Abstract

In this paper, the impact of software testing effort and the efficiency on the modeling of software reliability for optimizing the cost in case of release time policy has been discussed. Another important problem in the software development process is to determine when to stop testing and release the software. If testing is stopped too early, there may be too many defects in the software, resulting in too many failures during the operation and leading to significant losses. If too much time is spend on testing, there may be a high testing cost. Therefore, there must be a tradeoff between testing and releasing. The release time should be determined by the testing process, efforts and cost. The more defects have been detected and removed, the less time will be used for further testing. To eliminate this problem of releasing the software goal programming approach has been discussed.

References

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International Publishers.
- Goel, A. L, Okumoto K. (1979) "Time dependent error detection rate model for software reliability and other performance measures" IEEE Transactions on Reliability; R-28(3): 206-211.
- Khaled, M. S. (2009), What is Hampering the Performance of Software Reliability Models, A Literature review, Proceedings of the International Multi Conference of Engineers and Computer Scientists, Hong Kong, pp. 231-238.
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No. 6, pp. 23-30.

- Suri, P. K. (2009), Simulator for Risk assessment of software project based on performance Symposium on Software Reliability Engineering, Mexico, pp. 146-145.

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