Τάκης Παναγόπουλος

Νικόλας Μπομπέτσης

Ανάπτυξη Λογισμικού Τηλεπικοινωνιών και δικτύων 2015 - 2016

Περιεχόμενα

- Τι είναι το Maven
- Maven Repositories
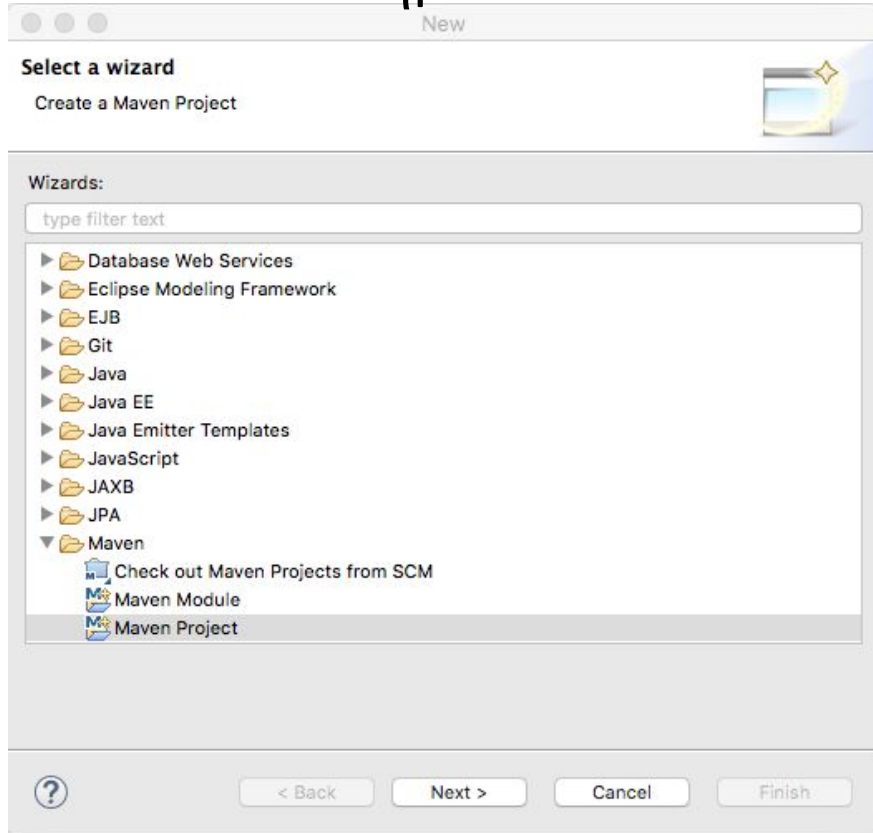- Log4j Example with Maven

Τι ειναι το Maven

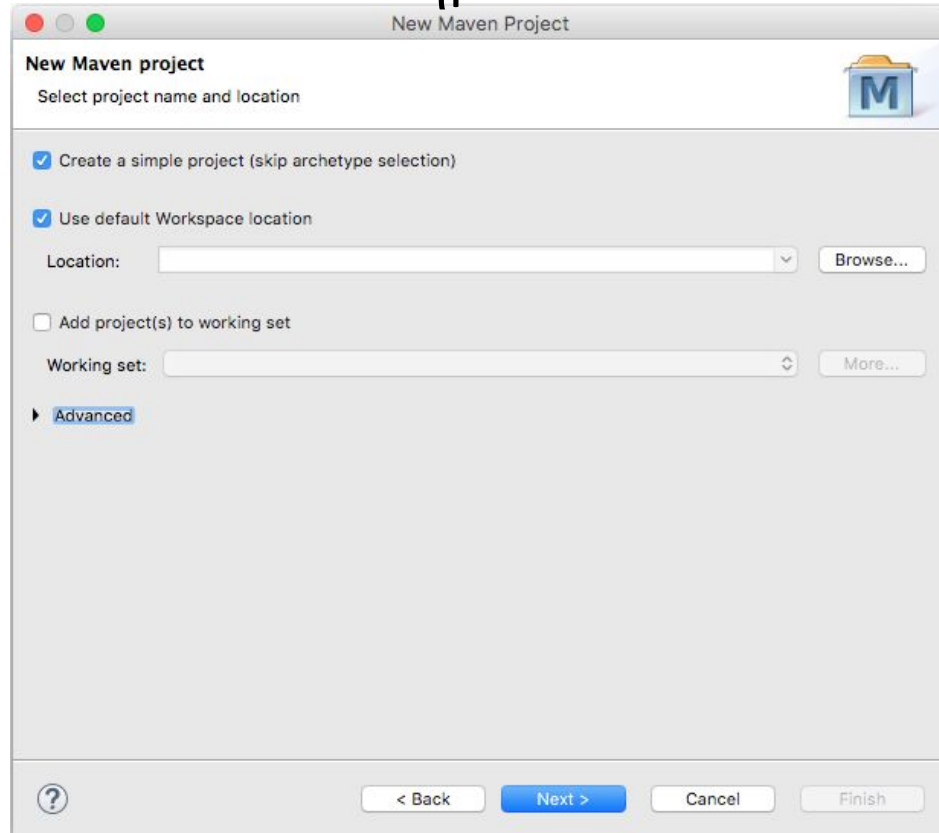- Το maven είναι ένα build εργαλείο που χρησιμοποιείται σε Java Projects

Maven Repositories

- Maven local repository
  - Maven local repository is used to store the project dependency libraries, and the default folder is ".m2"
- Maven central repository
  - Maven central repository is the default location for Maven to download all the project dependency libraries.
- Maven remote repository
  - Not all libraries are store in Maven central repository, often times, you need to add some remote repositories to download the libraries from another location instead of the default central repository.

Δημιουργία του project

Βήμα 1

Βήμα 2

Configure project

Log4j property file


```
# Root logger option
log4j.rootLogger=DEBUG, stdout, file

# Redirect log messages to console
log4j.appender.stdout=org.apache.log4j.ConsoleAppender
log4j.appender.stdout.Target=System.out
log4j.appender.stdout.layout=org.apache.log4j.PatternLayout
log4j.appender.stdout.layout.ConversionPattern=%d{yyyy-MM-dd HH:mm:ss} %-5p %c{1}:%L - %m%n

# Redirect log messages to a log file, support file rolling.
log4j.appender.file=org.apache.log4j.RollingFileAppender
log4j.appender.file.File=C:\\log4j-application.log
log4j.appender.file.MaxFileSize=5MB
log4j.appender.file.MaxBackupIndex=10
log4j.appender.file.layout=org.apache.log4j.PatternLayout
log4j.appender.file.layout.ConversionPattern=%d{yyyy-MM-dd HH:mm:ss} %-5p %c{1}:%L - %m%n
```
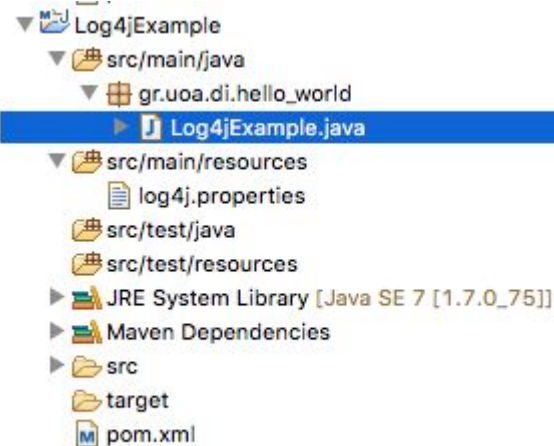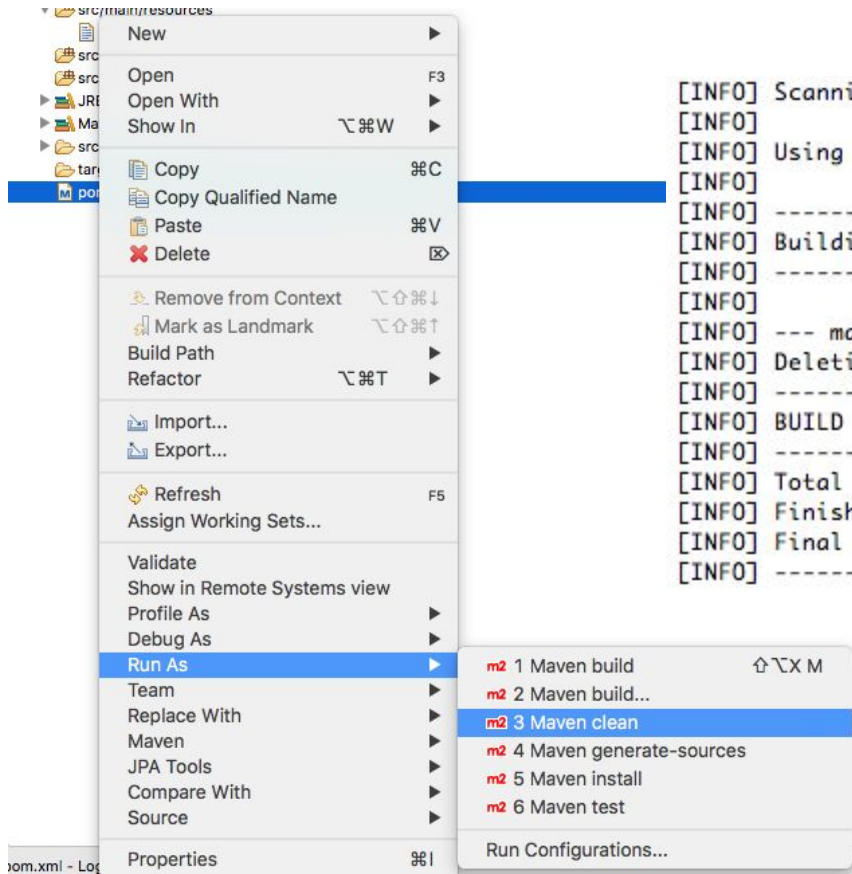
Log4j Class file

```java
1  package gr.uoa.di.hello_world;
2
3  import org.apache.log4j.Logger;
4
5  public class Log4jExample {
6
7
8      final static Logger logger = Logger.getLogger(Log4jExample.class);
9
10     public static void main (String[] arg){
11
12         logger.info("Hello World");
13
14         Log4jExample obj = new Log4jExample();
15
16         try{
17             logger.debug("Result : " + obj.divide());
18         }catch(ArithmeticException ex){
19             logger.error("Sorry, something wrong!", ex);
20         }
21
22
23     }
24
25     private int divide(){
26
27         return 10 /0;
28     }
29
30
31 }
32
```
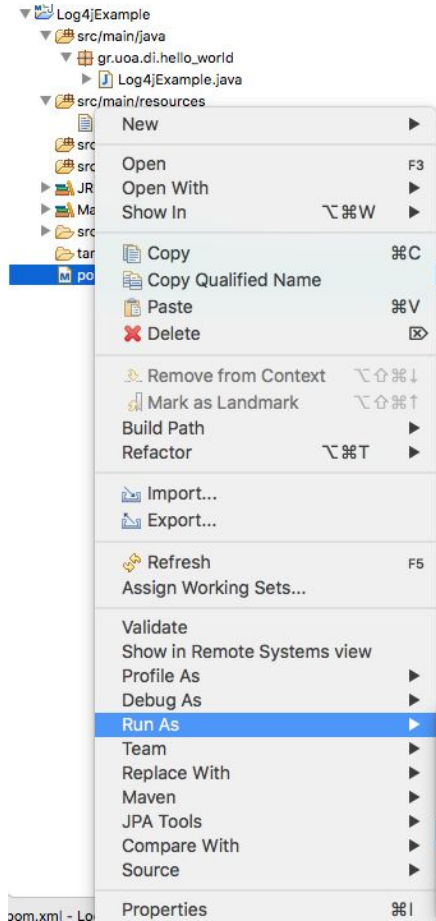
Log4jExample
- src/main/java
  - gr.uoa.di.hello_world
    - Log4jExample.java
- src/main/resources
  - log4j.properties
- src/test/java
- src/test/resources
- JRE System Library [Java SE 7 [1.7.0_75]]
- Maven Dependencies
- src
- target
- pom.xml

POM Maven clean

Cleans up artifacts created by prior builds

POM Maven install

Install the package into the local repository, for use as a dependency in other projects locally

Jar File

Example Output
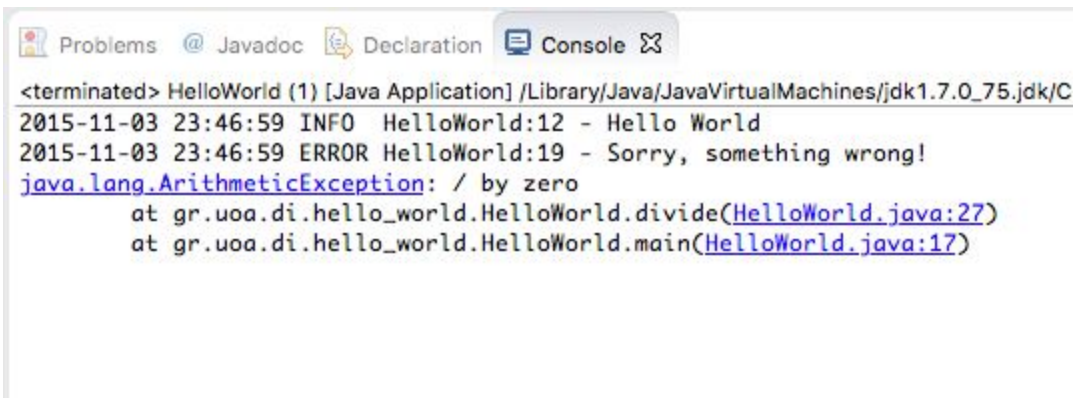


```
Problems  @ Javadoc  Declaration  Console ⌧
<terminated> HelloWorld (1) [Java Application] /Library/Java/JavaVirtualMachines/jdk1.7.0_75.jdk/C
2015-11-03 23:46:59 INFO  HelloWorld:12 - Hello World
2015-11-03 23:46:59 ERROR HelloWorld:19 - Sorry, something wrong!
java.lang.ArithmeticException: / by zero
        at gr.uoa.di.hello_world.HelloWorld.divide(HelloWorld.java:27)
        at gr.uoa.di.hello_world.HelloWorld.main(HelloWorld.java:17)
```