipse – Basic
- Exploring Eclipse – Advanced

Module 1 - Introduction to Selenium

- What is Selenium
- Use of Selenium
- Features of selenium
- Difference between Selenium and QTP
- Selenium IDE
- Selenium Core
- Selenium RC
- Selenium Grid
- Selenium 2.0 – Web Driver

Module 2 - Selenium IDE

- Selenium Overview
- Selenium IDE Introduction
- Downloading and Installing Selenium IDE
- Recording and Running a Simple Test
- Selenium IDE – Features
- Installing Useful Tools for Writing Tests
- Selenium Concepts
- Selenium Commands

- Verifying Page Elements – Assertions and Verifications
- Wait Commands

Module 3
- Object Identification
- Element Locators
- Regular Expression patterns
- Selenium Test Runner
- Using Regular Expressions in Selenium IDE
- Creating Selenium Test Suites
- How to run the recorded script against other browsers
- Why companies are not using recording tools
- Limitations of Selenium IDE

Module 4
- Selenium Core Overview
- Installing Selenium Core
- Running Selenium Core Test Suites

- ## Module 5 - JavaScript and HTML
  - Introduction
  - Statements
  - Comments
  - Variables
  - Operators
  - Comparisons
  - If...Else
  - Switch
  - Functions
  - For Loop
  - While Loop
  - Break Loops
  - For...In
  - Events
  - Try...Catch

Module 6

- Introduction to Firebug
- Downloading and installing of Firebug
- Downloading and installing of xpath
- How to identify the xpath for an particular element
- Identifying objects using CSS

Module 7 - Selenium RC

- Installing Selenium RC
- Selenium RC Overview
- Starting and Stopping Selenium Server
- Creating the generic scripts in selenium
- Creating the scripts by using functions
- Selenium Client Libraries
- Browser commands with examples
- Interactive commands with examples
- Information commands with examples
- Validation commands with examples
- How to take data from excel sheets
- Why should we use excel sheets
- How to take data from DB
- Debugging the scripts
- Maintaining the synchronization points
- How to handle Pop-up's and alert messages

Module 8 - How to use TestNG and Junit in Selenium

- Introduction to TestNG
- Why TestNG
- Setting up TestNG
- Working with TestNG
- Advantages of TestNG over Junit
- Exploring TestNG Features
- How to Use TestNG Annotations
- Data Driven Testing TestNG
- TestNG Execution Report
- TestNG Results output folder walkthrough
- TestNG Reporting features

Module 9 - Selenium Grid
• Introduction Selenium Grid
• Advantages of Selenium Grid

Advanced Selenium 2.0 – Web driver
• Introduction to selenium 2.0
• Advantages of web driver
• Web Driver v/s RC
• Architecture of Web Driver and RC
• Web Driver IDE
• Installation / Configuring Eclipse for Web Driver
• Identifying the elements in Web Driver Using Id, Name, Xpath ,Dom and CSS
• Working with Different drivers like HtmlUnit driver, Firefox Driver etc…
• Creating the generic scripts in Web Driver
• Creating the scripts by using functions
• Web Driver Client Libraries
• Web Driver commands with examples
• Working with excel sheets using Web Driver
• Web Driver with TestNG / Junit
  • POM(Page Object Model)

Module 10 - Automation Framework
• What is Framework?
• Types of Frameworks
• What is modular framework
• What is Data Driven framework
• What is Keyword driven framework
• What is Hybrid framework
• Use of Framework
• How to develop the framework
• Integration of the framework
• How to execute the scripts from framework

Additional Benefits:

- We provide real time scenarios examples, how to work in real time projects
- We guide for resume preparation by giving sample resume
- Will give you 2 POC (proof Of Concept) which you can practice before going for interview
- In 2 months training we provide study material's soft copy in classroom itself
- We provide hands –on in class room itself so that you can understand concepts 100%
- We give assignments every week for practice

For more information Contact: