



seleniumJ - Version: 1  
27 April 2021

# Automation Web Testing In Selenium Java



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 2 days Course

## Description:

In this course you will learn how to use Selenium WebDriver to develop automated tests for web application in Java

## Intended audience:

Automation developers. This course is NOT intended to teach how to build a test automation system from scratch. If you don't yet have a test automation system yet in place, it's highly recommended to talk to Sela consultants in order to help you establish the test automation infrastructure for your team before taking this course.

## Prerequisites:

Basic knowledge of Java

## Objectives:

- Understand Selenium fundamentals
- Know how to write automated tests in Java, using JUnit or TestNG and Selenium WebDriver
- Know how to use the different locators and how to choose between them
- Understand the page object pattern and how to implement it
- Know how to execute fragments of JavaScript from your tests and when to use it
- Understand the implicit and explicit wait and when to use them
- Know how to take screenshots and other evidences to help you investigate failures
- Understand the different exceptions that Selenium throws and their meanings
- Working with iframes and windows

Understand cross-browser testing, Selenium Grid and Selenium cloud providers

## Topics:

### Selenium Overview

- Introduction to Selenium
- Selenium Architecture
- Legacy Selenium IDE

### Unit test framework basics

- Creating a new test project using TestNG or JUnit
- Defining test class and test methods
- @Before and @After
- Asserts
- A typical test structure: Arrange-Act-Assert

### Selenium Webdriver

- Adding WebDriver support to a test project
- Navigating to other pages
- Understanding DOM Structure
- Finding elements on the page using basic selectors
- Performing actions on page elements
- Finding elements within other elements
- Working with drop-down (select) elements
- XPath
- CSS Selector
- ImplicitWait
- WebDriverWait
- Executing JavaScript using Selenium
- Using TakeScreenshot, getPageSource & getLogs to investigate failures
- The Page Object pattern
- Switching between windows and iframes



## Selenium Grid

- Cross Platform Browser Testing
- Selenium Server
- Selenium Grid
- Selenium cloud providers (BrowserStack, SauceLabs, etc.)