Abstract

This paper discusses about various aspects of software reliability. Software reliability is the probability of the failure free operation of a computer program for a specified period of time in a specified environment. Although Software Reliability is defined as a probabilistic function, and comes with the notion of time, different from traditional Hardware Reliability, Software Reliability is not a direct function of time. Electronic and mechanical parts may become "old" and wear out with time and usage, but software will not rust or wear-out during its life cycle. Reliability measures the probability of failure, not the consequences of those failures. Software Reliability is dynamic and stochastic. This article provides an overview of Software Reliability
measurement and improvement policies then examines different improvement policies for software reliability, however, there is no single model that is universal to all the situations.

References


Index Terms

Computer Science Software Engineering

Keywords
Software Reliability  Stochastic  Fault  Fault Tolerance  Phases Of Software