Investigation onto the Software Testing Techniques and Tools: An Evaluation and Comparative Analysis

Foundation of Computer Science (FCS), NY, USA

Volume 177
Number 23

Year of Publication: 2019

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10.5120/ijca2019919685

Abstract

Software testing are executed throughout all phases of software development life cycle (SDLC). It is though time consuming, labour intensive and now becoming expensive due to the used of an automated tool system. Errors and defect detection in software are identify using software techniques and tools. These techniques and tools are numerous and to improve on the software quality, there is the need to conduct a testing activity using a suitable technique so as to ascertained a product with an excellent quality features such as being; reliable, secure, efficient etc. In most cases, multiple automated techniques and tools are required to cover all the possible testing state, with the requirement of high skilled expertise, making it professional. The aim of this paper is to investigate on some kind of dynamic testing techniques (white, black and grey box) and an automated tools (load, web and mobile) given their comparative and evaluation analysis based on an established criterion. The conclusion of this investigation, has shown that choosing an appropriate techniques/tools increases test depth, software reliability and as well reduces their execution period with greater flexibility.
References

15. M. Ehmer and F. Khan, "A Comparative Study of White Box, Black Box and Gray Box


Index Terms

Computer Science Software Engineering

Keywords

SDLC, techniques, tools, OSSTAT, PSTAT.