

Selenium introduction & environment configuration



Plan

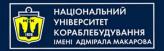
- 1. Defining goals
- 2. Configuring environment
- 3. Selenium and test framework definition
- 4. Creating the project
- 5. Writing simple test script



Knowledge on start

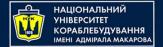
Good to have:

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

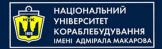


Goals of the training

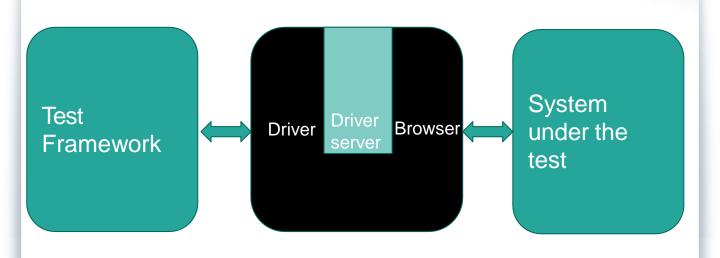
- 1. Learn how to create own test framework
- 2. Get practical skill in test automation
- 3. Learn how to use Selenium



What is Selenium?



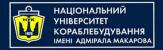
Place of WebDriver



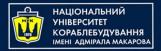
What Selenium product we will use?

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

- Download WebDriver exe file
 https://www.seleniumhq.org/download/
 https://chromedriver.chromium.org/downloads/
- 2. Put it to /test/resources folder
- 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

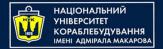
2) TestNG

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

Maven dependencies: configuring pom.xml

```
<dependencies>
<dependency>
    <groupId>orq.seleniumhq.selenium
    <artifactId>selenium-java</artifactId>
    <version>4.4.0
</dependency>
<dependency>
    <qroupId>org.testng/qroupId>
    <artifactId>testng</artifactId>
    <version>7.6.1
    <scope>test</scope>
</dependency>
```

</dependencies>



Ready to start?