



Using Selenium with Workshop

Duration: 3 days

Course Overview

The first two days of this course are instructor led and the third day is a hands-on workshop. Selenium allows both developers and test analysts to automate tests and execute them with multiple browsers. This course aims to provide a solid foundation to the attendee to understand automated testing using Selenium. A key focus is to teach what the tool is capable of and the practical steps required to make automation work.

Who should attend?

- Agile testers
- Test automation specialists looking to learn Selenium
- Testers wishing to become test automation specialists.

Prerequisites & pre-reading guidelines

Although it is beneficial that attendees have a coding background (ideally in Java), this is not essential. The code examples used during the course are available in the training environment for attendees less experienced in Java to access.

How certification is earned

Upon completion of the course the delegate will receive an Expleo certificate.

Course Objectives

On completion of the course, attendees will understand how to configure Selenium and how to automate tests using the tool.

Context

This course covers the Selenium IDE and Selenium WebDriver. It also teaches the delegate how to create a Java project to run their own automated tests using both Selenium WebDriver and JUnit.

Related courses

- ISAQB® Certified Professional for Software Architecture - Foundation Level (CPSA-F)
- ISTQB® Certified Tester: Advanced Level Test Analyst
- ISTQB® Certified Tester – Foundation Level
- Requirements Verification

Course Outline

Introduction

- Automation Overview
- Core skills taught on the course

Selenium IDE

- Overview of Selenium IDE and available add-ins
- Recording and replay of a Selenium IDE Test
- Object recognition tools ChroPath.
- Assertions and Verifications
- Exporting a Selenium IDE Test as Java

Creating Selenium Scripts in IntelliJ

- Configuring a new C# project in IntelliJ
- Creating a basic automated test and a test suite
- Executing a test and test suite through IntelliJ
- Importing a test from Selenium IDE

Selenium WebDriver

- Components of Selenium Webdriver in JUnit
- Annotations in WebDriver
- Interacting with the AUT: Object locators
- Actions on WebElements

Data Driving Selenium Tests

- Use of data sources (e.g. Excel spreadsheets, CSV files, databases) to provide increased maintainability flexibility.

Debugging and coding

Debugging skills are a critical and often overlooked part of learning how to automate tests.

This section teaches basic debugging within IntelliJ, including:

- Setting breakpoints
- Retrieving values on-the-fly
- Stepping through code
- Observing the Application under Test
- Making deductions
- Building and testing a hypothesis

Page Object Model

The Page Object Model enables reusable code to provide a maintainable automation framework.

Areas covered include:

- Introducing the Page Object Model
- Accessing the page objects in a test script

Object Recognition

Object recognition is one of the commonest issues automation testers have to face. A number of techniques and approaches can be used, including:

- Why it is difficult to identify an object.
- Choice of element locator
- Use of multiple locator properties
- Use of XPath or CSS syntax and patterns
- Use of ordinal identifiers
- Using ChroPath to write more stable locators
- Descriptive programming for dynamic objects
- How to navigate web iframes

Selenium Workshop

A series of hands-on learning exercises including:

- Selenium IDE: Creating a new test
- IntelliJ: Importing the new Selenium test into a newly created Java project
- Page Objects: Converting the script to use them
- Asserts: For both positive and negative test
- Data driving: simple and complex.

Contact

Patricia McGuire

Head of Training

Expleo Technology Ireland Ltd

M. +353 (0)87 235 5902

W. expleoacademy.com

pat.mcguire@expleogroup.com

academy@expleogrouptesting.com