Abstract

Regression testing is one of the important activities of software development. When a older version of the software is modified into a newer version a set of test cases needs to be run and the both the versions of the test cases are compared. If both the outputs are matched then the modifications does not affect the remaining part of the software. Rerunning the entire test suite of the previous version increases the cost and time of regression testing. In order to overcome test case prioritization is used. Test case prioritization schedules the test cases for the regression testing. Test cases with highest priority are scheduled to be executed first. There are several number of prioritization techniques are available with their own limitations. This paper presents a metric for assessing the rate of fault dependency detection. This proposed algorithm identifies the faults in earlier stages and the effectiveness of the prioritized test cases are compared with the non prioritized ones by APFDD.

References

- Pavan Kumar Chittimalli and Mary Jean Harrold &quot;Recomputing Coverage Information to Assist Regression Testing&quot; IEEE on Software engineering, Vol. 35, No. 4, 2009.
- X. Zhang, C. Nie, B. Xu, and B. Qu, &quot;Test case prioritization based on varying testing requirement priorities and test case costs,&quot; Proc. International Conference on


**Index Terms**

Computer Science Software Engineering

**Keywords**

Software Engineering Software Testing Regression Testing Test Cases Test Case Prioritization

Average Percentage of Faults Dependency Detection (APFDD)