








# Automated Testing

*Test automation is the use of software to control the execution of tests and the comparison of actual outcomes to predicted outcomes.*

-  Test automation is a core Agile practice that supports incremental delivery of software.
-  The process of automating programs to execute tests is aimed at reducing manual repetitive testing effort.
-  It is a cost effective and efficient mechanism to continuously execute regression tests enabling teams to respond quickly to changing requirements.
-  Almost all types of testing (e.g., unit, integration, functional/acceptance, performance, regression, etc) can be automated but some level of analysis is required to determine what is worthwhile automating.
-  There are **two principle types of automated testing tools**;
  1. those that use **code-driven tests** and
  2. those that use a **record-and-playback** mechanism to execute the tests.
-  The record-and-playback family are suited for black box testing whereas scripted tools can be used for levels of white box testing as well.
-  One of the main jobs run by a Continuous Integration server will be the automated test suite.

## TIPS

- Using automated tests allow an Agile team to release in small increments as the cost of ensuring quality is kept low.
- Automation alone cannot effectively determine software quality; usability and exploratory testing are two tasks still best done in a manual fashion.
- For *testers*, use the technical skills of developers to assist in building automated suites.
- For *developers*, use tester knowledge to construct tests that are most likely to find defects.



## REFERENCE:

Check out: Wikipedia for an overview of testing automation. <http://en.wikipedia.org/wiki/>.