**TestNG Framework**

- open source unit test framework

- TDD Test Driven Development

**Purpose**

- design test cases in proper way

- Generate html report

- annotations

- priorities

- dependencies

- grouping (reports will be generated in groups, keyword - groups)

- data provider

*Java testing framework - works only for java*

**Installation**

Download TestNG plugin for eclipse from “<http://beust.com/eclipse/>”

* 1. Go to Help in eclipse.
  2. Add the URL in the “Work with” field - TestNG option will be displayed below.
  3. Check the checkbox and also check last option “Contact \*\*\*\*\*” and click Next & Finish.

**Annotations**

> Executed in below order:

@BeforeSuite @AfterSuite

@BeforeTest @AfterTest

@BeforeClass @AfterClass

@BeforeMethod @AfterMethod

@Test - No of test cases

> Each annotation should be associated with a method

> If there are 2 test cases, it will be executed in the below order:

@BeforeSuite

@BeforeTest

@BeforeClass

@BeforeMethod @Test1 @AfterMethod

@BeforeMethod @Test2 @AfterMethod

@AfterClass

@AfterTest

@AfterSuite

> Can also add priority to execute test cases in priority order

@Test1(priority=1)

@Test2(priority=2)

**Create a testcase**

1. Create a package
2. Create a class - Do not select main method option
3. Run it as TestNG

**TestNG Features**

@Test(dependsOnMethods="xxxxxx")

If the dependent method gets failed, then this test will be skipped

**InvocationCount**

To run the same test case multiple time

@Test(invocationCount=10)

**Assertions**

Assert.assertEquals(actualTitle, "expected title", "message if got failed");

It actual checks with expected title if it got failed then the message will get displayed.

Assert.assertTrue();

In case of true false condition, we can use this.

Ex: to check if logo is present

Public void logo(){

Boolean a = driver.findElement(By.xpath(“xxxxxx”)).isDisplayed();

Assert.assertTrue(a);

Assert.assertEquals(a, true);

}

**To run all classes at a time**

Create a file and name it as .xml

Enter below code and run the file as TestNG Suite

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

<suite name="TestNG">

 <test name="features">

 <classes>

 <class name="TrainingPackage.Test2" />

 <class name="TrainingPackage.TestNGFeatures" />

 <class name="TrainingPackage.InvocationCount" />

 </classes>

 </test>

</suite>