

⊕ Evolution of S/W testing : →

In the early days of the S/W development, S/W testing was considered only a debugging process for removing errors after the development of S/W.

We can divide the evolution of S/W testing into the following phases.

1) Debugging oriented phase : →

This phase is the early period of the testing, at that time testing is unknown program basic are return and test it by the programmer until they are sure that all the bugs were removed. The term used for testing was "check out" or "getting a system to run."

2) Demonstration oriented phase : →

Debugging continued in this phase. In 1953, the purpose of check out is realized that it is not only to run the S/W but also to demonstrate the correctness according to mentioned requirements. Thus, the scope of check out of program increased to program runs to program correctness.

3) Destruction oriented phase : →

Here, changed the view of testing from "testing is to show the absence of error" to "testing is to find more and more errors". The importance of early testing was also realised in this phase.

4) Evaluation oriented phase : →

This phase stresses on the quality of S/W product such that it can be evaluated at every stage of development. If the bugs were identify at any early state of development it was cheaper to debug them as compared to bugs found in implementation or post implementation phases.

5) Prevention Oriented phases : →

The evaluation model stressed on the concept of the bug prevention as compare to early concept of bug detection with the idea of early detection of bugs in earlier phases so that we can prevent the bugs in the implementation in further phases.

6) Process oriented phases : →

In this phase, testing was established as a complete process rather than a single phase (perform after coding) in the software development life cycle (SDLC). The testing phase process starts as soon as the requirements for the project are specified and it runs parallel to SDLC.

* S/W testing 1.0 : →

S/W testing was just considered a single phase to be performed after coding of the S/W in SDLC. No test organization was present. A few testing tools were present but their use was limited due to high cost. There was no quality goal.

* S/W testing 2.0 : →

In this phase, S/W testing gain the importance in SDLC and the concept of early testing also started. Testing was evolving in the direction of planning the test resources many testing tools were also available in this phase.

* S/W testing 3.0 : →

In this phase, S/W testing is being evolved in the form process which is based on the strategic effort which means that there should be a process which gives

is roadmap of overall testing process management is actively involved in this phase. It should be driven by quality goals.

* SDLC :→

