Approaches for Enhancing Reliability of Software Product

Abstract

In modern world, we are highly dependent upon computer for most of our works. As we know, all computers are controlled by software. So, to operate a computer in a proper manner, software reliability is very necessary. Software Reliability is the probability of failure-free software operation for a specified period of time in a specified environment. The high complexity of software is the major contributing factor of Software Reliability problems. Various approaches can be used to improve the reliability of software, however, it is hard to balance development time and budget with software reliability. For good reliability, two approaches have to be used, namely, reactive and proactive approach. This paper provides an overview of Software reliability, hardware reliability, reactive and proactive approaches.

References

2. Walter J. Gutjahr, “Reliability optimization of Redundant Software with Correlated Failure,”
5. Jeff Tian, “Better Reliability assessment And Prediction through Data Clustering”,
10. Jayant Rajgopal, Mainak Mazumdar, “Modular Operational Test Plans for Inferences on Software Reliability Based on a Markov Model”.
19. R.S. Fabry ,“How to design systems in which module can be changed on the fly” In Proc. 2nd Int. Conf Software Engg,1976.

Index Terms

Computer Science                Software Engineering

Keywords
Approaches for Enhancing Reliability of Software Product

Software, Reliability, Hardware, Product