# **RishiSir - Selenium Course**

### 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