Selenium with Python Syllabus

✔️ Introduction to Selenium

- What is Automation Testing?
- Why need for Automation Testing for Applications?
- Benefit and Features of Automation Testing
- Automation Testing Tools in Market
- Explaining about Selenium
- Selenium Component and Features
- Selenium Architecture
- Selenium vs QTP
- Explaining about IDE, Selenium WebDriver, Selenium-Grid
- Explaining Supporting Languages in Selenium
- Why Choose Python Over Java

✔️ Getting Start with Python

- What is Python?
- How to install Python
- Basic Programming on Python
- How to Write and Execute Simple Python program
- Variables and Scope
- Data Types in Python
- Logical Operation
- Control Flows in Python
- Loop Statement
- Exceptional Handling
- Function and Procedure in Python
- File Operations in Python
- Explaining about Python Modules and Libraries
- How to use Modules in Script
- Standard Libraries and External Libraries
- Object Oriented Programming Supports in Python

✔️ Installation and Configuration

- Prerequisite for install Selenium
- Installing Selenium IDE
- Setting PyCharm
- Eclipse plugin for PyDev
- Chrome Setup
- Internet Explorer Setup

✔ Selenium IDE

- Explaining about Selenium IDE Features
- Assert Vs Verify
- Creating a Test Suite
- Working with AJAX Pages
- How to Storing Elements

✔ Getting Start with Writing Tests

- Explaining about unittest library
- How to Write Tests
- Setup() Method, tearDown() Methods
- Assertions
- How to run the test
- Test suites
- How to generate HTML test reports

✔ Locating Web Elements

- Explaining about Elements
- Inspecting pages and elements with Chrome and IE
- Locating elements By different options
- Locating elements By ID, XPath
- Locating elements By CSS Selector
- Locating elements By Class Name, Link Test and Name

✔ Selenium API for Elements Interaction / Extracting

- Overview of HTML form Elements
- Understanding WebDriver Properties and Methods
- WebElements Properties and Methods
- Working with forms , checkboxes and radio button
- Working with dropdowns and lists
- Working with alert and pop-up windows

✔ Working with Windows and Frames

- iFrames
- Multiple Windows
- Windows Size and Location

✔ Working with Synchronizing Tests

- Explaining about Synchronizing Testn
- Using Implicit Wait
- Using Explicit Wait
- Waiting for alerts
- custom wait conditions

✔ Advanced Selenium WebDriver

- Overview of WebDriver
- Keyboard actions
- double_click and drag_and_drop method
- Capturing screenshots of failures
- Handling pop-up windows
- How to Managing cookies