

Selenium WebDriver C#

Online

3
Days

Course Length

- 3 Sessions of approximately 3 hours each spread over 3 days

Course Description

- This introductory course covers all the essential principles of using the Selenium WebDriver automation framework in Microsoft Visual Studio. Designed for beginners as well as testers with previous automation experience, it takes the new-comer to Selenium through all the basic techniques of writing effective automated web tests.

Delivery Method

- Live On-line training course (VILT). You will be provided a workbook for the course and homework exercises between sessions.
- The provided workbook contains code examples & exercises

Course Objectives

- understand the key principles of test automation using Selenium WebDriver
- understand how to structure your automated testing including the Page Object Model
- gain a full understanding of how Selenium integrates with the Application Under Test
- understand how to manage Object Recognition, using techniques such as Xpath and CSS

Key Technologies used

- Microsoft Visual Studio 2015, NUnit 3, WebDriver 3

Course Pre-requisites

- A basic understanding of HTML and how Web Pages are developed
- Some programming experience would be advantageous - The course is based on WebDriver C# .NET, but does not teach you C# as you can use a variety of programming languages with WebDriver.

Key Points

Introduction to WebDriver

An overview of the Selenium tools, Unit testing Frameworks, and Supported Browsers.

Installation & Setup

Libraries & Extensions in VS2015, using NuGet to install the required libraries. How to organise your file structure.

First Test Case

Creating our initial NUnit Test, the import statements, invoking a browser, writing to the console, writing the code to login to the Web Site

Object Identification

Element locator strategies, Chrome Developer Tools and other extensions, Regular Expressions, Index, Xpath functions

Synchronisation

What is Synchronisation, Adding Delay, Implicit versus Explicit Waits, common examples

Capturing Values and Validation

How to capture values from the Web Site, Using Asserts, Execution Flow, Debugging Tools

Testing Structure

How to build more than one test, in a single Class, NUnit Fixtures, Execution Order, NUnit Traits/Categories, Playlists

Helper Libraries

Reusable code, Common examples such as Handling Alerts & Pop-ups

Introducing Page Objects (POM)

Introduction to why we do it and how it reduces maintenance. Refactoring our tests to use a page object model. Developing a library of pages (POMs)

Data-Driven Testing

Data driving your Tests using In-Line Test Data, using external sources such as CSV files

Integration

Command-line execution with the NUnit Console Runner, Command-Line Switches, Using Parameters

The introductory course that takes you from beginner through to writing effective automated tests in Selenium WebDriver .NET

Recommended for anyone new to Selenium