

Website: awesome-testing.com

Contact: <https://awesome-testing.com/contact>

Selenium WebDriver Intermediate: Framework Design

A hands-on workshop on building a maintainable Selenium test framework, covering architecture, reusable patterns, reporting, and Selenium Grid execution.

Level: Intermediate

Duration: 2 days

Mode: remote, onsite

Languages: PL, EN

Tooling: Selenium, Java, Selenium Grid

Details: <https://awesome-testing.com/workshops/selenium-framework-intermediate>

Key outcomes

- Design and build maintainable Selenium framework modules
- Apply Page Object and test-data patterns to create reusable tests
- Run, debug, and troubleshoot tests locally and in remote environments (including Selenium Grid)

Full program

Learning objective

Selenium WebDriver is a free tool used to automate web applications.

This workshop expands your Selenium WebDriver skills and focuses on building a practical, maintainable test framework. You will learn how to optimise your day-to-day work, apply advanced testing techniques, and follow proven best practices for automated test development.

The course is primarily delivered using Java. For closed groups, it can also be delivered using Python, C#, or JavaScript. The training is workshop-based: for each topic, participants implement real framework components.

Scope

- Selenium WebDriver: extending core concepts and techniques
- Framework design and architecture
- Project structure
- Creating core framework components (Framework Core)
- Test configuration and execution
 - Properties
 - Parameters
- Test parametrisation with test data
 - DataFactory
 - DataReader
- Utilities
 - Helpers and common functions
- Automatic test logging
- Automated test reporting
- Automatic screenshots

- Integrations with external libraries and tools
- Design patterns
 - Page Object Pattern and PageFactory (advanced usage)
- Remote execution
 - RemoteWebDriver and Selenium Grid
 - Server and remote node setup
 - Running tests on remote machines
- Troubleshooting common framework issues
- Testing an application using the created framework

How to prepare

Who should attend?

This training is intended for participants who:

- have basic programming skills in Java, JavaScript, or Python, and
- understand Selenium WebDriver fundamentals.

It is suitable for manual testers transitioning into automation, junior and intermediate automation testers, and software developers.

Preparation

Please bring your own laptop prepared according to the trainer's instructions.

Teaching methods

The training is predominantly hands-on, supported by short lecture-style explanations. Participants learn the tool by completing practical tasks.

Training materials

You will receive a complete set of training materials (presentation and supporting resources) and full access to electronic materials on the edu.ittraining.pl platform.

Benefits

- You will deepen your knowledge of automated testing with Selenium WebDriver.
- You will learn advanced techniques and capabilities of the tool.
- You will be able to build your own web testing framework or extend an existing one.
- You will strengthen your professional profile and support career growth in test automation.

Further development path

A recommended skills-development path can be proposed via related Selenium courses. You can also attend this course independently.