What is Manual Testing?

Manual testing is a testing process that is carried out manually in order to find defects without the usage of tools or automation scripting.

A test plan document is prepared that acts as a guide to the testing process in order to have the complete test coverage.

Manual Testing is a type of Software Testing where Testers manually execute test cases without using any automation tools.

Manual testing is the most primitive of all testing types and helps find bugs in the software system.

 Any new application must be manually tested before its testing can be automated. Manual testing requires more effort, but is necessary to check automation feasibility.Manual Testing does not require knowledge of any testing tool.One of the Software Testing Fundamental is "**100% Automation is not possible**".

What is Manual Testing?

Following are the testing techniques that are performed manually during the test life cycle:

* Acceptance Testing
* White Box Testing
* Black Box Testing
* Unit Testing
* System Testing
* Integration Testing

# Comparison between Automation Testing and Manual testing

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| --- | --- |
| **Automation Testing** | **Manual Testing** |
| Automation testing perform the same operation each time | Manual testing is not reliable. Using this method test execution is not accurate all the time. |
| Automation testing is very much helpful regressions in testing where code changes frequently. | To execute the test cases first time using manual testing will be very much useful. But it is not sure that it will catch the regression defects under frequently changing requirements. |
| Automation testing will be useful to execute the set of test cases frequently. | Manual testing will be useful when the test case only needs to run once or twice. |
| After making Automation test suites, fewer testers required to execute the test cases. | To execute the test cases every time tester requires the same amount of time. |
| Automation testing can also be done on different machine with different OS platform combination, concurrently. | Using manual testing,testing on different machine with different OS platform combination is not possible, concurrently. To execute such task different testers are required. |
| Using Automation testing, testers can test complicated application too. | It does not involve in programming task to fetch hidden information. |
| Automation runs test cases significantly faster than human resources. | Manual testing is slower than automation. Running tests manually can be very time consuming. |
| Some time it is not helpful in UI testing | It is very much helpful in UI testing |
| Automation testing is very useful for automating the Build Verification Testing (BVT) & it is not mundane and tiresome. | To execute the Build Verification Testing (BVT) is very mundane and tiresome in manual testing. |
| Initial cost of automation testing is more than manual testing but useful always. | Manual testing requires less cost than automation. |

**Advantages of Manual Testing**

1. Manual Testing is eye ball testing
2. Applications with short life cycles.
3. Applications that have GUIs that constantly changes
4. It requires less time and expense to begin productive manual testing.
5. Automation cannot replace human intuition, inference, and inductive reasoning.
6. Automation Testing cannot change course in the middle of a test run to examine something that had not been previously considered.
7. Manual QA testing can be used in both small and big projects.
8. Easily we can update our test case according to project movement.
9. It is covered in limited cost.
10. Easy to learn for new people who are entered into testing.
11. Manual QA Testing is more reliable than automation (in many cases automation will not cover all cases)

**Disadvantage of Manual Testing**:

1. GUI objects size difference and color combination etc is not easy to find out in manual testing.
2. Load testing and performance testing is not possible in manual testing.
3. Running test manually is very time consuming job.
4. Regression Test cases are time consuming if it is manual testing.