HP Quality Center (QC), a commercial test management tool by HP, supports various phases of software development life cycle. It is popularly known as HP-ALM Application Life Cycle Management. HP Quality Center is also available as a Software-as-a-Service offering. This tutorial will give you an in-depth understanding on HP Quality Center, its way of usage, project tracking and planning, and other tabs in QC such as Management, Test Plan, Test Lab, defects management and Dashboard view.

* **Unit tests**: A single piece of code (usually an object or a function) is tested, isolated from other pieces
* **Integration tests**: Multiple pieces are tested together, for example testing database access code against a test database
* **Acceptance tests (also called Functional tests)**: Automatic testing of the entire application, for example using a tool like Selenium to automatically run a browser.

TDD or Test-Driven Development is a process for when you write and run your tests.

BDD suggests to test behaviors, so instead of thinking of how the code is implemented, we spend a moment thinking of what the scenario is. Typically you phrase BDD tests in the form of “it should do something”. So when ticking a counter, it should increment count by one.

The important part here is thinking of the scenario, rather than the implementation, can lead you to design a better test.

Unit Testing gives you the what. Test-Driven Development gives you the when. Behavior Driven-Development gives you the how. Although you can use each individually, you should combine them for best results as they complement each other very nicely.

System Integration Testing (SIT) is performed to verify the interactions between the modules of a software system. It deals with the verification of the high and low-level software requirements specified in the Software Requirements Specification/Data and the Software Design Document.

**what is a TEST Automation Framework ?**

A set of guidelines like coding standards , test-data handling , object repository treatment etc... which when followed during automation scripting produce beneficial outcomes like increase code re-usage , higher portability , reduced script maintenance cost etc. Mind you these are just guidelines and not rules; they are not mandatory and you can still script without following the guidelines. But you will miss out on the advantages of having a Framework.