

Software Automation Engineer: Java Selenium

Course Curriculum

(Duration: 25 Hrs Lectures. 20 Hrs Home Assignments / Practicals)

Programming Essentials

- ✓ Java Required knowledge for Automation
- ✓ OOPs
- ✓ Collections
- ✓ RegEx
- ✓ HTML Basics
- ✓ Exception Handling
- ✓ Debugging
- ✓ Overview of Ellipse IDE

Selenium WebDriver

- ✓ Introduction
- ✓ Advantages
- ✓ Limitations
- ✓ Selenium WebDriver Architecture

Introduction to Web elements

- ✓ Locators for Web Elements
 - ID
 - Name
 - Class Name
 - Tag Name
 - Link Text,
 - Partial Link Text
 - CSS Selector
 - XPath

Web Elements Interactions I

- ✓ WebDriver Commands
- ✓ Interacting with Web Elements
- ✓ Performing Actions on Web Elements
- ✓ Checking the Web Element state
- ✓ CSS Selectors and Waits in Selenium

Web Elements Interactions I

- ✓ Handling Alerts in Selenium WebDriver
- ✓ Use of JavaScriptExecutor
- ✓ Working with iFrames
- ✓ Working with Scrollbars, Tooltips
- ✓ Actions Class and Action Interface
- ✓ Handling Keyboard and Mouse based interactions
- ✓ Drag and Drop and Mouse Hover functionality using Actions Class

TestNG Framework

- ✓ Introduction to TestNG
- ✓ Installing TestNG Plug-in in Eclipse
- ✓ Annotations
- ✓ Grouping
- ✓ Sequencing
- ✓ Parameterization
- ✓ Parallel/Cross Browser Testing
- ✓ Introduction to Reports
- ✓ Types of Reports

Page Object Model

- ✓ What is Page Object Model?
- ✓ What is Page Factory?
- ✓ Advantages of POM
- ✓ Implementing POM using Selenium WebDriver
- ✓ Implementing POM with Page Factory

Automation Frameworks-I

- ✓ Introduction to Selenium Frameworks
- ✓ Types of Selenium Frameworks
- ✓ Introduction to Data-Driven Test Framework
- ✓ Advantages and Disadvantages of Data-Driven Test Framework
- ✓ Best practices of Data-Driven Testing
- ✓ Apache POI
- ✓ Data Providers

Automation Frameworks-II

- ✓ Introduction to Keyword-Driven Test Framework
- ✓ Uses of Keyword-Driven Test Framework
- ✓ Keyword-Driven Framework Components
- ✓ Advantages and Limitations of Keyword-Driven Testing
- ✓ Implement Keyword-Driven Framework
- ✓ Hybrid Framework

Interview Preparation and Mock Interviews
