

## Training Course Content

# Test Automation with Selenium – Beginners

Duration : 3 days

Languages : EN & FR

In this course you will learn how to use Selenium to write automated tests for web applications and how to set a basic automated testing framework up.

This course explores how to use the popular browser test automation framework Selenium, to create automated tests for web applications. We will go through the different Selenium features to directly record test steps from within a browser, as well as to use JAVA to automate WebDriver, using Selenium's API. We will also explore how to run distributed tests over multiples machines using Selenium GRID capabilities.

## Learning Objectives

This course will enable you to:

- Understand the scope of Test Automation and fundamentals of Test Automation
- Create test cases using Selenium IDE
- Understand Selenium WebDriver architecture and various layers of interaction
- Set up WebDriver project in Eclipse and write test cases using Junit and TestNG
- Work with various WebDriver commands to drive web browsers and to interact with web components
- Learn to deal with multi-purpose functional test scenarios: error-check, multiple windows, alerts, different browsers, links to pages, form filling...
- Learn to use Selenium Grid for distributed testing and TestNG for parallel execution

## Pre-requisites

Basic knowledge of the JAVA language. Depending on the qualification level of the audience, JAVA concepts will be refreshed so that everybody stands a chance to achieve a full understanding of the course.

## Audience

This training is aimed at anyone involved in software testing. This includes people in roles such as:

- QA Engineers and Testers
- Developers
- Other IT professionals

## Course Content

- 1. What is Test Automation ?**
  - When is Automation applicable or necessary?
- 2. Where to start from?**
  - Levels of Testing: Cohn's Pyramid
  - What NOT to do: The ice cream cone
- 3. Introduction to Selenium**
  - What is Selenium? A bit of history
  - Early issues and evolution
- 4. Selenium IDE and Web Elements**
  - Development principles
  - Setting up Selenium IDE
  - Check what you learnt: pros and cons
- 5. Selenium WebDriver**
  - Principles and WebDriver set-up with browser drivers
  - Setting WebDriver up with RemoteWebDriver
- 6. Selenium Grid**
  - Principles
  - What changes with regard to single WebDriver
- 7. Exercises**
  - Additional Exercises and assessments
  - Exercise with GRID and TestNG to run tests in Selenium

## Practical exercises

This training consists of practical exercises to illustrate the subjects discussed and provides trainees with the opportunity to learn through practice.

## Trainer skills

Our experts who run our training courses or those we organize with a partner are specialists in the subjects covered. They are validated by our internal teams, both in terms of business knowledge and pedagogy, for each course they teach. They have at least five to ten years of experience in their field and hold or have held positions covering business topics.