

## TD : Maven

Dépôt git : <https://github.com/Miafiaj/ProjetMaven.git>

### 1-Mon premier projet Maven :

#### **Exercice 1-9 :**

Création et mise en place du projet, présent dans le git.

#### **Exercice 10 :**

```
public void testApp()  
{  
    assertEquals(5, App.max(4, 5));  
    assertEquals(5, App.max(5, 4));  
}
```

#### **Exercice 11 :**

-----  
T E S T S  
-----

Running jrouxel.AppTest

Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.009 sec

Results :

Tests run: 1, Failures: 0, Errors: 0, Skipped: 0

[INFO] -----  
[INFO] BUILD SUCCESS  
[INFO] -----  
[INFO] Total time: 1.421s  
[INFO] Finished at: Tue Apr 11 18:10:45 CEST 2017  
[INFO] Final Memory: 10M/200M  
[INFO] -----

#### **Exercice 12 :**

```
<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/maven-  
v4_0_0.xsd">  
  <modelVersion>4.0.0</modelVersion>  
  <groupId>jrouxel</groupId>  
  <artifactId>jrouxel</artifactId>  
  <packaging>jar</packaging>  
  <version>1</version>  
  <name>jrouxel</name>  
  <url>http://maven.apache.org</url>
```

```

<dependencies>
  <dependency>
    <groupId>junit</groupId>
    <artifactId>junit</artifactId>
    <version>3.8.1</version>
    <scope>test</scope>
  </dependency>
</dependencies>

<build>
  <plugins>
    <plugin>
      <groupId>org.apache.maven.plugins</groupId>
      <artifactId>maven-compiler-plugin</artifactId>
      <version>2.3.2</version>
      <configuration>
        <source>1.6</source>
        <target>1.6</target>
      </configuration>
    </plugin>
  </plugins>
</build>
</project>

```

### **Exercice 13 :**

On crée la release (ici jrouxel) , on obtient un build succes :

```

[INFO] -----
[INFO] Building jrouxel 1
[INFO] -----
[INFO] --- maven-resources-plugin:2.3:resources (default-resources) @ jrouxel ---
[WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is
platform dependent!
[INFO] skip non existing resourceDirectory
/promo2019/jrouxel/Outil_developpement/TD_Maven/ProjetsMaven/jrouxel/ProjetMaven/src/main
/resources
[INFO] --- maven-compiler-plugin:2.3.2:compile (default-compile) @ jrouxel ---
[INFO] Nothing to compile - all classes are up to date
[INFO] --- maven-resources-plugin:2.3:testResources (default-testResources) @ jrouxel ---
[WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is
platform dependent!
[INFO] skip non existing resourceDirectory
/promo2019/jrouxel/Outil_developpement/TD_Maven/ProjetsMaven/jrouxel/ProjetMaven/src/test/r
esources
[INFO] --- maven-compiler-plugin:2.3.2:testCompile (default-testCompile) @ jrouxel ---
[INFO] Nothing to compile - all classes are up to date

```

[INFO]  
[INFO] --- maven-surefire-plugin:2.10:test (default-test) @ jrouxel ---  
[INFO] Surefire report directory:  
/promo2019/jrouxel/Outil\_developpement/TD\_Maven/ProjetsMaven/jrouxel/ProjetMaven/target/surefire-reports

---

## T E S T S

---

Running jrouxel.AppTest  
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.013 sec

Results :

Tests run: 1, Failures: 0, Errors: 0, Skipped: 0

[INFO]  
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ jrouxel ---  
[INFO] Building jar:  
/promo2019/jrouxel/Outil\_developpement/TD\_Maven/ProjetsMaven/jrouxel/ProjetMaven/target/marelease.jar  
[INFO]  
[INFO] --- maven-dependency-plugin:2.5.1:copy-dependencies (copy-dependencies) @ jrouxel ---  
[INFO] Copying commons-logging-1.2.jar to  
/promo2019/jrouxel/Outil\_developpement/TD\_Maven/ProjetsMaven/jrouxel/ProjetMaven/target/dependency-jars/commons-logging-1.2.jar  
[INFO] Copying opencsv-3.9.jar to  
/promo2019/jrouxel/Outil\_developpement/TD\_Maven/ProjetsMaven/jrouxel/ProjetMaven/target/dependency-jars/opencsv-3.9.jar  
[INFO] Copying commons-lang3-3.5.jar to  
/promo2019/jrouxel/Outil\_developpement/TD\_Maven/ProjetsMaven/jrouxel/ProjetMaven/target/dependency-jars/commons-lang3-3.5.jar  
[INFO] Copying commons-collections-3.2.2.jar to  
/promo2019/jrouxel/Outil\_developpement/TD\_Maven/ProjetsMaven/jrouxel/ProjetMaven/target/dependency-jars/commons-collections-3.2.2.jar  
[INFO] Copying commons-beanutils-1.9.3.jar to  
/promo2019/jrouxel/Outil\_developpement/TD\_Maven/ProjetsMaven/jrouxel/ProjetMaven/target/dependency-jars/commons-beanutils-1.9.3.jar  
[INFO]  
[INFO] --- maven-install-plugin:2.4:install (default-install) @ jrouxel ---  
[INFO] Installing  
/promo2019/jrouxel/Outil\_developpement/TD\_Maven/ProjetsMaven/jrouxel/ProjetMaven/target/marelease.jar to /promo2019/jrouxel/.m2/repository/jrouxel/jrouxel/1/jrouxel-1.jar  
[INFO] Installing  
/promo2019/jrouxel/Outil\_developpement/TD\_Maven/ProjetsMaven/jrouxel/ProjetMaven/pom.xml to /promo2019/jrouxel/.m2/repository/jrouxel/jrouxel/1/jrouxel-1.pom  
[INFO] -----  
[INFO] BUILD SUCCESS  
[INFO] -----  
[INFO] Total time: 9.358s  
[INFO] Finished at: Wed Apr 12 15:26:12 CEST 2017  
[INFO] Final Memory: 11M/241M

[INFO] -----

#### **Exercice 14 :**

On a bien l'exécution du main

```
jrouxel@SA202-24A:~/Outil_developpement/TD_Maven/ProjetsMaven/jrouxel/ProjetMaven$ java  
-jar target/jrouxel.jar  
Max :5
```

#### **Exercice 16 :**

On obtient une erreur lors de la release du projet, dû au mauvais résultats des test. (Le programme attendait 5 et a reçu 4) .

-----  
T E S T S  
-----

Running jrouxel.AppTest

Tests run: 1, Failures: 1, Errors: 0, Skipped: 0, Time elapsed: 0.011 sec <<< FAILURE!

Results :

Failed tests: testApp(jrouxel.AppTest): expected:<5> but was:<4>

Tests run: 1, Failures: 1, Errors: 0, Skipped: 0

[INFO] -----

[INFO] BUILD FAILURE

[INFO] -----

[INFO] Total time: 0.633s

[INFO] Finished at: Tue Apr 11 18:21:43 CEST 2017

[INFO] Final Memory: 8M/240M

[INFO] -----

[ERROR] Failed to execute goal org.apache.maven.plugins:maven-surefire-plugin:2.10:test  
(default-test) on project jrouxel: There are test failures.

[ERROR]

[ERROR] Please refer to

/promo2019/jrouxel/Outil\_developpement/TD\_Maven/ProjetsMaven/jrouxel/ProjetMaven/target/surefire-reports for the individual test results.

[ERROR] -> [Help 1]

[ERROR]

[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.

[ERROR] Re-run Maven using the -X switch to enable full debug logging.

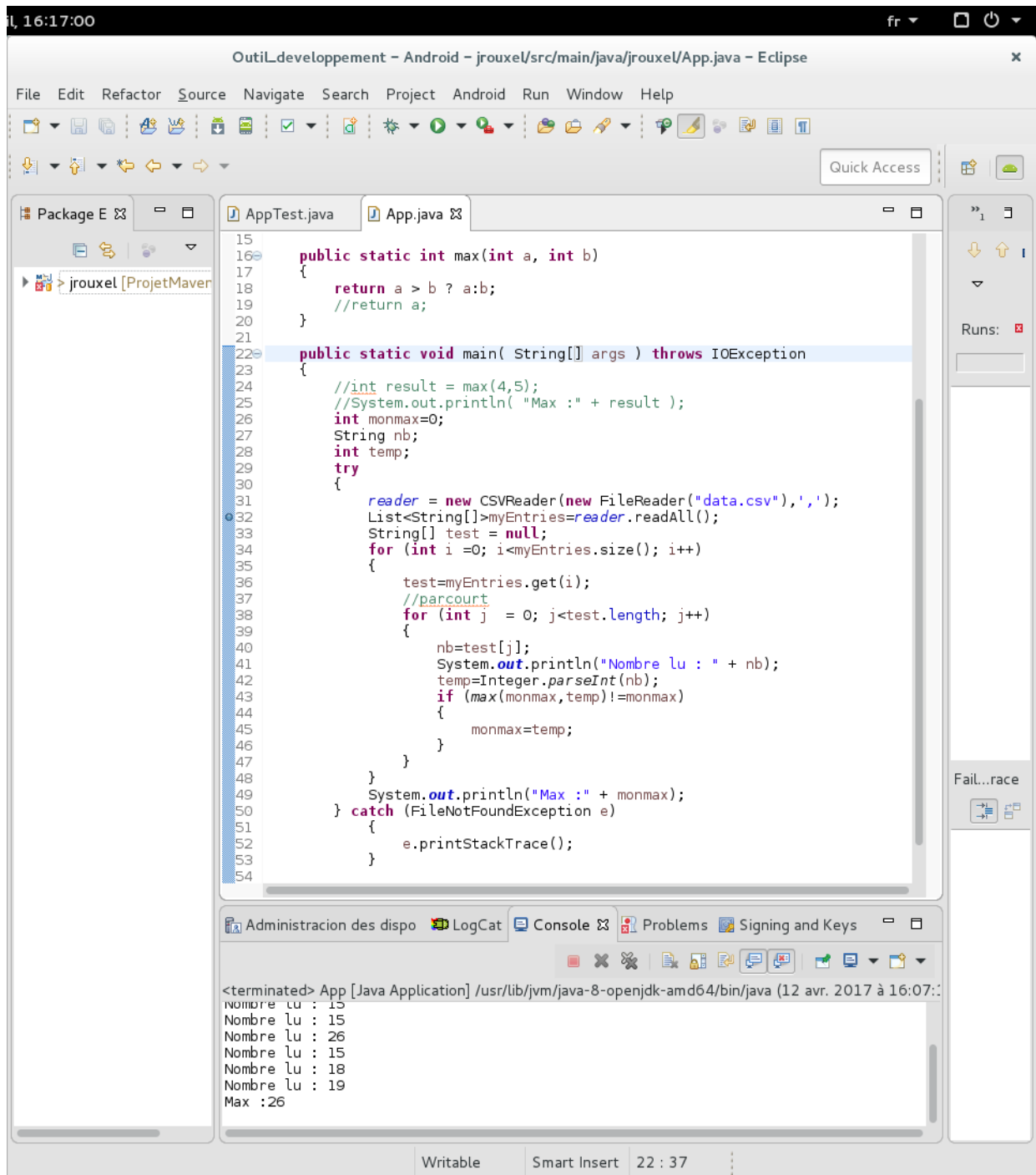
[ERROR]

[ERROR] For more information about the errors and possible solutions, please read the following articles:

[ERROR] [Help 1] <http://cwiki.apache.org/confluence/display/MAVEN/MojoFailureException>

## 2-Open CSV :

### Exercice 20-21 :



```
15
16 public static int max(int a, int b)
17 {
18     return a > b ? a:b;
19     //return a;
20 }
21
22 public static void main( String[] args ) throws IOException
23 {
24     //int result = max(4,5);
25     //System.out.println( "Max :" + result );
26     int monmax=0;
27     String nb;
28     int temp;
29     try
30     {
31         reader = new CSVReader(new FileReader("data.csv"),',');
32         List<String[]>myEntries=reader.readAll();
33         String[] test = null;
34         for (int i =0; i<myEntries.size(); i++)
35         {
36             test=myEntries.get(i);
37             //parcourt
38             for (int j = 0; j<test.length; j++)
39             {
40                 nb=test[j];
41                 System.out.println("Nombre lu : " + nb);
42                 temp=Integer.parseInt(nb);
43                 if (max(monmax,temp)!=monmax)
44                 {
45                     monmax=temp;
46                 }
47             }
48         }
49         System.out.println("Max :" + monmax);
50     } catch (FileNotFoundException e)
51     {
52         e.printStackTrace();
53     }
54 }
```

Administration des dispo LogCat Console Problems Signing and Keys

```
<terminated> App [Java Application] /usr/lib/jvm/java-8-openjdk-amd64/bin/java (12 avr. 2017 à 16:07:21)
Nombre lu : 15
Nombre lu : 15
Nombre lu : 26
Nombre lu : 15
Nombre lu : 18
Nombre lu : 19
Max :26
```

Le code affiche les nombres lus dans le fichier csv et récupère bien le nombre max.

### Exercice 22 :

Avec le code du stagiaire on obtient max=0, le max n'est pas changé vu que la fonction max renvoie seulement la valeur de max qui est au départ 0.

### Exercice 23 :

```
jrouxel@SA204-11A:~/Outil_developpement/TD_Maven/ProjetsMaven/jrouxel/ProjetMaven/target/test_release$ java -jar marelease.jar
Exception in thread "main" java.lang.NoClassDefFoundError: com/opencsv/CSVReader
    at jrouxel.App.main(App.java:31)
Caused by: java.lang.ClassNotFoundException: com.opencsv.CSVReader
    at java.net.URLClassLoader.findClass(URLClassLoader.java:381)
    at java.lang.ClassLoader.loadClass(ClassLoader.java:424)
    at sun.misc.Launcher$AppClassLoader.loadClass(Launcher.java:331)
    at java.lang.ClassLoader.loadClass(ClassLoader.java:357)
    ... 1 more
```

Quand on exécute le jar on obtient une erreur, il ne trouve pas le fichier csv qu'il doit lire.

```
jrouxel@SA204-11A:~/Outil_developpement/TD_Maven/ProjetsMaven/jrouxel/ProjetMaven/target/test_release$ unzip marelease.jar
Archive:  marelease.jar
  creating: META-INF/
  inflating: META-INF/MANIFEST.MF
  creating: jrouxel/
  inflating: jrouxel/App.class
  creating: META-INF/maven/
  creating: META-INF/maven/jrouxel/
  creating: META-INF/maven/jrouxel/jrouxel/
  inflating: META-INF/maven/jrouxel/jrouxel/pom.xml
  inflating: META-INF/maven/jrouxel/jrouxel/pom.properties
```

En dézipant la release on voit ce qu'il y a dans la release, on y trouve les fichiers de classe de java ainsi que les fichiers de configuration du projet maven. Il manque donc bien le fichier csv à lire.

#### **Exercice 25 :**

Après avoir édité le fichier pom.xml avec le plugin du TD, la release nouvellement faite contient les bibliothèques CSV nécessaire pour lire les fichiers.

### **3- Commons Collection :**

#### **Exercice 26 :**