

CORE SELENIUM

- **Selenium Introduction**
 - Course Agenda
 - Selenium History
 - Why Web-driver latest version?
 - Selenium 2.0 Web-driver Architecture

- **Installation and Configuration**
 - Java Installation
 - Eclipse Installation and Configuration
 - Selenium Jars download/Configuration
 - Selenium Project Setting-up

- **Basic JAVA**

- **Testing**
 - What is Testing
 - Advantages over Junit
 - Integrating Testing in Selenium
 - Using Testing to run-tests

- **Basic concepts for first Web-driver Program**
 - What is web-driver Interface
 - Browser Driver
 - Basic Methods of Web-driver
 - How to run tests in Google Chrome
 - How to run tests in Internet Explorer

- **Locator Techniques and Tools used**
 - Installation Firebug & Firepath – Firefox
 - Locator Techniques – 1 (xpath, ID, tagName)
 - Locator Techniques – 2 (className, name, Linktext)

- **Advanced Ways – Locating Objects**
 - Writing customized xpath
 - CSS Selector locators
 - Tricks and Tips in Identifying Objects

- **Techniques to automate Web UI**
 - How to handle dropdowns?
 - Drop down methods real time example



- Handling Java Alerts, Popups- realtime example
- How to handle Radio buttons, Checkboxes?
- List technique to handle radiobuttons- Realtime example
- Selection, Deselection, Enabling, Disabling explanation

➤ **Techniques to automate Advanced Web UI**

- Handling Ajax, Mouse Interactions
- Actions class- real time example
- Handling Multiple Windows
- Window Handle concepts – real time example
- How to handle Frames?
- Frames Technique – real time example

➤ **Miscellaneous**

- How to handle table Grids in webpage?
- Techniques used for table grid – real time example
- How to overcome Synchronization problems?
- Maximizing window, deleting cookies
- How to troubleshoot if it's not invoking in Firefox
- Killing the Process and Cookies using Selenium
- How to handle HTTPS certifications in Selenium
- How to take Screenshots in Selenium?

ADVANCE SELENIUM

➤ **Function and Keyword Driven Framework**

- Basic framework Concept
- Evolution of Framework
- Module/function framework – Implementation
- Advantage of Keyword Driven Framework over Function framework
- Keyword Driven Framework – Implementation

➤ **Data Driven Framework**

- Intro on Data driven framework
- Data driven Framework – Concept
- Advantages of Data Driven Framework
- Framework Implementation

➤ **Page Object Model Framework**

- Intro on POM framework
- POM – Concept
- Advantages of POM over Keyword driven Framework
- POM Framework Implementation

➤ **Selenium Grid**

- Intro on Hub and Nodes
- Architecture
- Configuring the Hub
- Configuring the Nodes
- Grid – Implementation

➤ **Miscellaneous**

- Log4j logging
- Multi-browser Testing
- Capture Screenshot
- Capture Videos