



TEST TRIANGLE

Selenium WebDriver

SOFTWARE TESTING SERVICES COMPANY



Topics

- Installation and Setup Java
- Configure Selenium Jars in Eclipse
- Firebug and Firepath AddOns in Firefox
- Managing Input Fields, Handling Radio Buttons, Handling Dropdown, Handling various Tabs, Handling Alerts, Mouse and Keyboard Events, Data-Driven approach using MS Excel

Selenium WebDriver

- Open-Source Tool
- Test web applications
- Supports different browsers and supports different programming languages

Programming Languages

- Selenium Supports different languages like Java, Ruby, Python, C#
- We will be using Java for automation

Java Set Up

- Install Java
- Set the path for Environmental Variable



Eclipse

- Eclipse is the editor where we write our Java scripts.

First Eclipse Project

- Open Eclipse File --> New --> Java Project
- Give project Name and Click finish
- Create a Package inside the Project

Configure Selenium Jars In Eclipse

- Right click on project
- Go to BuildPath and Click on Configure Build Path...Java BuildPath window will open
- Click on Add External jars...Go to Selenium-2.53.1 directory and select **selenium-java-2.53.1-srcs.jar**, **selenium-java-2.53.1.jar** and all the jars in libs directory in Selenium-2.53.1 directory
- Click OK

WebDriver Javadoc files

- Check Javadoc for Selenium WebDriver API
- It has Classes and Interfaces
- Ones in Italics are Interfaces
- WebDriver is an Interface. It has methods
- Classes(browser drivers) implements the Interface

Import WebDriver documentation into eclipse

- In Eclipse, Right click on project
- Go to BuildPath -->Configure BuildPath...
- Go to Libraries section, Select Selenium-java-2.53.0.jar
- Expand the Jar and Select Java doc location
- Click on edit, give this url :

<http://seleniumhq.github.io/selenium/docs/api/java/>

Install Firefox

- Turn off automatic updates
- Menu-->options-->Advanced-->Update-->Never check Updates

FireBug and FirePath AddOns

- FireBug: To identify objects on webpage
- Firepath: To get x-path of element on webpage
- Menu--> Add-ons--> Search for FireBug-->
Available addons--> Install
- Repeat steps for Firepath

Locator Strategy in WebDriver

- Locator helps to identify object in a webpage
 - By.id
 - By.name
 - By.xpath
 - By.linkedText

Managing Input Text Fields

- Write into, read and clear the text from the Text field

Managing Radio Buttons

Using findElements() method

- Print if radio button is selected or not
- If selected returns True, else returns

Null

Handling Dropdown

Using "Select" class

- Dropdown list contains different options
- Select an option
- Get all options
- Print no. of options
- Print all options

Handling various Tabs

- Get all window handles using **getWindowHandles()** method
- Switch to any window using **switchTo()** method



EXERCISE

Handling Alerts

Using "Alert Interface"

- Switch to Alert using **switchTo()** method
- Handle Alerts using **accept()** or **dismiss()** methods

Mouse Events

Using "Actions" Class

- Define the actions using **moveToElement()** method
- Build the actions to one
- Perform those built actions
- Use **dragAndDrop()** method

Keyboard Events

Using "Actions" Class

- Perform keyboard events using **keyDown()** and **keyUp()** methods in 'Actions' class
- Build the actions to single action
- Perform those actions

Data-Driven approach Using Excel

- Read the Input test data from External File(Excel)
- Each row corresponds to a different profile
- Each column corresponds to different test data fields for one profile

TestNG

- It is an automated Testing Framework
- Provides annotations like Grouping, Sequencing, Parameterization etc...
- Parallel Testing
- Generates HTML reports of execution

Continuous Integration Using Jenkins

- Open source Automation server
- Selenium Integration with Jenkins
- Schedule the jobs in Jenkins

Training at Test Triangle

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