# Junit:

What is software : The process of testing the code is called Software testing.

It helps to Identify the following

1. Incorrect implementation of the business rules
2. Weak software performance
3. Incorrect results of data searches
4. Incorrect file handling

How many ways we can do software testing?

Manual Testing : A test Engineer create test cases manually and executed it as per the client requirement, this process is called Manual testing, Test Engineer will paly a role of client to find bugs and wrong behavior of the software.

Automation Testing : Testing formed with the help of automation tool like, QTP , load Runner and JMETER etc

# Testing Stages:

* Unit Testing
* Integration Testing
* Smoke
* Functional
* Regression
* Performance

We will focus on Unit Testing,

Unit testing 🡪 Developer check the particular method in the project is working fine or not Instated of integration of complete code and deployment, This type of testing is called Unit testing

Integration Testing🡪 Once we completed with Unit Testing, Developer integrate and deploy code to test end to end , this type of testing is called is Integration testing

# Smoke Testing 🡪 (All screens are accessible or not)

Once these testing completed, Developer send project build to the tester team and they will deploy the build in the environment and first check all the screen redirection happening the project or not this process of testing is called Smoke testing, if there is screen redirection problem, They will send bug report to the developer.

# Functional Testing🡪

After completing Smoke testing, Tester run test cases to check the functionality such testing is called as Functional testing

# Regression Testing🡪

If Tester found any bug during functional testing, they will contact to the developer and developer fix the bug and deliver build to the Tester and Tester will do end to end testing again and also they will check what fix is implemented, is there any impact to other functionality due to new code such process of testing is called Regression Testing

# Performance Testing 🡪

Check the response time of the project, how many users can login at time such type of testing is called performance testing

# Why to do Unit Testing:

Unit testing is used to identify defects early in the software deployment

Proper unit testing done during the development stages to save time and money.

# Junit with Mocking🡪

What is unit testing : The process of testing

What is Junit?: It is open source framework, it is used to perform unit testing in java

Annotations available in the Junit?

@Test : it used to represent unit test method

@Asset:

@beforeClass

@After