Maven

Maven:   
 Maven is a build management tool which is provided by Apache software foundation and it is completely open source tool.

Advantages:  
1. It gives project structure.  
2. It has POM(Project Object Model).XML.  
 pom.xml has two entries – dependencies and plugins.  
3.It generates reports.  
4.Generate documentation.  
5.It has packaging.

Dependencies:  
 Responsible for downloading third party libraries or jar files like drivers into your project.

Plugins:  
1. Controls the entire project.  
2.Contains different types of configurations on which our project will run.

<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 https://maven.apache.org/xsd/maven-4.0.0.xsd"*>

<modelVersion>4.0.0</modelVersion>

<groupId>MavenSelenium</groupId>

<artifactId>MavenSelenium</artifactId>

<version>0.0.1-SNAPSHOT</version>

<name>MavenSelenium</name>

<dependencies>

<!-- https://mvnrepository.com/artifact/org.seleniumhq.selenium/selenium-java -->

<dependency>

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

<artifactId>selenium-java</artifactId>

<version>4.6.0</version>

</dependency>

</dependencies>

</project>

* Create a maven project
* Maven Folder Structure:

1.src/main/java: It contains the code written by the developers.  
2.src/main/resources: During writing a code, if the developer needs any third party libraries, that are stored in the resources.  
These two folders are used by developers.  
3.src/test/java: It contains the unit test cases.

4.src/test/resources: It contains the libraries that are used on the unit testing.  
5.pom.xml: Project Object Model.

* Maven build life cycle:  
  1. Validate the code.

2. Compile the code.

3. Test the code.  
4. Packaging.

5. Integration testing.

6. Verify.

7. Install local repository.

8. Deploy – install in remote repository to use by the other projects.

* Maven project run:

Check there is a JDK or JRE, and update the project.

Clean.

Test.

Compile.

Install.