

Advance Selenium in Python

1. Introduction to Automation Testing

- What automation testing?
- Automation vs Manual testing
- Advantage and disadvantage of automation testing
- **Metrics for automation testing**
 - Technical behaviour of the project
 - Complexity of the project
 - Stability of the project
 - Test data Size
 - Application Size
 - Reusability if the script
 - Execution platforms of the project
- **Available tools for automation testing**
 - Selenium
 - UFT(Unified Functional Testing)

2. Selenium Introduction

- Selenium child_secE
- Selenium Webdriver
- Selenium Grchild_sec

3. Setup Selenium Webdriver in Eclipse

- Downloading Selenium Webdriver
- Import webdriver to Eclipse
- Running your first selenium test using python

4. Running Selenium webdriver in multi browsers:

- Firefox
- Chrome
- IE
- Safari
- HtmlUnitDriver

5. Selenium WebDriver Commands

- Opening a URL using WebDriver
- Managing a browser
- Finding the title of webpage
- Navigating forward, backward and refresh webpages pages
- **findElement by locators::**
 - child_sec
 - Name
 - tagName
 - Classname
 - css locator
 - link text: partial and full link text
 - Xpath: absolute and relative Xpath
- Working with input box: read, write and clear text
- Clicking on an element
- Reading attributes and css values(like color, font size) of an element
- Managing alerts, frames and other windows

6. Selenium waiting elements:

- Implicit wait
- Explicit wait

7. Selenium Assertion and Valchild_secation

8. Operating on listbox/dropdown box and comboboxs

9. Operating on minutes

10. Operating on tables

11. Operating on Calendars

12. Operating on file upload and download

13. Action controlling:

- Performing Context/right click
- Performing mouseover action
- Performing drag and drop action
- etc

14. Event listener and triggers

- Onclick
- On mouseover,

- And others

15. Inspecting elements on websites:

- Using browser inspector
- Using XPath, firePath and fireBugs
- XPath helper

16. Special tips:

- Handling file upload and download in different ways
- Automating to test all links
- Checking logo and address position
- Work with https and proxy authentication
- Handling windows alerts using autoIT

17. Logging using log4j

- Introduction to logging
- Download and import Log4j
- Writing test cases with Log4j
- Log4j manager
- Log4j appenders
- Log4j logger

Selenium Grchild_sec

1. Server and Client setup for distributed testing
2. Selenium Grchild_sec command to start selenium as a server and client

PyUnit: Python Unit testing

1. Unit testing introduction

1. What is Unit testing
2. Unit testing coverage
3. Unit testing in python

2. Unittest introduction

1. What is unittest
2. Configuring unittest
3. Defining test case in unittest
4. Running unittest test from Eclipse
5. Eclipse unittest perspective for reporting

3. unittest complete example using Eclipse

1. Create a project in Eclipse
 2. Create a python class to be tested
 3. Create and run a unittest testcase
- 4. unittest Decorators**
1. skip(), skipIf(), skipUnless()
 2. expectedFailure()
 3. SkipTest()
 4. @classmethod() for setup(), setupClass()
 5. @classmethod() for teardown(), teardownClass()
 6. Ignore
 7. Test
- 5. unittest main Assertions**
1. assertEquals and assertNotEqual
 2. assertTrue and assertFalse
 3. assertIs and assertIsNot
 4. assertIsNone and assertIsNotNone
 5. assertIn and assertNotIn
 6. isinstance and assertNotIsinstance
 7. assertRaises and assertRaisesRegexp