## Impact Analysis Based on Change Requirement Traceability in Object Oriented Software Systems

Authors : Sunil Tumkur Dakshinamurthy, Mamootil Zachariah Kurian

**Abstract :** Change requirement traceability in object oriented software systems is one of the challenging areas in research. We know that the traces between links of different artifacts are to be automated or semi-automated in the software development life cycle (SDLC). The aim of this paper is discussing and implementing aspects of dynamically linking the artifacts such as requirements, high level design, code and test cases through the Extensible Markup Language (XML) or by dynamically generating Object Oriented (OO) metrics. Also, non-functional requirements (NFR) aspects such as stability, completeness, clarity, validity, feasibility and precision are discussed. We discuss this as a Fifth Taxonomy, which is a system vulnerability concern.

Keywords : artifacts, NFRs, OO metrics, SDLC, XML

Conference Title : ICRE 2017 : International Conference on Requirements Engineering

**Conference Location :** Singapore, Singapore

Conference Dates : January 08-09, 2017