**Instructions how to running Java project by Jenkins and Maven.**

Project reference:

<https://github.com/IgorDems/SurePrep_coding_challenge.git>

**Pre-conditions:**  
Browser: Google Chrome Version 59.0.3071.115 (Official Build) (64-bit)  
System Version: macOS 10.12.6 (16G29)  
Dependencies: selenium-java 3.3.1, TestNG-5.0, java-1.8

[Jenkins ver. 2.60.3](https://jenkins.io/) – or highest version

1.Jenkins installation (article attached).

2. We need to create a directory for our project with a sequence of nested directories.

Let me create condition-satisfying sequences of nested directories under my user profile and inside the standard directory for Mac OS X /Users/igor/Desktop. The final sequence will be look like that:

/Users/igor/Desktop/TestNG/src/main/java. So, we have got /TestNG directory like a our project-directory.

For Maven project we have to find created by me POM.xml file follow the reference below:

[**https://github.com/IgorDems/SurePrep\_coding\_challenge/tree/master/TestNG**](https://github.com/IgorDems/SurePrep_coding_challenge/tree/master/TestNG)

Finally we have to get file with dependencies for our project /Users/igor/Desktop/TestNG/POM.xml

All dependencies we can find follow the reference: [https://mvnrepository.com](https://mvnrepository.com/)/

##-----------------------------------Content of /Users/igor/Desktop/TestNG/POM.xml ----------------------------

<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">

<modelVersion>4.0.0</modelVersion>

<groupId>com.qauber.selenium-qa</groupId>

<artifactId>Airports\_chalenge\_test </artifactId>

<version>1.0</version>

<properties>

<jre.level>1.8</jre.level>

<jdk.level>1.8</jdk.level>

</properties>

<build>

<plugins>

<!-- Compiler plug-in -->

<plugin>

<groupId>org.apache.maven.plugins</groupId>

<artifactId>maven-compiler-plugin</artifactId>

<version>2.3.2</version>

<configuration>

<source>${jdk.level}</source>

<target>${jdk.level}</target>

</configuration>

</plugin>

</plugins>

</build>

<!-- Include the following dependencies -->

<dependencies>

<dependency>

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

<artifactId>selenium-java</artifactId>

<version>2.53.0</version>

</dependency>

<dependency>

<groupId>org.testng</groupId>

<artifactId>testng</artifactId>

<version>6.8.7</version>

</dependency>

</dependencies>

</project>

##------------------------------------------------------------------------------------------------------------------------------

By next step we have to get **ByTestNG.java** file with code for test-case automation.

We could get Java-project **ByTestNG.java** by the reference below

<https://github.com/IgorDems/SurePrep_coding_challenge/blob/master/TestNG/src/main/java/ByTestNG.java>

As result we have a **ByTestNG.java inside** our project-directory : /Users/igor/Desktop**/TestNG/src/main/java/**[ByTestNG.java](https://github.com/IgorDems/SurePrep_coding_challenge/blob/master/TestNG/src/main/java/ByTestNG.java)

**Running our project by CI tool Jenkins**

Start **Jenkins** by utilising command line(Terminal).

sudo java -jar jenkins.war

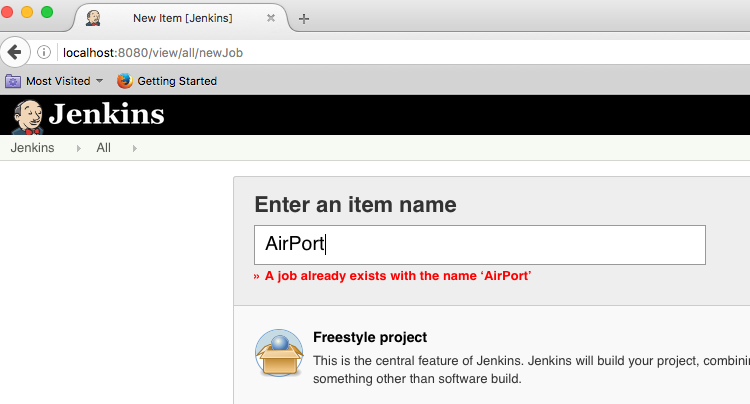
**After, Jenkins ready for work we'll continue.**

Now go to your browser(for example Firefox 46.0 or highest version) and type the url: [*http://localhost:8080/*](http://localhost:8080/login?from=%2F)and we should see a screen similar to the one below, prompting for the initial administrator password that was generated in the previous step. Input the password and click ‘*Continue*’.

We will see:



Click on the **‘New  Item’**.



We'll call our job 'AirPort' and will make a choice 'Freestyle project' .

Click on the **‘Ok’** button.



Click on the **‘Advanced’** button.

After we have to add **/Users/igor/Desktop/TestNG** like a ‘custom workspace directory’



Click on the **‘Advanced’** button in the ‘**BUILD’** section and will make a choice Execute shell



After we have to add some strings into command area.

**/usr/local/bin/mvn clean install**

**/usr/local/bin/mvn exec:java -Dexec.mainClass="org.testng.TestNG" -Dexec.args="-testclass TestNG.ByTestNG"**

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Click on the **‘Apply’ and ‘Save’** buttons.



By ‘Build Now’ button we can execute our project.

Log-result of execution have to look like that:

Started by user [admin](http://localhost:8080/user/admin)

Building in workspace /Users/igor/Desktop/TestNG

[TestNG] $ /bin/sh -xe /var/folders/zz/zyxvpxvq6csfxvn\_n0000000000000/T/jenkins4719669705683068997.sh

+ /usr/local/bin/mvn clean install

[INFO] Scanning for projects...

[INFO]

[INFO] ------------------------------------------------------------------------

[INFO] Building Airports\_chalenge\_test 1.0

[INFO] ------------------------------------------------------------------------

[INFO]

[INFO] --- maven-clean-plugin:2.5:clean (default-clean) @ Airports\_chalenge\_test ---

[INFO]

[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ Airports\_chalenge\_test ---

[WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is platform dependent!

[INFO] skip non existing resourceDirectory /Users/igor/Desktop/TestNG/src/main/resources

[INFO]

[INFO] --- maven-compiler-plugin:2.3.2:compile (default-compile) @ Airports\_chalenge\_test ---

[WARNING] File encoding has not been set, using platform encoding UTF-8, i.e. build is platform dependent!

[INFO] Compiling 2 source files to /Users/igor/Desktop/TestNG/target/classes

[INFO]

[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ Airports\_chalenge\_test ---

[WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is platform dependent!

[INFO] skip non existing resourceDirectory /Users/igor/Desktop/TestNG/src/test/resources

[INFO]

[INFO] --- maven-compiler-plugin:2.3.2:testCompile (default-testCompile) @ Airports\_chalenge\_test ---

[INFO] No sources to compile

[INFO]

[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ Airports\_chalenge\_test ---

[INFO] No tests to run.

[INFO]

[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ Airports\_chalenge\_test ---

[INFO] Building jar: /Users/igor/Desktop/TestNG/target/Airports\_chalenge\_test-1.0.jar

[INFO]

[INFO] --- maven-install-plugin:2.4:install (default-install) @ Airports\_chalenge\_test ---

[INFO] Installing /Users/igor/Desktop/TestNG/target/Airports\_chalenge\_test-1.0.jar to /var/root/.m2/repository/com/qauber/selenium-qa/Airports\_chalenge\_test/1.0/Airports\_chalenge\_test-1.0.jar

[INFO] Installing /Users/igor/Desktop/TestNG/pom.xml to /var/root/.m2/repository/com/qauber/selenium-qa/Airports\_chalenge\_test/1.0/Airports\_chalenge\_test-1.0.pom

[INFO] ------------------------------------------------------------------------

[INFO] BUILD SUCCESS

[INFO] ------------------------------------------------------------------------

[INFO] Total time: 2.096 s

[INFO] Finished at: 2017-08-20T02:54:51-07:00

[INFO] Final Memory: 17M/215M

[INFO] ------------------------------------------------------------------------

+ /usr/local/bin/mvn exec:java -Dexec.mainClass=org.testng.TestNG '-Dexec.args=-testclass TestNG.ByTestNG'

[INFO] Scanning for projects...

[INFO]

[INFO] ------------------------------------------------------------------------

[INFO] Building Airports\_chalenge\_test 1.0

[INFO] ------------------------------------------------------------------------

[INFO]

[INFO] --- exec-maven-plugin:1.6.0:java (default-cli) @ Airports\_chalenge\_test ---

[TestNG] Running:

Command line suite

Starting ChromeDriver 2.30.477690 (c53f4ad87510ee97b5c3425a14c0e79780cdf262) on port 34041

Only local connections are allowed.

<http://sureprep-frontend-coding-challenge.s3-website-us-east-1.amazonaws.com/> ==== SurePrep Frontend Coding Challengepage opened

Test 1

3

Bonus of verifying outbound airport code: JNB - test is correct

-----Search by 'm' for result 1 ----(Full Text)---------------------

Johannesburg, South Africa

O.R. Tambo International Airport (JNB)

----------------------------------------------------------------------

Bonus of verifying outbound airport code: BOM - test is correct

-----Search by 'm' for result 2 ----(Full Text)---------------------

Mumbai, India

Chhatrapati Shivaji International Airport (BOM)

----------------------------------------------------------------------

Bonus of verifying outbound airport code: SYD - test is correct

-----Search by 'm' for result 3 ----(Full Text)---------------------

Sydney, Australia

Sydney Kingsford Smith International Airport (SYD)

----------------------------------------------------------------------

Test 2

3

Bonus of verifying inbound airport code: JNB - test is correct

-----Search by 'm' for result 1 ----(Full Text)---------------------

Johannesburg, South Africa

O.R. Tambo International Airport (JNB)

----------------------------------------------------------------------

Bonus of verifying inbound airport code: BOM - test is correct

-----Search by 'm' for result 2 ----(Full Text)---------------------

Mumbai, India

Chhatrapati Shivaji International Airport (BOM)

----------------------------------------------------------------------

Bonus of verifying inbound airport code: SYD - test is correct

-----Search by 'm' for result 3 ----(Full Text)---------------------

Sydney, Australia

Sydney Kingsford Smith International Airport (SYD)

----------------------------------------------------------------------

Test 3

Verify the result is 'London, UK': - is correct

Test 4

Verify the result inbound equal '2': - test is correct

Verify the result inbound equal '3': - test is correct

Test 5

Total number of 'iframes' = 1

Verifying location result = 51°28'14.2"N 0°27'43.0"Win google maps

Verifying the result location (51°28'14.2"N 0°27'43.0"W) in google maps -test result is correct

=========================BOWSER WAS CLOSED - OK!=======================

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Command line suite

Total tests run: 5, Failures: 0, Skips: 0

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TestNG Reports Processing: START

Looking for TestNG results report in workspace using pattern: \*\*/testng-results.xml

Saving reports...

Processing '/var/root/.jenkins/jobs/AirPort/builds/22/testng/testng-results.xml'

TestNG Reports Processing: FINISH

Finished: SUCCESS