Maven

1. What is maven?

Maven is a build creation and build testing tool

2. Why developer use maven?

Used to test the unit testing on build bcoz modification , addition or deletion of a code will affect the build

3. why we need to use maven in automation?

Used to check the integration in framework bcoz addition and deletion fo code

4. Why devops use maven?

Used to create a build and install a build

Advantages:-

1. Used to check the integration between the modules

2. It handles the dependency jar

3. It will provide ready framework structure

4. It will support jenkin configuration

5. It support maven parameters

6. It support maven profiling( used to invoke specific testng.xml file)

7. we can execute testscripts in command line without using eclipse

8. It will check the compliation issues

Maven:-

1. Eclipse (maven eclipse plugin)

2. Maven command line plugin(Explicitly install this plugin)

https://downloads.apache.org/maven/maven-3/3.8.1/binaries/apache-maven-3.8.1-bin.zip

Maven life cycle:-

1. mvn clean:- delete the target folder and remove the reports

2. mvn validate:- validate the pom.xml file and download missing dependencies

3. mvn compile:- check the complialtion issue between the module

4. mvn test:- Used to exceute the test script

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mvn install

mvn package

mvn deploy

mvn verify

Installation of maven command line plugin

1. Extract zip file

2. Copy the bin directory

3. set user variable and variable path

Advantage of maven parameter?

used to give pass the common data required for test through command line

mvn test -Duri=https://reqres.in/

Api.properties

uri=https://api-prod-env.com

private String URI=System.getProperty("uri");

given()

.baseUri(URI)

.when()

.get(/project)

.log().all();

Use of maven profiling?

In a project we will have different xml file for eg: SmokeTest, Resgression,Cross browser etc.. and if we maintain a single surefire plugin again and again we do change the name xml file so in order to overcome this we go for profiling

cmd> mvn test -P profileId

<profiles>

<profile>

<id>SmokeTest</id>

<build>

<plugins>

<plugin>

<groupId>org.apache.maven.plugins</groupId>

<artifactId>maven-surefire-plugin</artifactId>

<version>3.0.0-M5</version>

<configuration>

<suiteXmlFiles>

<suiteXmlFile>testng.xml</suiteXmlFile>

</suiteXmlFiles>

</configuration>

</plugin>

</plugins>

</build>

</profile>

<profile>

<id>RegressionTest</id>

<build>

<plugins>

<plugin>

<groupId>org.apache.maven.plugins</groupId>

<artifactId>maven-surefire-plugin</artifactId>

<version>3.0.0-M5</version>

<configuration>

<suiteXmlFiles>

<suiteXmlFile>Parameter\_testng.xml</suiteXmlFile>

</suiteXmlFiles>

</configuration>

</plugin>

</plugins>

</build>

</profile>

</profiles>

How to exceute a specific class through command line?

1/1000Test script

Written a new class by you

mvn test -Dtest=packageName.className

How to execute a specific method inside a class?

mvn test -Dtest=packageName.ClassName#methodName