Abstract

Current escalating demands on software, software developers to be obliged to generate software that can be altered, which escape from the risk of mortifying the software structural-design of the SDLC phases. Degraded software structural-design is problematic because it makes the system more prone to defects and change requests turn to be costlier. The impacts of change requests to software can be hard to determine. One way to determine these consequences is to artifact the causes and effects caused by change request. A software change artifact allows to assess the effects of a change using different criteria such as causes to apply the change to be requested, change request type and the software module influenced by that changes. Once these artifacts identified then these artifacts can be used to scale the potential impact of the change. Another benefit of defining artifacts of the change-requests are that it allows engineers to develop a common approach to deal with changes that have similar in defined artifacts, rather than addressing each change individually. This paper introduces a mechanism that defines artifacts of the change-request to assist developers in measuring the impact of a software change on the structural-design of the SDLC-phases.
Change Requests Artifacts to Assess Impact on Structural Design of SDLC Phases

References

- B. Lientz and B. Swanson, Software Maintenance Management Addison-Wesley, 1980
- I. Sommerville, Software Engineering. 7th ed: Addison-Wesley, 2004
Change Requests Artifacts to Assess Impact on Structural Design of SDLC Phases


- Bohner, S. A. , and Arnold, R. S. (Eds.), &quot;Software change impact analysis,&quot; Bohner, S. A. and Arnold, R. S., &quot;An introduction to software change impact analysis,&quot; IEEE Computer Society Press, pp. 1-26, 1996.
- Law, J. , and Rothermel, G. , &quot;Whole program path-based dynamic impact analysis,&quot; Int&apos;Conf. on Softw. Eng. ICSE, pp. 308-318, 2003.
- J. Bosch, Design and Use of Software Architectures: Addison Wesley, 2000

Index Terms

Computer Science
Software Engineering

Keywords
Artifact change request SDLC software engineering risk prediction