

Automated Web Testing with Selenium

An introduction to Selenium IDE and programming WebDriver

Automation in testing is key to improving the throughput of development teams and is required to achieve Continuous Integration and Delivery goals. Selenium is a collection of open sourced tools that automates web testing. This course covers both the record-and-playback Selenium IDE and programming Selenium directly with WebDriver.

Selenium WebDriver is a programming toolkit. This course is offered in Java, Python, and Javascript variations.

Length: 2 days. Customizations upon request

Topics

- The three Selenium products and when to use each of them
- Using the IDE to record tests
- Identifying element targets:
 - Browser inspectors
 - Selenium target types
 - Alternative targets
- Introduction to XPath and how to use it to specify targets
- Selenium IDE commands
- Conditionals
- Javascript Execution within Commands
- Selenium WebDriver
 - Connecting to drivers
 - Dealing with multiple browsers
 - Working with web elements
 - Waiting for rendering and dealing with timing problems
 - Navigating the page, pop-ups, and iframes
- Introduction to Selenium Grid and its uses

Approach

The course is hands-on with an emphasis on exercises and discussion. Students are expected to have Selenium IDE and WebDriver installed in order to get hands-on practice. Course delivery includes a mix of instruction, demonstration, and practical experience.

Prerequisites

This course is offered in three variations: Python, Java, and Javascript. Students are expected to have a firm understanding of the language in question. As the course includes practical components, students will need to have sufficient administration rights on their machines to be able to install packages and tools.