



RESEARCH ARTICLE

An Analysis on Objectives, Importance and Types of Software Testing

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Abstract— Software testing is about testing a feature with varying test data to get a result and then comparing the actual result with expected result. It is not merely finding defects or bugs in the software; it is the completely dedicated discipline of evaluating the quality of the software. Software testing efforts its goals or objectives but it does have certain limitations, still testing can be done more effectively if certain established principles are to be followed when we are doing testing of any software product. The objective of software testing is to identify all defects in a program. However, in practice, even after satisfactory completion of testing phase, it is not possible to guarantee that a program is error free. This is because the input data of most programs is very large and it is not practical to test the program exhaustibly with respect to each value that the input can assume. Even with this obvious limitation of testing process, we cannot underestimate the importance of software testing. Software testing is mainly conducted at three levels: Unit, Integration and System. In other words, software testing is a process which is used to measure the quality of software developed.

Keywords: - Software testing; Objectives; Importance; Unit testing; Integration testing; System testing; Black-box; White-box; Non-functional testing; Limitations

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