

Selenium introduction & environment configuration



1. Defining goals
2. Configuring environment
3. Selenium and test framework definition
4. Creating the project
5. Writing simple test script

Good to have:

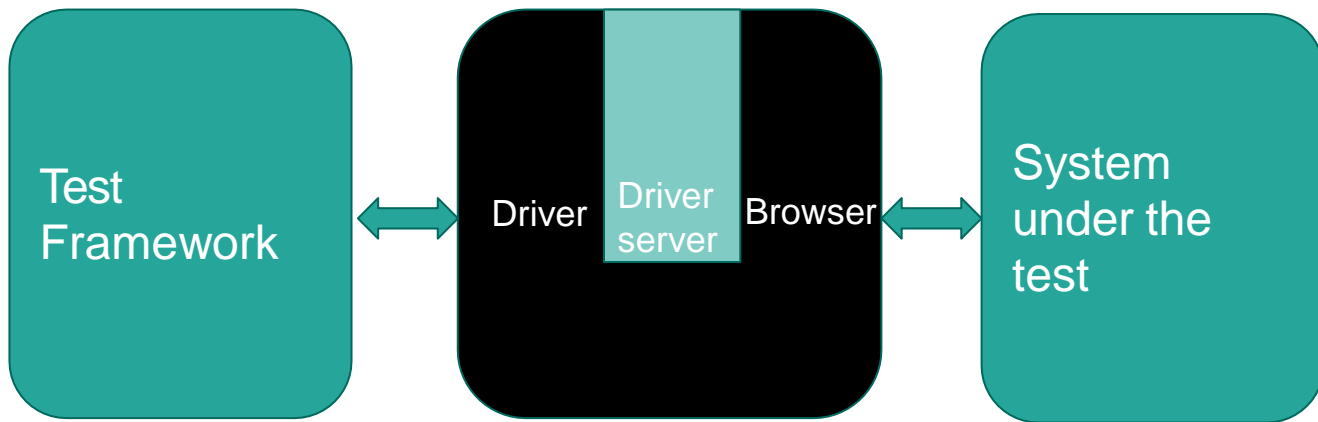
1. Have Java basics
2. Any programming background on C-like languages
3. Basic knowledge about software testing

Goals of the training

1. Learn how to create own test framework
2. Get practical skill in test automation
3. Learn how to use Selenium

What is Selenium?

Place of WebDriver



What Selenium product we will use?

Selenium 'brand' includes:

- WebDriver
- Selenium Standalone Server
- Selenium IDE
- Selenium RC (obsolete)

Prepare your local environment

Should be installed:

1. IntelliJ IDEA - download free "Community" version
2. Install Java: JDK
3. Install Maven <https://maven.apache.org/download.cgi>

Setup environment variables:

- 1) **JAVA_HOME** = **C:\Program Files\Java\jdk1.8.0_341**
- 2) **MAVEN_HOME** = C:\Program Files (x86)\apache-maven-3.8.6
- 3) **M2_HOME** = C:\Program Files (x86)\apache-maven-3.8.6\bin

Create project and configure IntelliJ Idea

- Let's create a project
 - 1) open **IntelliJ** IDEA
 - 2) create new **Maven** project
 - 3) choose **SDK** (installed earlier)
 - 4) Use reverse DNS convention in your **groupId** AND **artifactId** (good practice)
 - 5) Set a project name and location
- When project is created, let's setup Maven
 - Go to File -> Settings, search Maven
 - Choose Maven home directory - select your local Maven (C:/Program Files (x86)/apache-maven-3.8.6)
 - choose option "Import Maven projects automatically"

Project structure

1. Download WebDriver exe file
<https://www.seleniumhq.org/download/>
<https://chromedriver.chromium.org/downloads>
<https://googlechromelabs.github.io/chrome-for-testing/#stable>
2. Put it to /test/resources folder
3. Add new java class SearchTest to /test/java folder

```
src
--main
--java
--resources
--test
--java
--resources
pom.xml
```

Connecting external libraries



1) Selenium Java

<https://mvnrepository.com/artifact/org.seleniumhq.selenium>

Also useful information on the page:

<https://www.seleniumhq.org/download/maven.jsp>

2) TestNG

<https://mvnrepository.com/artifact/org.testng/testng>

```
<dependencies>
```

```
  <dependency>
```

```
    <groupId>org.seleniumhq.selenium</groupId>
```

```
    <artifactId>selenium-java</artifactId>
```

```
    <version>4.10.0</version>
```

```
  </dependency>
```

```
  <dependency>
```

```
    <groupId>org.testng</groupId>
```

```
    <artifactId>testng</artifactId>
```

```
    <version>7.8.0</version>
```

```
    <scope>test</scope>
```

```
  </dependency>
```

```
</dependencies>
```

Ready to start?