Phase 5 :

Day 1 : 03-09-2022

jUnit Testing : Phase 3 : jUnit5

Testing and development (devops)

TestNG

Selenium

Docker

CI and CD tool ie Jenkin

Overview of Kubernetes

Overview of AWS : Busket, EBS and EC2.

Test NG : Test NG is a open source testing framework inspired by jUnit and nUnit.

In Test NG ng means next generation. In Text Ng added more features.

Junit is to do unit testing

Test NG mainly use to testing for unit as well as integration testing.

1. Using Test NG we can generate the report in html or any other format.
2. It allow us to use parallel testing.
3. We can run group of test case as well as we can set the priority for the test.

TestNG Hook functions

Mock test with TestNG or jUnit5

Service layer always depends upon DAO layer

Dao layer depends upon resource layer

Resource layer depends upon database or external service.

Service layer want to do the mock or fake or proxy testing for Dao layer.

jMockito is a open source framework which help to provide the mocking mechanism.

Day 2 : 04-09-2022

UI (User Interface)

HTML, CSS, JavaScript,

jQuery

Angular Framework

React JS

Vue JS

Frontend technologies : JSP, html, css and JS

Jasmine : Jasmine is one of the type of open source framework which help to do the testing for JavaScript program.

Jasmine is like unit testing for JavaScript it may be plain JavaScript, typescript , Angular Framework etc.

Karma : Karma is runner for Jasmine framework.

Angular framework with Jasmine and Karma

React JS with JEST testing framework

Node JS + Jasmine or Mocha with Chai tools

Jasmine is like a jUnit

Mocha is like a TestNG

Selenium tool : Selenium is a type of open source automation tool which help to do the testing for UI.

It support for all browser, all os as well as lot of language like Java, Python, C#, Php, Perl etc.

Selenium provide web driver which help to test using Java, C# or python.

Selenium can be used to automation functionality test and can be integrate with other tools like Maven, Gradle, CI/CD ie Jenkin as well as Docker.

DevOps : Git, Maven, Gradle, Jenkin, Docker, Kubernetes, Agile etc

Automation testing tool can access the test data, control the execution of test and compared the actual result against the expected output.

Selenium provided Web Driver features which help to read or access the Web page contents.

Then we have the take the help of jUnit or TestNG API to check actual and expected output.

jUnit and TestNG they provided testsuite, test case and more than one assert method but they can’t load or access web page.

Selenium provided web driver which help to read or access web page content develop in any language.

Selenium with TestNG testing framework for UI testing using Java.

First we write simple Selenium Program to load the web page.