Day 1 :

26-09-2022

Phase 5 :

Testing and deployment

TestNG : unit testing framework

Selenium : Automation testing tool

Overview of AWS : S3 and EC2 instance

Docker

Intro CI and CD tools : Jenkin

Introduction to Kubernetes

Test NG Test NG is an open source testing framework base upon jUnit. Test NG mean next generation. It is a light weighted framework which help to do unit testing as well as automation testing with Selenium tool.

Test NG provided lot of pre defined annotation

Like

@Test

@BeforeMethod

@AfterMethod

@BeforeTest

@AfterTest

@BeforeSuite

@AfterSuite

In TestNG , TestNG class is like a junit test case

In Test NG we have to create the XML file to make the TestNG suite class.

Inside that xml file we provide class Test NG class details.

If we want to create the TestNG project we need take the help maven project and add the dependencies.

Day 2 :

27-09-2022

Testing suite using XML file

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

<suite parallel=*"false"* name=*"Suite"*>

<test name=*"MyTest"*>

<classes>

<class name=*"com.service.HookTestingMethods"*>

<methods>

<exclude name=*"f1"*></exclude>

</methods>

</class>

<class name=*"com.service.SampleTest"*>

<methods>

<include name=*"f1"*></include>

</methods>

</class>

</classes>

</test> <!-- Test -->

</suite> <!-- Suite -->

Testing more than one test function using groups

Using group attribute we can add more than one test function part of same class or different class.

TestNG generate the report by default in the form of html.

Selenium with TestNG

Selenium is an open source web ui automation testing framework .

Automation testing framework

its suite of software consists of Selenium WebDriver, Selenium Grid and Selenium IDE.

We can do testing using Selenium using different language like Java, Python, JS, C# etc.

Selenium WebDriver support by all browser like Chrome, IE, Edge, fire fox etc.

jUnit and TestNG provided set of annotation which help to do the testing with set of assertion methods.

With help of jUnit and TestNG we can do UI Testing with Selenium.

JavaScript testing : Jasmine and Mocha tool is like a junit testing for JavaScript.

Jasmine(JS) 🡪 jUnit(Java)

Mocha(JS) 🡪 TestNG (Java)

Angular testing : jasmine with Karma (Test Runner )

With help of Selenium we can do UI testing doesn’t matter that application develop in any language.

Java developer, Selenium provided lot of classes with help of Jar which help do the testing for UI Application using Java code.

Using Selenium we can load the static as well as dynamic web page and we can read the DOM element (HTML contents) from that web page using different types of selector like id, class, tagName, className etc.

Then we have to depend upon jUnit and TestNG testing to check the tags connect ie actual and expectation.

Selenium Web Driver using Java

Selenium provided pre defined class ie WebElement which contains pre defined methods which help to read the dom elements.

By class which contains static method to access the dom elements.