**Maven Quiz Paper**

1)What is Maven ? What is your experience with it?

Ans:

Maven is a project management and comprehension tool. It is a build tool. I created web application on maven and this is very effective, like for web application we need to import few external jar but by using maven i don't need to do that maven automatically generate the jar from central repository. that was my simple experience.

2)What are the different tools that you have integrated Maven with?

3)What are the steps that happen before a software projects deployment?

Ans:

1. validate
2. compile
3. test
4. package
5. integration-test
6. verify
7. install

4)What are the Advantages of maven over Ant ?

Ans:

Ant is simply a toolbox whereas Maven is about the application of patterns is order to achieve an infrastructure which displays the characteristics of visibility, reusability, maintainability, and comprehensibility.

5)What does it mean when you say Maven uses Convention over Configuration?

Ans:

that means developers are not create build process by themselves and they do not have to mention each and every configuration details.

6)How do you know the version of mvn you are using?

mvn --version

7)List two most important files in your maven installation?

ans:

1. pom.xml
2. src

8)What is POM? What does it contain? Explain in detail

Ans:

POM (Project Object Model) is fundamental Unit of work in Maven, and it an XML file.

it contains:

1. project dependencies
2. build profiles
3. goals
4. plugins
5. project version
6. developers

9)What is settings.xml ? What does it contain?

10)What is a goal in Maven terminology?

Ans:

A goal represents a specific task which contributes to the building and managing of a project. It may be bound to zero of more build phrases. A goal not bound to any build phase could be expected outside of the build lifecycle by direct invocation.

11)Explain what the following commands will do?

mvn clean: Cleans up artifacts created by prior builds, its actually deletes the target file.

mvn test: test the compiled source code using a suitable unit testing framework. these tests should not require the code be packaged or deployed.

mvn install: install the package into the local repository, for use as a dependency in other projects locally.

mvn deploy: done in an integration or release environment, copies the final package to the remote repository for sharing with other developers and projects.

12)What are the most important phases of a Maven Build Lifecycle?

Ans:

1. validate
2. compile
3. test
4. package
5. install
6. deploy

13)What are Maven Profiles ? How do you use a specific profile?

Ans:

Profiles are specified using a subset of the elements available in the POM itself.

14) What are Maven Plugins? List a few important maven plugins that you used?

(Must talk about maven release plugin)

Ans:

1. Build plugins
2. Reporting plugins

use of Maven plugins:

1. create jare file
2. create war file
3. compile code file
4. unit test of code
5. create project documentation
6. create project reports

15)How do you use plugins in Maven?

16)What are dependencies in maven? How are they declared? How is transitive dependencies managed in Maven?

Ans:

Maven dependencies management using concept of repositories like Local, Central, Remote. They declared like:

<dependencies>

<dependency>

<groupId>junit</groupId>

<artifactId>junit</artifactId>

<version>3.8.1</version>

<scope>test</scope>

</dependency>

</dependencies>

transitive dependencies managed in Maven like an example project B can include A as a dependency in its dependency in its dependency management section and directly control which version of A is to be used when it is ever referenced.

17)What is difference between Dependency Management and Plugin Management in maven?

18)how do you create properties in a maven pom ?

Ans:

To reference a property defined in pom.xml, the property name uses the names of the XML elements that define the value, with “pom” being allowed as an alias for the project (root) element.

so $(pom.name) refers ti the name if the project, $(pom.version) refers to the version of the project, $(pom.build.finalName) refers to the final name of the file created when the build project is packaged.

19)How would you if a given pom is parent pom or a child pom ?

20)How would you use modules in maven? When do you create a module for your project?

21)What is the order of inheritence between following files:

settings file

company pom

project pom

child/ module pom

22)What is the difference between the aggregation and inheritence in Maven?

23) In your current/previous project, how did you guys manage application version strings ?

Talk about what mV versions:set -Dnewversion=X.X.X.X and maven release plugin