

# **Selenium Ecosystem**

November 2016

# Selenium Ecosystem



# Maven

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## Build tool

- Generates deployable artifacts from the source code.
- Preprocessing, compilation, packaging, testing and distribution.

## Convention over Configuration

Systems should "just work"  
Pre-defined directory structures

- Source
- Tests
- Documentation

Based on goals

- compile, test, package, install, deploy, site...

Just learn the conventions!

# Maven Installation

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Make sure JDK is installed

Add "JAVA\_HOME" variable as Windows environment variable

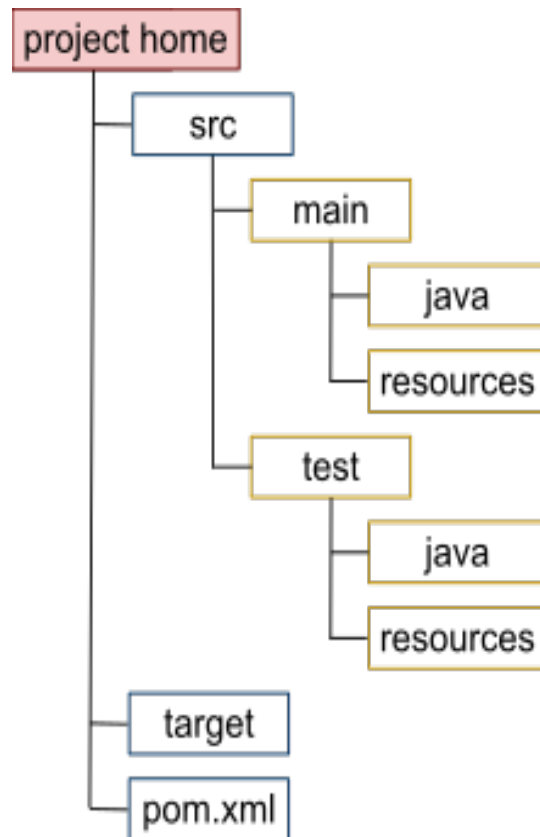
Visit Maven official website, download the Maven zip file, for example :  
apache-maven-3.2.2-bin.zip

Add both M2(Path\_till\_maven\_folder) and M2\_HOME(Path\_till\_maven\_bin\_directory) variables in the Windows environment

Done, to verify it, run mvn -version in the command prompt

# Maven Continued...

## Expected Structure



## Maven - Plug-ins

Maven is a plugin execution framework where every task is actually done by plugins.

Types:

- ✓ Build Plugin - They execute during the build and should be configured in the `<build/>` element of pom.xml.  
Ex: maven-dependency-plugin
- ✓ Reporting Plugin - They execute during the site generation and they should be configured in the `<reporting/>` element of the pom.xml  
Ex: maven-site-plugin

# Maven Plug-ins Continued...



```
<plugins>
  <plugin>
    <groupId>org.apache.maven.plugins</groupId>
    <artifactId>maven-compiler-plugin</artifactId>
    <configuration>
      <source>1.7</source>
      <target>1.7</target>
    </configuration>
  </plugin>
  <plugin>
    <groupId>org.apache.maven.plugins</groupId>
    <artifactId>maven-eclipse-plugin</artifactId>
    <configuration>
      <wtpmanifest>true</wtpmanifest>
      <wtpapplicationxml>true</wtpapplicationxml>
      <wtpversion>2.0</wtpversion>
    </configuration>
  </plugin>
</plugins>
```

# Jenkins

Jenkins is an extensible continuous integration server. This is open-source CI server which is very easy to install and use. Have a great GUI to handle.

Jenkins is:

- Written in Java
- Initially was supposed to be used as a CI tool
- Over 600 plugins to customize Jenkins as per your need
- Over 1000+ public repositories on Github,
- 500+ contributors, strong commit activity
- Free open source and most widely used tool for maintaining continuous integration cycle



# Jenkins Demo

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# Exercise

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- Trigger Tests from Jenkins
- View Test results in Jenkins

# Day 5 - Summary

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Today we learnt :

- ❖ Selenium Ecosystem
- ❖ Jenkins and Maven in Selenium Ecosystem
- ❖ Integration of Jenkins and Selenium
- ❖ Basics of Groovy, Geb & Spock and Cucumber
- ❖ Exercise on Maven: <https://github.com/UHC-SeleniumTraining/Selenium.git> - Day6 Folder