

Testautomation with Selenium

An introduction to the most successful open source web automation tool

Length: 1 day

Overview:

The Selenium tool family is the most successful open source toolset for building highly scalable web and mobile test automation solutions using a programming language of your choice. The tool supports all major browsers and programming languages. Page Objects help to significantly reduce the maintenance effort for the tests. Execution times can be drastically reduced by parallelizing tests with Selenium GRID. As well, cross browser tests can easily be implemented using Selenium GRID.

Due to the high flexibility, cost efficiency and broad support for browsers and programming languages, Selenium has become the standard tool for test automation in many large and small companies.

Course content

1. Introduction to test automation
2. The Selenium tool family
 1. Selenium IDE
 2. Selenium Webdriver
 3. Selenium GRID
3. Tests with Selenium IDE
 1. Record and playback of single tests
 2. Record and playback of multiple tests as a test suite
 3. Modification of tests
 4. Maintenance of Selenium IDE scripts
 5. Export of Selenium IDE scripts to other programming languages
4. Tests with Selenium WebDriver
 1. Introduction to TestNG
 2. Client and Server
 3. Client Bindings for various programming languages (i.e. JAVA, Ruby, Python)
 4. JSON Wire Protocol / WebDriver API
 5. Write tests using the WebDriver API
 6. Page Objects – the key to maintainability
5. Scaling with Selenium GRID
 1. Parallelizing tests with Selenium GRID
 2. Distribution of tests to multiple systems
 3. Resource management and load balancing with Selenium GRID
 4. Cross Browser Tests
6. Introduction to automation for mobile web and mobile apps – Selenium style
7. Reporting
 1. TestNG / JUnit standard reports
 2. Generating custom reports
 3. TestNG listeners

Target audience

Test engineers, software developers, team leads

Requirements:

Basics in software testing, HTML, programming (i.e. JAVA)