**What is Manual Testing?**

Manual testing is testing of the software where tests are executed manually by a QA Analysts. It is performed to discover bugs in software under development.

In Manual testing, the tester checks all the essential features of the given application or software. In this process, the software testers execute the test cases and generate the test reports without the help of any automation software testing tools.

It is a classical method of all testing types and helps find bugs in software systems. It is generally conducted by an experienced tester to accomplish the software testing process.

**What is Automation Testing?**

In Automated Software Testing, testers write code/test scripts to automate test execution. Testers use appropriate automation tools to develop the test scripts and validate the software. The goal is to complete test execution in a less amount of time.

Automated testing entirely relies on the pre-scripted test which runs automatically to compare actual result with the expected results. This helps the tester to determine whether or not an application performs as expected.

Automated testing allows you to execute repetitive task and regression test without the intervention of manual tester. Even though all processes are performed automatically, automation requires some manual effort to create initial testing scripts.

**Manual Testing Pros and Cons**

**Pros of Manual Testing:**

* Get fast and accurate visual feedback
* It is less expensive as you don't need to spend your budget for the automation tools and process
* Human judgment and intuition always benefit the manual element
* While testing a small change, an automation test would require coding which could be time-consuming. While you could test manually on the fly.

**Cons of Manual Testing:**

* Less reliable testing method because it's conducted the human. Therefore, it is always prone to mistakes & errors.
* The manual testing process can't be recorded, so it is not possible to reuse the manual test.
* In this testing method, certain tasks are difficult to perform manually which may require an additional time of the software testing phase.

**Automated Testing Pros and Cons**

**Pros of automated testing:**

* Automated testing helps you to find more bugs compare to a human tester
* As most of the part of the testing process is automated, you can have a speedy and efficient process
* Automation process can be recorded. This allows you to reuse and execute the same kind of testing operations
* Automated testing is conducted using software tools, so it works without tiring and fatigue unlike humans in manual testing
* It can easily increase productivity because it provides fast & accurate testing result
* Automated testing support various applications
* Testing coverage can be increased because of automation testing tool never forget to check even the smallest unit

**Cons of Automated Testing:**

* Without human element, it's difficult to get insight into visual aspects of your UI like colors, font, sizes, contrast or button sizes.
* The tools to run automation testing can be expensive, which may increase the cost of the testing project.
* Automation testing tool is not yet full proof. Every automation tool has their limitations which reduces the scope of automation.
* Debugging the test script is another major issue in the automated testing. Test maintenance is costly.