Phase 5 :

Junit Testing

Testing and Deployment using devops life cycle

Test NG Open Source framework for testing java programs.( Unit testing and Integration testing)

Selenium Testing with Test NG Framework (Automation Testing )

Introduction to AWS (EC2, S3 and EBS) etc

Git

Maven or Gradle

Docker Devops

CI and CD tool using Jenkin

Overview of Kubernetes

Phase end project

Testing : Testing is use to find the defects or error or bugs in the application.

Running the program develop in any language in directly we are testing that program.

class Operation {

public int add(int x, int y) {

int sum = x+y;

return sum;

}

}

We are testing java programs without main method also known as testing the programs.

Testing mainly divide into 2 types.

1. Black box testing :

Input ------------------🡪Process ------------------🡪Output

1. White box testing

Input ------------------🡪Process ------------------🡪Output

Unit Testing : Unit testing is a type of white box testing which help to test function functionality working or not properly. Unit is smallest code which work independently. Like in a method or function etc.

To do this type of unit testing

Java use 2 framework

jUnit : junit testing open source framework which help to do unit testing

Test NG (next generation) : Test NG is base upon Junit testing. Light weighted which help to do

Unit testing as well as integration testing.

JavaScript -🡪 Jasmine is an open source framework which help to do unit testing for JavaScript programs.

React JS 🡪 JEST is an third party framework provided by Facebook which help to do the unit testing for React JS programs.

We will do unit testing using Junit

Junit 3.x without annotation

Junit 4.x with annotation

jUnit 5.x with more than third party library and support java8 features with annotation

test case : test case is a type of class which contains more than one test function which help to test function functionality.

test suite : test suite is use to run more than one test case classes.