

## Advanced Selenium using Java | Level 3



### Description

Advanced Selenium Using Java (Level 3) provides students with a solid understanding of practical automation concepts using Selenium, the WebDriver API, the Selenium server, and Selenium Grid to drive consistent functional and non-functional tests that are performed remotely and can be parallelized. Students will learn the core API, tools, and how to work with them together to create powerful testing harnesses.

### Target Audience:

Intermediate and beyond level skills for Test Engineers, QA, and web developers with basic Selenium experience. Familiarity with Java syntax basics is required for this course.

### Labs

Labs for this course are:

1. Install and Configure Maven
2. Using Maven
3. Introduction to Jenkins
4. Using WebDriver-Manager
5. Working with Selenium Grid
6. Parallelizing the Tests for Selenium Grid
7. Installing Docker
8. Creating a Docker Image
9. Selenium in Docker

### Learning Objectives:

Working within an engaging, hands-on learning environment, attendees will explore:

- Explore Build Management techniques using Maven
- Install and use Maven to define all project artifact, project dependencies and plugins
- Discuss the need for Continuous integration
- The basics of the Jenkins automation server
- Setting up a Job, Maven, Unit tests and Selenium project
- Understand web page testing needs and how Selenium meets those needs
- Setup and run a Selenium Grid to run a set of Selenium tests
- Setup and run Selenium tests in parallel in a Selenium Grid
- Introduce Docker
- Run Selenium tests in a Docker container