**What is TestNG?**

TestNG is a Testing framework for Java programming language.

We can run only a set of Test cases.

We can run the prerequisites & post before running the Test cases.

We can control the Execution of Test cases.

We can Run multiple test cases in a single class.

We can run multiple test cases based on their functionality in a single run

**Multiple Test cases in a single class**

**package** Practise;

**import** org.testng.annotations.Test;

**public** **class** day1 {

@Test // 1st Test case (Method)

**public** **void** Demo()

{

System.***out***.println("Rathan Rajiv Singh");

}

@Test // 2nd Test case (Method)

**public** **void** SecondDemo()

{

System.***out***.println("Jack Singh Dharma");

}

@Test // 3rd Test case (Method)

**public** **void** ThirdDemo()

{

System.***out***.println("The King");

}

}

**What is Test Suite?**

In TestNG, a **‘TestSuite’** is a collection of tests that are grouped together to be executed as a single entity. A suite can contain multiple test classes, test methods, and configurations. It is defined using an XML file, typically named **‘testng.xml’**, which specifies the details of the tests to be run and their configuration settings.

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name=*"Practise"*>

<test thread-count=*"5"* name=*"Test"*>

<classes>

<class name=*"Practise.day1"*/>

<class name=*"Practise.day2"*/>

</classes>

</test>

</suite>

Exclude tag is used to remove particular method in a class while running the Test cases (Method in a class).

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name=*"Practise"*>

<test thread-count=*"5"* name=*"Test"*>

<classes>

<class name=*"Practise.day1"*/>

<class name=*"Practise.day2"*/>

</classes>

</test>

<test thread-count=*"5"* name=*"name"*>

<classes>

<class name=*"Practise.day1"*/>

<methods>

<include name=*"Demo"*/>

</methods>

</classes>

</test>

</suite>

Include tag is used to run only particular method in a class while running the Test cases (Method in a class).

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name=*"Practise"*>

<test thread-count=*"5"* name=*"Test"*>

<classes>

<class name=*"Practise.day1"*/>

<class name=*"Practise.day2"*/>

</classes>

</test>

<test thread-count=*"5"* name=*"name"*>

<classes>

<class name=*"Practise.day1"*/>

<methods>

<exclude name=*"Demo"*/>

</methods>

</classes>

</test>

</suite>

This will remove all the Test cases that name starts with “Demo”.

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name=*"Practise"*>

<test thread-count=*"5"* name=*"Test"*>

<classes>

<class name=*"Practise.day1"*/>

<class name=*"Practise.day2"*/>

</classes>

</test>

<test thread-count=*"5"* name=*"name"*>

<classes>

<class name=*"Practise.day1"*/>

<methods>

<exclude name=*"Demo.\*"*/>

</methods>

</classes>

</test>

</suite>

Executing the Test cases in Package level.

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

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name=*"Practise"*>

<test thread-count=*"5"* name=*"Test"*>

<packages>

<package name=*"Practise"*/>

</packages>

</test>

</suite>