**TestNG:**

**Importance of TestNG:**

You have developed 3 test cases and you can execute these 3 test cases one by one. For example you have 100 test cases and if you have to run all these test cases you can’t run these one by one 100 times. In these cases Test NG is very useful where you can group all these test cases and run them automatically one by one.

TestNG is a test framework which is inspired from Junit and NUnit.

**Installing TestNG in Eclipse:**

The installation instructions are at http://testng.org/doc/download.html.

In Eclipse select Help -> Install New Software

In the work with field enter the url “<http://beust.com/eclipse>” and click on add, it should show TestNG after sometime and click on Next until it is installed. Restart eclipse.

To check if TestNG is installed or not goto Window -> Preferences and check by TestNG

**How to run tests with TestNG?**

All the java programs start execution from main method. In case of TestNG, you don’t need to to have main method. You can create all the programming in different methods and use @Test annotation before the methods.

Also when you execute the test you have to execute it as “Run as TestNG”

Make sure you are importing org.testng.annotations.Test

The method should be prefixed by @Test

Once the test is executed, in the console it will give a neat report of how many test cases executed and how many passed an failed.

Example:

**package** TestNGExamples;

**import** org.openqa.selenium.By;

**import** org.openqa.selenium.WebDriver;

**import** org.openqa.selenium.firefox.FirefoxDriver;

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

**public** **class** TextBox {

@Test

**public** **void** testbox1() **throws** InterruptedException{

System.*setProperty*("webdriver.gecko.driver", "C:\\BrowserDrivers\\geckodriver.exe");

WebDriver driver = **new** FirefoxDriver();

driver.get("file:///D:/Selenium%20Course/Java/index.html");

driver.findElement(By.*id*("firstname")).sendKeys("Subbu");

Thread.*sleep*(2000);

driver.quit();

}

}

In the above example if you see we don’t have any main method. But we have a method which is prefixed by @Test and these annotations make the script as TestNG script. Once you execute, it will produce the following report.

PASSED: testbox1

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Default test

Tests run: 1, Failures: 0, Skips: 0

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Default suite

Total tests run: 1, Failures: 0, Skips: 0

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You can have as many tests as you want which will test the features of the application.