Q. What is mean by Testing?

Ans: Testing is a process through which we can ensure to deliver bug free or defect free software or application

Q. Why do we Testing or What is main objective of Testing?

Ans:

> We do test to ensure bug free or defect free software

> The main objective of Testing is to deliver quality product

Types of Testing

There are two types of Testing

1) Manual Testing

2) Automation Testing

Q. What is manual Testing?

Ans: The process of manually reviewing and testing software or application is considered as manual Testing

manual Testing is performed by software developer and tester without any automation tool

Q. What is mean by Automation Testing?

Ans: The process of converting manual test cases to test script by using some tool is known as Automation Testing

Q. When we should go for Automation for Project?

Ans: When the build is stable, to save regression testing time we use Automation

Q. Why Automation?

What are advantages of Automation Testing over the Manual Testing?

1) Automation Testing save time

2) Less error prone as compared to manual Testing

3) Write ones use many time

4) Automation Testing reduce cost to company

5) Automation Testing increases productivity

6) It provides rapid feedback to developer

7) Automated test generates customized defect reports

8) It provides unlimited iteration of test case execution

Web Automation Tool

To test web application, we have different web Automation tools like

1) Selenium

2) Cypress

3) Cucumber

other than above mentioned tools, we have various tools in market

but nowadays Selenium is very popular and demanding

About Selenium

1) It is an open-source functional automation Testing tool.

2) It was originally developed by Jason Huggins in 2004

3) Selenium is not a single tool but it is suite of software/tools

or it is group of software or bunch of software

4) Selenium has following tools/components

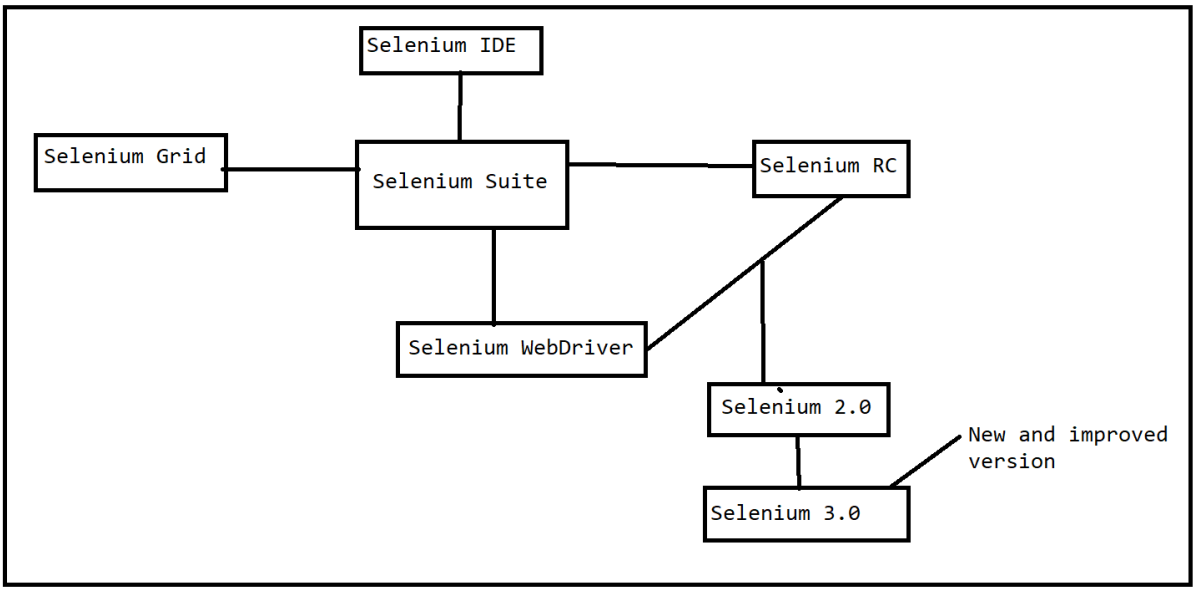
a) Selenium IDE (Selenium Integrated Development Environment)

b) Selenium RC (Selenium Remote Control)

c) Selenium Web-Driver

d) Selenium Grid

Selenium suite Diagram



High level description for each component

a) Selenium IDE

-> It is used to record and run script

-> It is Add-on for Firefox

-> We can install in Firefox only

-> With help of this tool we can convert recorded script into another language

-> The script can be run in another browser with the help of RC and Web-Driver

b) Selenium RC

-> It is also known as Selenium1

-> Selenium RC is a server and launches all browsers but only one browser at a time.

c) Selenium Web-Driver

-> Selenium Web-Driver is advanced version of RC.

d) Selenium Grid

-> Selenium Grid is used for parallel execution.

-> We can launch all the targeted browsers at a time and execute script in parallel

-> Maximum 5 browsers can be launched

Q. Why Selenium?

1) It is open source

2) For different purpose we have different tools in Selenium

3) It supports multiple browsers like Chrome, Safari, IE, Firefox

i.e., Cross browsers Support

4) It supports for multiple programming language like Java, Python Ruby

i.e. Cross programming support

5) It supports multiple operating System like Windows Linux/Unix Mac

i.e. Cross operating system support

6) It supports parallel execution

7) Selenium can be integrated with other tools like Ant Maven TestNG Junit

8) Less number of resources are required as compared with other automation tool

Q. What are the limitations of Selenium?

1) Selenium does not support Desktop Application

2) To use selenium tester must have knowledge of at least one programming language

3) We cannot test Webservice with the help of Selenium

4) It does not have inbuild object repository

5) It does not have inbuild reporting capability so need to depends on Junit or TestNG