Simplified software inspection process in compliance with international standards

Mishra, D (Mishra, Deepti)[2]; Mishra, A (Mishra, Alok)[1]

Abstract

A significant amount of software is developed all over the world by small and medium size software organizations. These organizations do not have enough infrastructures and resources to implement an austere quality plan. Software inspection is a fundamental component of the software quality assurance process. Formal review methods are rigorous and their implementation is cumbersome for small and medium enterprises. In this paper, we have presented a new simplified inspection process which is easy to implement, requires fewer resource and almost no documentation. Also, people who are conducting this inspection need not be present at the same place during most stages of the inspection process. We have also compared this process with IEEE and NASA standards for software inspection and found that it meets almost 99% of both standards. While there has been much research on inspection, little attention is paid towards compliance with international standards. These results could be used as a basis for further research in software inspection and process towards aligning with international standards. This process has been successfully implemented in a CMM level 3 software development organization which is striving to accomplish higher maturity levels to establish at the international level. (C) 2008 Elsevier B.V. All rights reserved.