

Spring Au 2021 - February(Batch -2)

Maven Basics - Afternoon

Name - Nitin Kaushik

Github - <https://github.com/nitinkaushik10/SAU-Feb-Batch-2/>

1) mvn install



```
Command Prompt

Microsoft Windows [Version 10.0.18363.1379]
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C:\Users\Nitin>mvn -version
Apache Maven 3.6.3 (cecedd343002696d0abb50b32b541b8a6ba2883f)
Maven home: C:\Users\Nitin\apache-maven-3.6.3\bin\..
Java version: 1.8.0_91, vendor: Oracle Corporation, runtime: C:\Program Files\Java\jdk1.8.0_91\jre
Default locale: en_IN, platform encoding: Cp1252
OS name: "windows 10", version: "10.0", arch: "amd64", family: "windows"

C:\Users\Nitin>
```

2) Using Maven Archetype Web APP Plugin generate a webapp project

```
C:\Users\Nitin\Desktop\java project>mvn archetype:generate -DgroupId=ToolsQA -DartifactId=DemoMavenProject -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]
[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
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/archetypes/maven-archetype-quickstart/1.0/maven-archetype-quickstart-1.0.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/archetypes/maven-archetype-quickstart/1.0/maven-archetype-quickstart-1.0.pom (703 B at 1.5 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/archetypes/maven-archetype-bundles/2/maven-archetype-bundles-2.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/archetypes/maven-archetype-bundles/2/maven-archetype-bundles-2.pom (1.5 kB at 3.5 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/archetype/maven-archetype-parent/1/maven-archetype-parent-1.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/archetype/maven-archetype-parent/1/maven-archetype-parent-1.pom (1.3 kB at 2.6 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/4/maven-parent-4.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/4/maven-parent-4.pom (10.0 kB at 21 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/archetypes/maven-archetype-quickstart/1.0/maven-archetype-quickstart-1.0.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/archetypes/maven-archetype-quickstart/1.0/maven-archetype-quickstart-1.0.jar (4.3 kB at 9.7 kB/s)
[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\Nitin\Desktop\java project
[INFO] Parameter: package, Value: ToolsQA
[INFO] Parameter: groupId, Value: ToolsQA
[INFO] Parameter: artifactId, Value: DemoMavenProject
[INFO] Parameter: packagename, Value: ToolsQA
[INFO] Parameter: version, Value: 1.0-SNAPSHOT
[INFO] project created from Old (1.x) Archetype in dir: C:\Users\Nitin\Desktop\java project\DemoMavenProject
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 10.044 s
[INFO] Finished at: 2021-03-01T23:19:37+05:30
[INFO] -----
C:\Users\Nitin\Desktop\java project>
```

```

C:\Users\Nitin\Desktop\java project>cd DemoMavenProject

C:\Users\Nitin\Desktop\java project\DemoMavenProject>mvn package
[INFO] Scanning for projects...
[INFO]
[INFO] -----< ToolsQA:DemoMavenProject >-----
[INFO] Building DemoMavenProject 1.0-SNAPSHOT
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ DemoMavenProject ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory C:\Users\Nitin\Desktop\java project\DemoMavenProject\src\main\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ DemoMavenProject ---
[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\Nitin\Desktop\java project\DemoMavenProject\target\classes
[INFO]
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ DemoMavenProject ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory C:\Users\Nitin\Desktop\java project\DemoMavenProject\src\test\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ DemoMavenProject ---
[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\Nitin\Desktop\java project\DemoMavenProject\target\test-classes
[INFO]
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ DemoMavenProject ---
[INFO] Surefire report directory: C:\Users\Nitin\Desktop\java project\DemoMavenProject\target\surefire-reports

-----
T E S T S
-----

Running ToolsQA.AppTest
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.005 sec

Results :

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

[INFO]
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ DemoMavenProject ---
[INFO] Building jar: C:\Users\Nitin\Desktop\java project\DemoMavenProject\target\DemoMavenProject-1.0-SNAPSHOT.jar
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----

```

```

C:\Users\Nitin\Desktop\java project\DemoMavenProject\target>java -cp DemoMavenProject-1.0-SNAPSHOT.jar ToolsQA.App
Hello World!

C:\Users\Nitin\Desktop\java project\DemoMavenProject\target>

```

3) Read about servlets and tomcat

a) Create your own servlet

b) Run it using maven tomcat plugin

```
<dependencies>
  <dependency>
    <groupId>javax.servlet</groupId>
    <artifactId>javax.servlet-api</artifactId>
    <version>3.1.0</version>
    <scope>provided</scope>
  </dependency>
  <!-- https://mvnrepository.com/artifact/javax.servlet/jsp-api -->
  <dependency>
    <groupId>javax.servlet</groupId>
    <artifactId>jsp-api</artifactId>
    <version>2.0</version>
    <scope>provided</scope>
  </dependency>
</dependencies>
```

```
myproject\App>mvn tomcat7:run
[Q] Scanning for projects...
[Q] -----< com.accolite.au:App >-----
[Q] Building App Maven Webapp 1.0-SNAPSHOT
[Q] -----[ war ]-----
[Q] >>> tomcat7-maven-plugin:2.2:run (default-cli) > process-classes @ App >>>
[Q] --- maven-resources-plugin:2.6:resources (default-resources) @ App ---
[Q] [WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build is platform dependent!
[Q] Copying 0 resource
[Q] --- maven-compiler-plugin:3.1:compile (default-compile) @ App ---
[Q] No sources to compile
[Q] <<< tomcat7-maven-plugin:2.2:run (default-cli) < process-classes @ App <<<
[Q] --- tomcat7-maven-plugin:2.2:run (default-cli) @ App ---
[Q] Running war on http://localhost:8080/
```