

SELENIUM

Training Requirements/Logistics

- Internet connection and administrator privileges
- Selenium libraries, Eclipse, JDK(Java) , Maven(S/w project management tool), TestNG (Unit testing framework)+
- Firefox , Chrome , Internet Explorer

Introduction to Automation

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

Introduction to Selenium

- What is Selenium
- Why Selenium
- Features of selenium
- Difference between Selenium and QTP

Core Java Programming

- Introduction to core java
- Basic java programming and features
 - Variables
 - Data types
 - String functions
- Decision based statements (if, Switch case)
 - Loops (For, while, do-while)
 - Arrays and Methods
- Object oriented programming concepts (Inheritance, Polymorphism)
 - Package
 - Exception Handling
 - Collections

Selenium IDE

- Selenium IDE Introduction
- Downloading and Installing Selenium IDE
 - Recording and Running a Sample Test
 - Selenium IDE – Features
 - Selenium Test Runner
 - Creating Selenium Test Suites
- Why companies are not using recording
 - Limitations of Selenium IDE

Selenium WebDriver

- Why WebDriver?
- Downloading WebDriver Jar files and configuring in eclipse
 - Architecture of selenium webdriver

- Selenium Browser Commands
- Selenium NavigationCommands
 - Selenium Javadocs
- Verifying Page Elements – Assertions and Verifications
- Wait Commands (Implicit, Explicit, Pageload, Script)
 - Drivers for Firefox, IE, chrome
 - First Selenium Code
 - Working with Firefox, chrome and IE
 - Close and Quit -Difference
 - HTMLUnit driver
 - Firepath and firebug Add-ons installation
- Inspecting elements in Mozilla, Chrome and IE
 - HTML language tags and attributes
 - Various locator strategies
 - WebDriver Interface
 - WebElement Interface
- Finding WebElements using id, name, class
 - Finding Xpaths
 - Absolute and Relative Xpaths
- Objects with same id/xpath/cssSelector
 - What is class attribute?
- Handling HTML Elements such as:
 - o Input textfields
 - o submit button
 - o Radio button
 - o Checkbox
 - o Hyperlink
- Finding whether object is present on page or not
 - Handling drop down list
 - Select Class in Selenium API
 - Taking Screenshots of the web

pages/pro-grammatically

- Actions class
- Moving a mouse (Hover) on an Object and right clicking on it
- Navigating front and back button click on Browser using selenium
 - Javascript Executor

Cross Browser testing

- Firefox browser
- Google chrome browser
- Internet explorer

TestNG

- What is TestNg
- Installing TestNg in Eclipse
 - TestNg annotations
 - Advantages over Junit

- Understanding usage of annotations
 - Running a Test in TestNg
 - Batch Running of tests in TestNg
- parameterizing Tests – DataProvider
 - Assertions/Reporting Errors
 - TestNGReports
 - Using TestNG in Selenium
 - Grouping test cases
- Setting priority of execution for test cases
 - TestNG-Maven Integration

Maven

- What is Maven and Why Maven?
 - Installing/Configuring Maven
 - Eclipse plugin for maven
 - Creating maven project
 - POM.xml
 - Maven Repositories
- Building POM.xml to configure Selenium and TestNG
 - Importing the maven project into eclipse
- Building a selenium project and running it through Maven

Object Repository

- What is object repository
- Sample scripts using object repository