TLG700 : Web testing with Selenium

Code :   TLG700   **Duration :**   2 days   **Category :**   Tooling

Audience :

This course is intended for developers and testers who want to set up a test automation framework with Selenium.

Prerequisites :

To participate successfully in this course knowledge and programming experience is highly desirable.
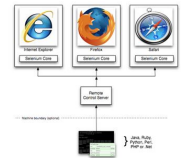
Realization :

The theory is discussed on the basis of presentation slides. Demos are used to illustrate the theory. There is ample opportunity to practice. The course material is in English.
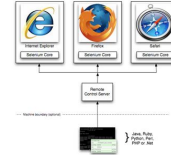
Web Testing with Selenium

Contents :

In the course Web Testing with Selenium participants learn to work with this test automation framework. Selenium is increasingly used as a test automation tool. Addressed are the principles of test automation, the Selenium IDE, Element Identification and testing of dynamic HTML applications. All aspects of Element Identification (id, name, CSS, xPath link) are covered extensively. As an example the Java programming language is used in this course, but another language like Python can be chosen as well. Participants begin to create an abstraction of the Test Object. Here the most common Selenium web driver functions will be explained and applied. In addition test scripts that can be written in the JUnit Test Framework are addressed. Automating not only consists of the execution of a test case, but also of the set up of the baseline and neatly leaving everything behind afterwards. The so-called fixture. Furthermore selecting elements with various functions and Navigating and Manipulating elements is discussed. Finally attention is paid to a number of advanced topics such as the combination of Selenium and JavaScript.

Module 1 : Selenium Intro	**Module 2 : JUnit**	**Module 3 : Navigation**
What is Selenium?	jUnit Basics	Basic Navigation
Create Projects	Test Cases	getTitle
Maven	JUnit asserts	getCurrentUrl
Basic Automation	Fixtures	findElement
Navigation	@Before	findElements
Interrogation	@After	Interrogation
Manipulation	@BeforeClass	CSS Selectors
Synchronisation	@AfterClass	Basics of CSS Selectors
	Hamcrest matchers	Browser Plugins
		XPath Location
		Basics of XPath

Module 4 : Manipulation	**Module 5 : Frames and Windows**	**Module 6 : Selenium and JavaScript**
WebElement methods	WebDriver methods explained	Why use Javascript?
WebDriverWait	Frames Examples	JavaScript Execution
ExpectedConditions	Windows Explained	Synchronous and Asynchronous
SendKeys method explored	Manipulating the browser window	Adding Javascript to page
Select support class	Synchronisation Strategies	Use of Different Browsers
User Interactions	Why we need synchronisation	Firefox
Dealing with Alerts	WebDriverWait Fluent interface	Google Chrome
Alert methods explored	FluentWait, Function & Predicate	Remote Driver
	Implicit vs Explicit Wait	Selenium Grid 2
	Cookies	
	Reading cookies	
	Managing cookies	