

## Maven Assignment

- Maven Installation

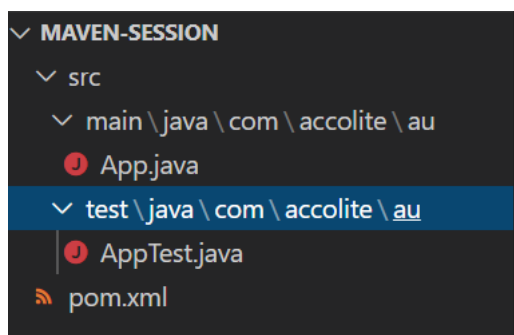
```
C:\Users\Stuti>mvn --v
Apache Maven 3.6.3 (cecedd343002696d0abb50b32b541b8a6ba2883f)
Maven home: C:\Program Files\apache-maven-3.6.3\bin\..
Java version: 14.0.2, vendor: Oracle Corporation, runtime: C:\Program Files\Java\jdk-14.0.2
Default locale: en_IN, platform encoding: Cp1252
OS name: "windows 10", version: "10.0", arch: "amd64", family: "windows"
'cmd' is not recognized as an internal or external command,
operable program or batch file.
```

- Create simple project using maven:

```
mvn archetype:generate -DgroupId=com.accolite.au -DartifactId=maven-session
-DpackageName=com.accolite.au -Dversion=1.0 -DarchetypeArtifactId=maven-archetype-
quickstart -DinteractiveMode=false
```

```
C:\Users\Stuti>mvn archetype:generate -DgroupId=com.accolite.au -DartifactId=maven-session -DpackageName=com.accolite.au -Dversion=1.0 -DarchetypeArtifactId=maven-archetype-quickstart -DinteractiveMode=false
[INFO] Scanning for projects...
[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] <<< maven-archetype-plugin:3.2.0:generate (default-cli) < generate-sources @ standalone-pom <<<
[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\Stuti
[INFO] Parameter: package, Value: com.accolite.au
[INFO] Parameter: groupId, Value: com.accolite.au
[INFO] Parameter: artifactId, Value: maven-session
[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\Stuti\maven-session
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 8.463 s
[INFO] Finished at: 2020-07-29T02:37:27+05:30
```

- Directory



- pom.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</artifactId>
  <packaging>jar</packaging>
  <version>1.0</version>
  <name>maven-session</name>
  <url>http://maven.apache.org</url>
  <properties>
    <maven.compiler.source>1.8</maven.compiler.source>
    <maven.compiler.target>1.8</maven.compiler.target>
  </properties>
  <dependencies>
    <dependency>
      <groupId>junit</groupId>
      <artifactId>junit</artifactId>
      <version>3.8.1</version>
      <scope>test</scope>
    </dependency>
  </dependencies>
</project>
```

- Maven install command: *mvn install*

```
C:\Users\Stuti\AU Maven\maven-session>mvn install
[INFO] Scanning for projects...
[INFO]
[INFO] -----< com.accolite.au:maven-session >-----
[INFO] Building maven-session 1.0
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ maven-session ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory C:\Users\Stuti\AU Maven\maven-session\src\main\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ maven-session ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ maven-session ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory C:\Users\Stuti\AU Maven\maven-session\src\test\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ maven-session ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ maven-session ---
[INFO] Surefire report directory: C:\Users\Stuti\AU Maven\maven-session\target\surefire-reports

-----
T E S T S
-----
Running com.accolite.au.AppTest
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.016 sec

Results :

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

[INFO]
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ maven-session ---
[INFO]
[INFO] --- maven-install-plugin:2.4:install (default-install) @ maven-session ---
[INFO] Installing C:\Users\Stuti\AU Maven\maven-session\target\maven-session-1.0.jar to C:\Users\Stuti\.m2\repository\com\accolite\au\maven-session\1.0\maven-session-1.0.jar
[INFO] Installing C:\Users\Stuti\AU Maven\maven-session\pom.xml to C:\Users\Stuti\.m2\repository\com\accolite\au\maven-session\1.0\maven-session-1.0.pom
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 2.253 s
```

- Run the project: `mvn exec:java -Dexec.mainClass=com.accolite.au.App`

```
C:\Users\Stuti\AU Maven\maven-session>mvn exec:java -Dexec.mainClass=com.accolite.au.App
[INFO] Scanning for projects...
[INFO]
[INFO] -----< com.accolite.au:maven-session >-----
[INFO] Building maven-session 1.0
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- exec-maven-plugin:3.0.0:java (default-cli) @ maven-session ---
Hello World!
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 1.197 s
[INFO] Finished at: 2020-07-29T02:47:22+05:30
[INFO]
'cmd' is not recognized as an internal or external command,
operable program or batch file.
```

Q2 Creating the WebApp mentioning the DarchetypeArtifactId accordingly:

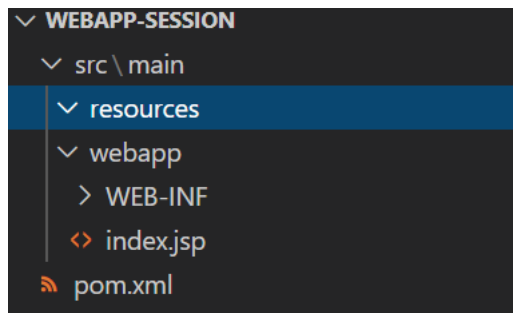
`mvn archetype:generate -DgroupId=com.accolite.au -DartifactId=webapp-session -Dpackage=com.accolite.au -Dversion=1.1 -DarchetypeArtifactId=maven-archetype-webapp -DinteractiveMode=false`

```
C:\Users\Stuti\AU Maven>mvn archetype:generate -DgroupId=com.accolite.au -DartifactId=webapp-session -Dpackage=com.accolite.au -Dversion=1.1 -DarchetypeArtifactId=maven-archetype-webapp -DinteractiveMode=false
[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] --- maven-archetype-plugin:3.2.0:generate (default-cli) @ standalone-pom ---
[INFO] Generating project in Batch mode
[INFO] Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/archetypes/maven-archetype-webapp/1.0/maven-archetype-webapp-1.0.pom (533 B at 1.5 kB/s)
[INFO] Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/archetypes/maven-archetype-webapp/1.0/maven-archetype-webapp-1.0.jar (3.9 kB at 12 kB/s)
[INFO]
[INFO] Using following parameters for creating project from Old (1.x) Archetype: maven-archetype-webapp:1.0
[INFO] Parameter: basedir, Value: C:\Users\Stuti\AU Maven
[INFO] Parameter: package, Value: com.accolite.au
[INFO] Parameter: groupId, Value: com.accolite.au
[INFO] Parameter: artifactId, Value: webapp-session
[INFO] Parameter: packageName, Value: com.accolite.au
[INFO] Parameter: version, Value: 1.1
[INFO] project created from Old (1.x) Archetype in dir: C:\Users\Stuti\AU Maven\webapp-session
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 21.233 s
[INFO] Finished at: 2020-07-29T02:58:55+05:30
[INFO]
'cmd' is not recognized as an internal or external command,
operable program or batch file.
```

*mvn install*

```
[INFO] Packaging webapp
[INFO] Assembling webapp [webapp-session] in [C:\Users\Stuti\AU Maven\webapp-session\target\webapp-session]
[INFO] Processing war project
[INFO] Copying webapp resources [C:\Users\Stuti\AU Maven\webapp-session\src\main\webapp]
[INFO] Webapp assembled in [41 msecs]
[INFO] Building war: C:\Users\Stuti\AU Maven\webapp-session\target\webapp-session.war
[INFO] WEB-INF\web.xml already added, skipping
[INFO]
[INFO] --- maven-install-plugin:2.4:install (default-install) @ webapp-session ---
[INFO] Installing C:\Users\Stuti\AU Maven\webapp-session\target\webapp-session.war to C:\Users\Stuti\AU Maven\repository\com\accollite\au\webapp-session\1.1\webapp-session-1.1.war
[INFO] Installing C:\Users\Stuti\AU Maven\webapp-session\pom.xml to C:\Users\Stuti\AU Maven\repository\com\accollite\au\webapp-session\1.1\webapp-session-1.1.pom
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 7.569 s
[INFO] Finished at: 2020-07-29T03:01:45+05:30
[INFO]
```

## Directory structure



## *pom.xml file*

```
<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>webapp-session</artifactId>
  <packaging>war</packaging>
  <version>1.1</version>
  <name>webapp-session Maven Webapp</name>
  <url>http://maven.apache.org</url>
  <properties>
    <maven.compiler.source>1.8</maven.compiler.source>
    <maven.compiler.target>1.8</maven.compiler.target>
  </properties>
  <dependencies>
    <dependency>
      <groupId>junit</groupId>
      <artifactId>junit</artifactId>
      <version>3.8.1</version>
      <scope>test</scope>
    </dependency>
  </dependencies>
  <build>
    <finalName>webapp-session</finalName>
  </build>
</project>
```