

# Tests d'acceptation des utilisateurs automatisés avec Selenium WebDriver

# OBJECTIFS

- ▶ Maven pour gérer un projet Java
- ▶ Configuration du Selenium Web Driver
- ▶ Tests automatisés d'un navigateur

# AVEC SEG3503 PLAYGROUND

- ▶ Créer le répertoire **/lab06**
  - ▶ **Lire** les exigences de la bibliothèque
  - ▶ **Unzip BookstoreApp.zip**



<https://maven.apache.org/index.html>

<https://maven.apache.org/guides/getting-started/maven-in-five-minutes.html>

# SEG 3x03 LABO 06 - TESTS D'ACCEPTATION AUTOMATISÉS AVEC SELENIUM WEBDRIVER

<code>src/main/java</code>	Application/Library sources
<code>src/main/resources</code>	Application/Library resources
<code>src/main/filters</code>	Resource filter files
<code>src/main/webapp</code>	Web application sources
<code>src/test/java</code>	Test sources
<code>src/test/resources</code>	Test resources
<code>src/test/filters</code>	Test resource filter files
<code>src/it</code>	Integration Tests (primarily for plugins)
<code>src/assembly</code>	Assembly descriptors
<code>src/site</code>	Site
<code>LICENSE.txt</code>	Project's license
<code>NOTICE.txt</code>	Notices and attributions required by libraries that the project depends on
<code>README.txt</code>	Project's readme

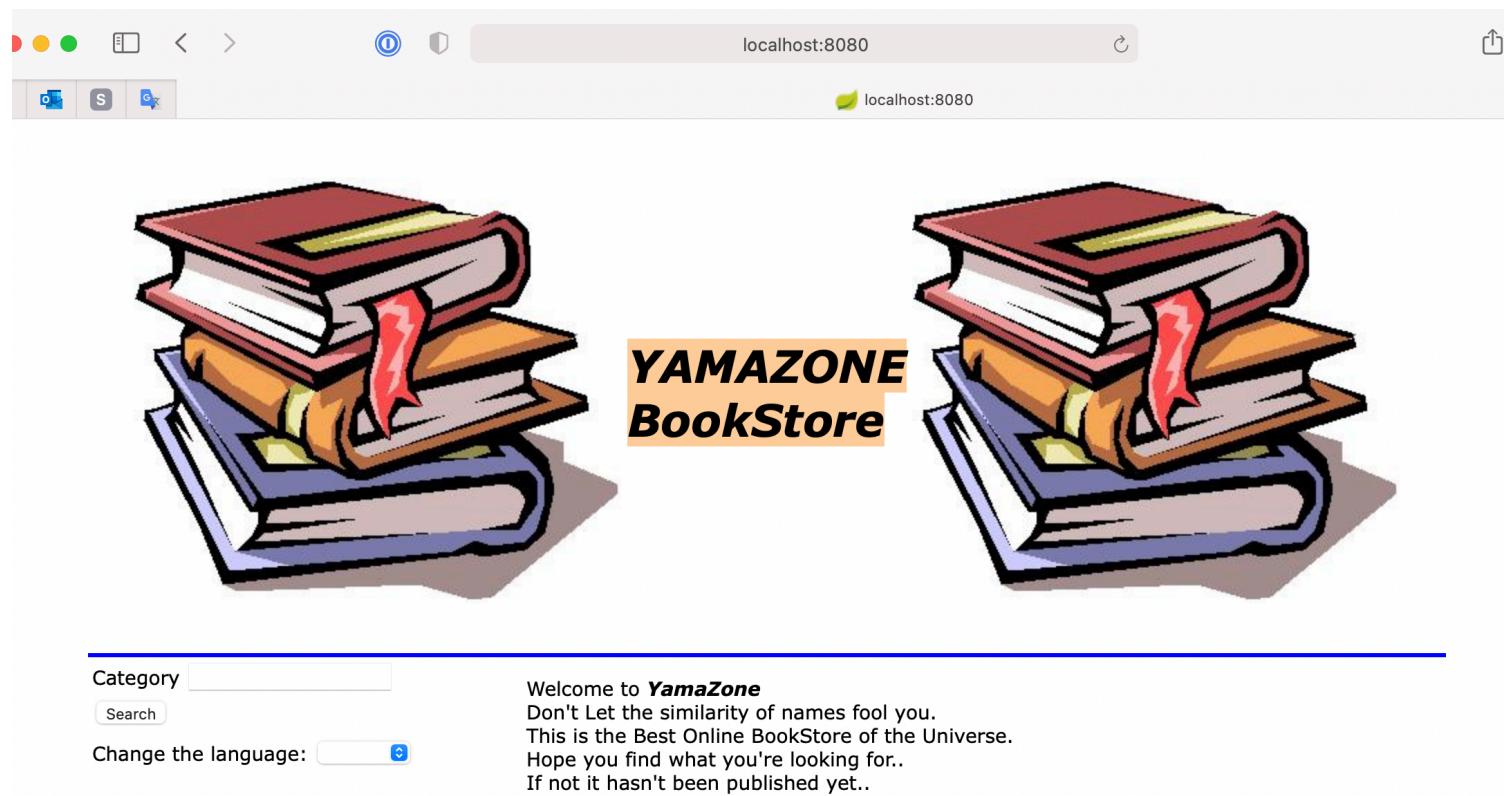
<https://maven.apache.org/guides/introduction/introduction-to-the-standard-directory-layout.html>

```
[INFO] Scanning for projects...
[INFO]
[INFO] -----< SEG3103:BookstoreApp >-----
[INFO] Building BookstoreApp 0.1.0
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ BookstoreApp
---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory /private/tmp/seg3x03/BookstoreApp/src/
main/resources
[INFO]
[INFO] --- maven-compiler-plugin:3.7.0:compile (default-compile) @ BookstoreApp ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time:  0.491 s
[INFO] Finished at: 2021-06-28T09:03:49-04:00
[INFO] -----
```

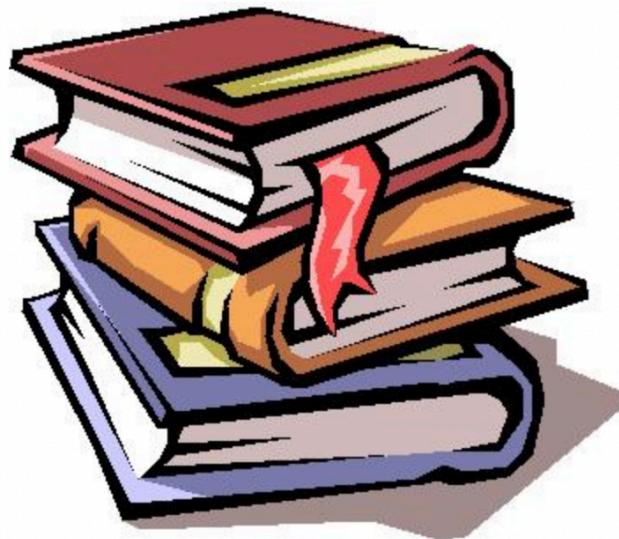
## mvn compile

```
[INFO] -----< SEG3103:BookstoreApp >-----
[INFO] Building BookstoreApp 0.1.0
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ BookstoreApp
---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory /private/tmp/seg3x03/BookstoreApp/src/
main/resources
[INFO]
[INFO] --- maven-compiler-plugin:3.7.0:compile (default-compile) @ BookstoreApp ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @
BookstoreApp ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory /private/tmp/seg3x03/BookstoreApp/src/
test/resources
```

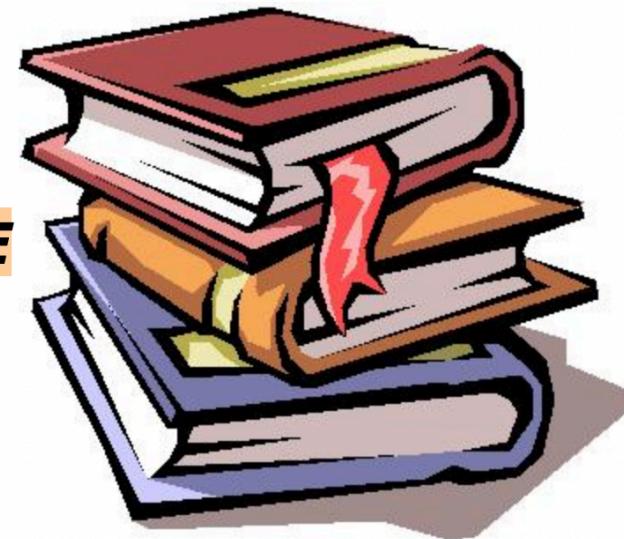
## mvn package -DskipTests



```
java -jar ./target/BookstoreApp-0.1.0.jar  
http://localhost:8080
```



**YAMAZONE  
BookStore**



Change the language:

User Name

Password

<http://localhost:8080/admin>

```
[INFO] Tests run: 2, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 13.162 s  
- in selenium.ExampleSeleniumTest  
[INFO] Running ExampleTest  
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0 s - in  
ExampleTest  
[INFO]  
[INFO] Results:  
[INFO]  
[INFO] Tests run: 3, Failures: 0, Errors: 0, Skipped: 0  
[INFO]  
[INFO] -----  
[INFO] BUILD SUCCESS  
[INFO] -----  
[INFO] Total time: 14.898 s  
[INFO] Finished at: 2021-06-28T09:15:25-04:00  
[INFO] -----
```

mvn test

```
[ERROR] test1  Time elapsed: 0.044 s  <<< ERROR!
org.openqa.selenium.WebDriverException:
Cannot find firefox binary in PATH. Make sure firefox is installed.
OS appears to be: MAC
Build info: version: '3.141.59', revision: 'e82be7d358', time:
'2018-11-14T08:17:03'
System info: host: 'Andrews-MacBook-Air.local', ip:
'fe80:0:0:0:cd6:4440:c26a:7fbf%en0', os.name: 'Mac OS X', os.arch:
'aarch64', os.version: '11.2.3', java.version: '17'
Driver info: driver.version: FirefoxDriver
    at
selenium.ExampleSeleniumTest.setUp(ExampleSeleniumTest.java:33)
```

SVP lire les sorties...

Firefox

GeckoDriver is implemented and supported by Mozilla, refer to their [documentation](#) for supported versions.

Internet Explorer

Only version 11 is supported, and it requires additional [configuration](#).

Safari

SafariDriver is supported directly by Apple, for more information, check their [documentation](#)

Opera

OperaDriver is supported by Opera Software, refer to their [documentation](#) for supported versions.

Chrome

ChromeDriver is supported by the Chromium project, please refer to their [documentation](#) for any compatibility information

Edge

Microsoft is implementing and maintaining the Microsoft Edge WebDriver, please refer to their [documentation](#) for any compatibility information

# Configurer le bon navigateur

<https://www.selenium.dev/downloads/>

```
//setting the driver executable
WebDriverManager.chromedriver().setup();

//Initiating your chromedriver
WebDriver driver = new ChromeDriver();

//Applied wait time
driver.manage().timeouts().implicitlyWait(10, TimeUnit.SECONDS);

//maximize window
driver.manage().window().maximize();

//open browser with desired URL
driver.get("https://duckduckgo.com/");

//closing the browser
driver.close();
```



## Selenium WebDriver

If you want to create robust, browser-based regression automation suites and tests, scale and distribute scripts across many environments, then you want to use Selenium WebDriver, a collection of language specific bindings to drive a browser - the way it is meant to be driven.

<https://www.selenium.dev>

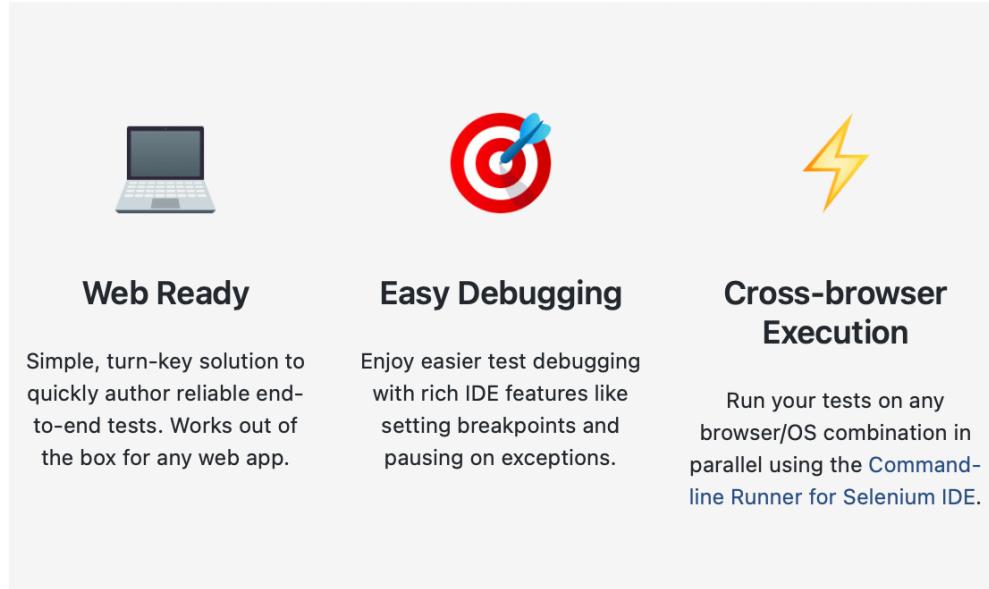
Maintenant,  
écrivez des  
tests de  
navigateur !!!

## Selenium IDE

Open source record and playback test automation for the web

[CHROME DOWNLOAD](#) [FIREFOX DOWNLOAD](#) [LATEST ZIP](#)

Star 1,653



Web Ready	Easy Debugging	Cross-browser Execution
Simple, turn-key solution to quickly author reliable end-to-end tests. Works out of the box for any web app.	Enjoy easier test debugging with rich IDE features like setting breakpoints and pausing on exceptions.	Run your tests on any browser/OS combination in parallel using the <a href="#">Command-line Runner for Selenium IDE</a> .

Selenium  
IDE pour  
explorer  
l'app !!!

<https://www.selenium.dev/selenium-ide/>

# RESSOURCES

- <https://www.selenium.dev/selenium/docs/api/java/overview-summary.html>
- <https://www.browserstack.com/guide/selenium-with-java-for-automated-test>
- <https://www.browserstack.com/guide/locators-in-selenium>
- <https://www.browserstack.com/guide/verify-and-assert-in-selenium>
- <https://www.guru99.com/first-webdriver-script.html>
- <https://artoftesting.com/selenium-with-java-example>
- <https://examples.javacodegeeks.com/enterprise-java/selenium/selenium-tutorial-for-beginners/>

# SOUMISSION

- ▶ Tout travail doit être dans
  - ▶ **seg3503\_playground/lab06**
- ▶ Ajouter au moins un test supplémentaire de Selenium Web Driver
- ▶ Afficher des screenshots de
  - ▶ l'application
  - ▶ Les résultats (positifs) des tests