Abstract

Software systems have gained great significance for most organizations on an operational as well as a strategic level. Failures before delivery or more often changes in existing software systems are stochastic processes and it is important for programmers (or users) to predict reliability of software product they are developing (or using) in order to accept that as business risk. In this paper we have used the Modified Musa Basic Execution Time Model to show how to evaluate a healthcare solution called electronic Nursing Care Management System (eNCMS). We used black box testing to ascertain that the software achieved its basic functions. Five (5) patient records collected from Obafemi Awolowo University Teaching Hospital Complex (OAUTHC) were used during this evaluation and the outcome shows that the system achieved 75% reliability.

References

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**Index Terms**

Computer Science  
Software Engineering

**Keywords**

Black box, reliability, healthcare, software reliability testing, testing.