MAVEN ASSIGNMENT
- Submitted by (Kavita Goodwani INT 438)

1. Install Maven   1.Send the screenshot of "mvn -version"

```
C:\Users\Kavita Goodwani\webapp-session-kavita>mvn -version
Apache Maven 3.6.3 (cecedd343002696d0abb50b32b541b8a6ba2883f)
Maven home: C:\Program Files\apache-maven-3.6.3\bin\..
Java version: 1.8.0_261, vendor: Oracle Corporation, runtime: C:\Program Files\Java\jdk1.8.0_261\jre
Default locale: en_IN, platform encoding: Cp1252
OS name: "windows 10", version: "10.0", arch: "amd64", family: "windows"
```

2. Create a sample maven project
   a. Using archetype plugin and generate goal.
   b. Give custom values for groupId, artifactId, version, package and execute "mvn install"
   and "mvn exec:java -Dexec.mainClass=your-fully-qualified-class-name".
   c. Share zip of project and screenshot for "mvn install" and "mvn exec:java" command

```
[INFO] Scanning for projects...
[INFO]
[INFO] ------------------< org.apache.maven:standalone-pom >-------------------
[INFO] Building Maven Stub Project (No POM) 1
[INFO] --------------------------------[ pom ]---------------------------------
[INFO]
[INFO] >>> maven-archetype-plugin:3.2.0:generate (default-cli) > generate-sources @ standalone-pom >>>
[INFO]
[INFO] <<< maven-archetype-plugin:3.2.0:generate (default-cli) < generate-sources @ standalone-pom <<<
[INFO]
[INFO]
[INFO] --- maven-archetype-plugin:3.2.0:generate (default-cli) @ standalone-pom ---
[INFO] Generating project in Batch mode
[INFO] ----------------------------------------------------------------------------
[INFO] Using following parameters for creating project from Old (1.x) Archetype: maven-archetype-quickstart:1.0
[INFO] ----------------------------------------------------------------------------
[INFO] Parameter: basedir, Value: C:\Users\Kavita Goodwani
[INFO] Parameter: package, Value: com.accolite.au
[INFO] Parameter: groupId, Value: com.accolite.au
[INFO] Parameter: artifactId, Value: maven-session-kavita
[INFO] Parameter: packageName, Value: com.accolite.au
[INFO] Parameter: version, Value: 1.0
[INFO] project created from Old (1.x) Archetype in dir: C:\Users\Kavita Goodwani\maven-session-kavita
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  55.924 s
[INFO] Finished at: 2020-07-30T11:55:29+05:30
[INFO] ------------------------------------------------------------------------
```

```
[INFO]
[INFO] ---------------< com.accolite.au:maven-session-kavita >----------------
[INFO] Building maven-session-kavita 1.0
[INFO] --------------------------------[ jar ]---------------------------------
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ maven-session-kavita ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory C:\Users\Kavita Goodwani\maven-session-kavita\src\main\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ maven-session-kavita ---
[INFO] Changes detected - recompiling the module!
[WARNING] File encoding has not been set, using platform encoding Cp1252, i.e. build is platform dependent!
[INFO] Compiling 1 source file to C:\Users\Kavita Goodwani\maven-session-kavita\target\classes
[INFO]
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ maven-session-kavita ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory C:\Users\Kavita Goodwani\maven-session-kavita\src\test\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ maven-session-kavita ---
[INFO] Changes detected - recompiling the module!
[WARNING] File encoding has not been set, using platform encoding Cp1252, i.e. build is platform dependent!
[INFO] Compiling 1 source file to C:\Users\Kavita Goodwani\maven-session-kavita\target\test-classes
[INFO]
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ maven-session-kavita ---
[INFO] Surefire report directory: C:\Users\Kavita Goodwani\maven-session-kavita\target\surefire-reports

-------------------------------------------------------
 T E S T S
-------------------------------------------------------
Running com.accolite.au.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] --- maven-jar-plugin:2.4:jar (default-jar) @ maven-session-kavita ---
[INFO] Building jar: C:\Users\Kavita Goodwani\maven-session-kavita\target\maven-session-kavita-1.0.jar
[INFO]
[INFO] --- maven-install-plugin:2.4:install (default-install) @ maven-session-kavita ---
[INFO] Installing C:\Users\Kavita Goodwani\maven-session-kavita\target\maven-session-kavita-1.0.jar to C:\Users\Kavita Goodwani\.m2\repository\com\accolite\au\maven-session-kavita\1.0\maven-session-kavita-1.0.jar
[INFO] Installing C:\Users\Kavita Goodwani\maven-session-kavita\pom.xml to C:\Users\Kavita Goodwani\.m2\repository\com\accolite\au\maven-session-kavita\1.0\maven-session-kavita-1.0.pom
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  2.311 s
[INFO] Finished at: 2020-07-30T11:58:44+05:30
[INFO] ------------------------------------------------------------------------
```
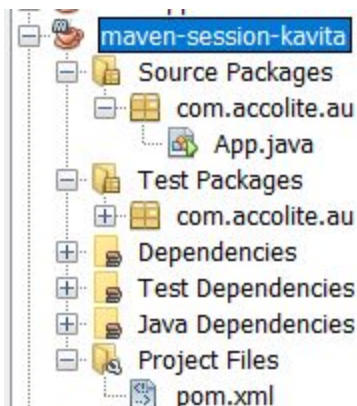
```
C:\Users\Kavita Goodwani\maven-session-kavita>mvn exec:java -Dexec.mainClass=com.accolite.au.App
[INFO] Scanning for projects...
[INFO]
[INFO] ---------------< com.accolite.au:maven-session-kavita >----------------
[INFO] Building maven-session-kavita 1.0
[INFO] --------------------------------[ jar ]---------------------------------
[INFO]
[INFO] --- exec-maven-plugin:3.0.0:java (default-cli) @ maven-session-kavita ---
Hello World!
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  0.723 s
[INFO] Finished at: 2020-07-30T11:59:31+05:30
[INFO] ------------------------------------------------------------------------
```

Directory Structure:

Pom.xml

```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/maven-v4_0_0.xsd">
    <modelVersion>4.0.0</modelVersion>
    <groupId>com.accolite.au</groupId>
    <artifactId>maven-session-kavita</artifactId>
    <packaging>jar</packaging>
    <version>1.0</version>
    <name>maven-session-kavita</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>
</project>
```

3. Create a maven web-app project

 a. Using archetype plugin and generate goal.
 b. Give custom values for groupId, artifactId, version, package and execute "mvn install"
and "mvn exec:java -Dexec.mainClass=your-fully-qualified-class-name".
 c. Share zip of project and screenshot for "mvn install"

4.In the above created sample maven project (Step 2) run "mvn install" again but it
should now skip the execution of tests.
a. Send the screenshot of "mvn install" that should skip the execution of tests.

```
[INFO] Scanning for projects...
[INFO]
[INFO] ------------------< org.apache.maven:standalone-pom >-------------------
[INFO] Building Maven Stub Project (No POM) 1
[INFO] --------------------------------[ pom ]---------------------------------
[INFO]
[INFO] >>> maven-archetype-plugin:3.2.0:generate (default-cli) > generate-sources @ standalone-pom >>>
[INFO]
[INFO] <<< maven-archetype-plugin:3.2.0:generate (default-cli) < generate-sources @ standalone-pom <<<
[INFO]
[INFO]
[INFO] --- maven-archetype-plugin:3.2.0:generate (default-cli) @ standalone-pom ---
[INFO] Generating project in Interactive mode
[INFO] Archetype repository not defined. Using the one from [org.apache.maven.archetypes:maven-archetype-webapp:1.4] found in catalog remote
[INFO] Using property: groupId = com.accolite.au
[INFO] Using property: artifactId = webapp-session-kavita
Define value for property 'version' 1.0-SNAPSHOT: : 1
[INFO] Using property: package = com.accolite.au
Confirm properties configuration:
groupId: com.accolite.au
artifactId: webapp-session-kavita
version: 1
package: com.accolite.au
 Y: : Y
[INFO] ----------------------------------------------------------------------------
[INFO] Using following parameters for creating project from Archetype: maven-archetype-webapp:1.4
[INFO] ----------------------------------------------------------------------------
[INFO] Parameter: groupId, Value: com.accolite.au
[INFO] Parameter: artifactId, Value: webapp-session-kavita
[INFO] Parameter: version, Value: 1
[INFO] Parameter: package, Value: com.accolite.au
[INFO] Parameter: packageInPathFormat, Value: com/accolite/au
[INFO] Parameter: version, Value: 1
[INFO] Parameter: package, Value: com.accolite.au
[INFO] Parameter: groupId, Value: com.accolite.au
[INFO] Parameter: artifactId, Value: webapp-session-kavita
[INFO] Project created from Archetype in dir: C:\Users\Kavita Goodwani\webapp-session-kavita
[INFO] ----------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ----------------------------------------------------------------------------
[INFO] Total time:  02:22 min
[INFO] Finished at: 2020-07-30T12:23:05+05:30
[INFO] ----------------------------------------------------------------------------
```

```
C:\Users\Kavita Goodwani\webapp-session-kavita>mvn install
[INFO] Scanning for projects...
[INFO]
[INFO] ----------------< com.accolite.au:webapp-session-kavita >----------------
[INFO] Building webapp-session-kavita Maven Webapp 1
[INFO] --------------------------------[ war ]---------------------------------
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-resources-plugin/3.0.2/maven-resources-plugin-3.0.2.pom
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-resources-plugin/3.0.2/maven-resources-plugin-3.0.2.pom (7.1 kB at 3.0 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-plugins/30/maven-plugins-30.pom
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-plugins/30/maven-plugins-30.pom (10 kB at 11 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-resources-plugin/3.0.2/maven-resources-plugin-3.0.2.jar
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-resources-plugin/3.0.2/maven-resources-plugin-3.0.2.jar (32 kB at 22 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-compiler-plugin/3.8.0/maven-compiler-plugin-3.8.0.pom
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-compiler-plugin/3.8.0/maven-compiler-plugin-3.8.0.pom (12 kB at 15 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-plugins/32/maven-plugins-32.pom
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-plugins/32/maven-plugins-32.pom (11 kB at 13 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/32/maven-parent-32.pom
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/32/maven-parent-32.pom (43 kB at 28 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/apache/20/apache-20.pom
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/apache/20/apache-20.pom (16 kB at 18 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-compiler-plugin/3.8.0/maven-compiler-plugin-3.8.0.jar
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-compiler-plugin/3.8.0/maven-compiler-plugin-3.8.0.jar (62 kB at 28 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-surefire-plugin/2.22.1/maven-surefire-plugin-2.22.1.pom
```
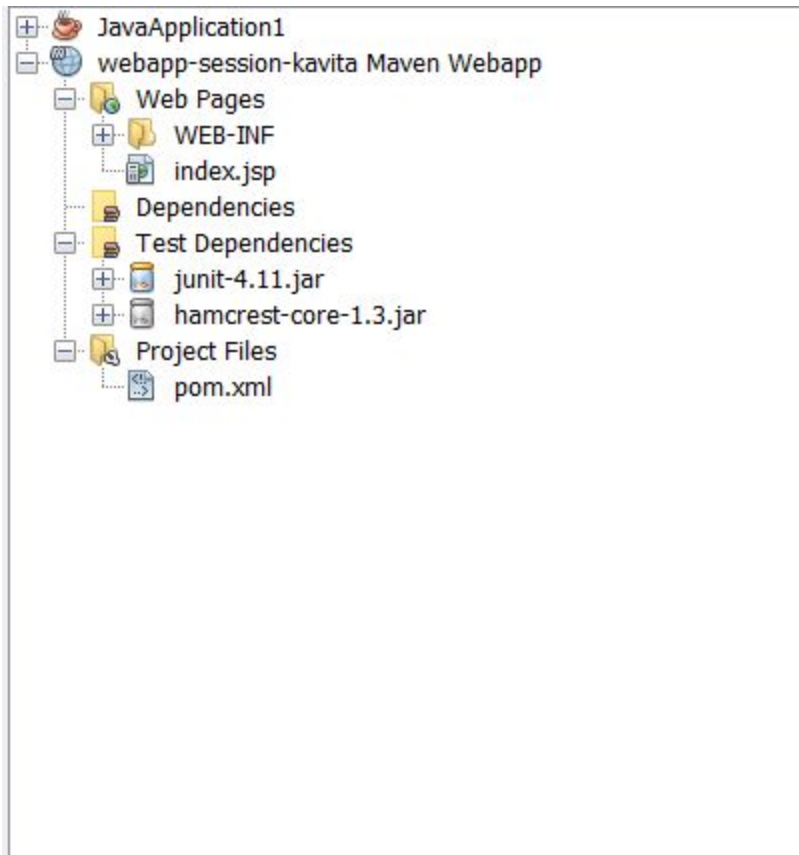
```
Downloading from central: https://repo.maven.apache.org/maven2/commons-codec/commons-codec/1.6/commons-codec-1.6.pom
Downloading from central: https://repo.maven.apache.org/maven2/commons-codec/commons-codec/1.6/commons-codec-1.6.pom (11 kB at 6.1 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/maven-shared-utils/0.4/maven-shared-utils-0.4.pom
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/maven-shared-utils/0.4/maven-shared-utils-0.4.pom (4.0 kB at 5.8 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/3.0.15/plexus-utils-3.0.15.pom
Downloading from central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/3.0.15/plexus-utils-3.0.15.pom (3.1 kB at 6.4 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/commons-codec/commons-codec/1.6/commons-codec-1.6.jar
Downloading from central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/3.0.15/plexus-utils-3.0.15.jar
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/maven-shared-utils/0.4/maven-shared-utils-0.4.jar
Downloading from central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/3.0.15/plexus-utils-3.0.15.jar (239 kB at 172 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/maven-shared-utils/0.4/maven-shared-utils-0.4.jar (155 kB at 89 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/commons-codec/commons-codec/1.6/commons-codec-1.6.jar (233 kB at 104 kB/s)
[INFO] Installing C:\Users\Kavita Goodwani\webapp-session-kavita\target\webapp-session-kavita.war to C:\Users\Kavita Goodwani\.m2\repository\com\accolite\au\webapp-session-kavita\1\webapp-session-kavita-1.war
[INFO] Installing C:\Users\Kavita Goodwani\webapp-session-kavita\pom.xml to C:\Users\Kavita Goodwani\.m2\repository\com\accolite\au\webapp-session-kavita\1\webapp-session-kavita-1.pom
[INFO] ----------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ----------------------------------------------------------------------------
[INFO] Total time:  04:23 min
[INFO] Finished at: 2020-07-30T12:36:12+05:30
[INFO] ----------------------------------------------------------------------------
```

Directory Structure:

Pom.xml

```xml
<?xml version="1.0" encoding="UTF-8"?>

<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.accolite.au</groupId>
    <artifactId>webapp-session-kavita</artifactId>
    <version>1</version>
    <packaging>war</packaging>

    <name>webapp-session-kavita Maven Webapp</name>
    <!-- FIXME change it to the project's website -->
    <url>http://www.example.com</url>

    <properties>
        <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
        <maven.compiler.source>1.7</maven.compiler.source>
        <maven.compiler.target>1.7</maven.compiler.target>
    </properties>

    <dependencies>
        <dependency>
            <groupId>junit</groupId>
            <artifactId>junit</artifactId>
            <version>4.11</version>
            <scope>test</scope>
        </dependency>
    </dependencies>

    <build>
        <finalName>webapp-session-kavita</finalName>
        <pluginManagement><!-- lock down plugins versions to avoid using Maven defaults (may be moved to parent pom) -->
            <plugins>
                <plugin>
                    <artifactId>maven-clean-plugin</artifactId>
                    <version>3.1.0</version>
                </plugin>
                <!-- see http://maven.apache.org/ref/current/maven-core/default-bindings.html#Plugin bindings for war packaging -->
                <plugin>
                    <artifactId>maven-resources-plugin</artifactId>
                    <version>3.0.2</version>
                </plugin>
                <plugin>
                    <artifactId>maven-compiler-plugin</artifactId>
                    <version>3.8.0</version>
                </plugin>
                <plugin>
                    <artifactId>maven-surefire-plugin</artifactId>
                    <version>2.22.1</version>
                </plugin>
                <plugin>
                    <artifactId>maven-war-plugin</artifactId>
                    <version>3.2.2</version>
                </plugin>
                <plugin>
                    <artifactId>maven-install-plugin</artifactId>
                    <version>2.5.2</version>
                </plugin>
                <plugin>
                    <artifactId>maven-deploy-plugin</artifactId>
                    <version>2.8.2</version>
                </plugin>
            </plugins>
        </pluginManagement>
    </build>
</project>
```

Files attached in the Github repository