Regression testing definition

What is regression testing?

Regression testing is type of testing carried out to ensure that changes made in the fixes or any enhancement changes are not impacting the previously working functionality. It is executed after enhancement or defect fixes in the software or its environment. It can be difficult to determine how much re-testing is needed, especially near the end of the development cycle.

This type of testing typically carried out by testing specialist peoples. The automated testing methods are the best and safe option to carry out the Regression testing. In the market there are many free as well as free (open source) **software testing tools** are available. In the larger software development project the Regression testing is commonly used.

Some of the most commonly used regression testing tools list:

- QTP
- Regression Tester
- Selenium
- Rational Functional Tester
- Watir
- Winrunner
- actiWate
- AdventNet QEngine
- SilkTest
- vTest

It is a verification method & mainly done in system testing but it applicable to all levels of software testing (Unit testing, Integration testing, System testing and Acceptance testing.)

Good Regression tester need to aware of what all features to be focus on changes in the software application.

"The main aim of regression testing to make sure that changed component is not impacting the unchanged part of the component".

Regression-testing

Every time after making changing in the existing working code, a suite of test case have to executed to ensure that changes are not breaking working features and not introduced any bugs in the software. It is essential to prepare such test suite & executed on every newer version of software. Also to automate the regression testing this test suite will help to create a automated testing script.

In the **Software regression testing**, tester has to do only the execution of previously executed test cases & compare the result with previously test execution result. If there is not conflict between results then we can say that the regression testing is passed.

In this type of testing new test cases are not created but previously created test suite is executed to find regression defects.

How to define the scope of regression testing?

The scope of testing is based on the how large fixes or enhancements of features. If this is impacting in the larger area of the application then scope will increase proportionally & it requires the deep testing of application including relevant test cases execution. But to analyze this tester should get the correct inputs from developer to decide the scope.

But if you are testing GUI applications the doing regression testing is very difficult. If the changes made in the GUI then all test cases written will not reused. In case if the project is big then it is very hectic work to update the GUI test cases. You have to write it again different test case for updated GUI once again.

Software testing resources:
To get more learning on how regression test is used in the actual environment, here are some useful resources for learning about regression testing in the **Software Testing Class**:

1) **Regression testing is one step ahead than retesting**: Many of the testers are confused about the terminology. In this class I am explore on difference

between the two terms & how regression and retesting is relate to each other with the **regression testing** examples.

2) How to select effective test cases in Regression testing?

3) Simple steps to for automate the regression testing–

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Source: http://www.softwaretestingclass.com/regression-testing-definition/