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Abstract

For many years, the software industry has been applying different types of reviews on their requirements documents to identify and remove defects that would otherwise propagate in the development life cycle, leading to rework and extra cost to fix at later phases. An inspection is a review technique known to be efficient at identifying defects but, like any other review technique, it does not guarantee that all defects are found. Requirements documents are also used as input for the measurement of the software size for estimation purposes; when carrying this measurement process, practitioners have often noticed defects in the requirements.

This paper reports on a research project investigating the contribution of the measurers in finding defects in requirements documents. More specifically, this paper describes an experiment where the same requirements document was inspected by a number of inspectors as well as by a number of measurers; the number and types of defects found by both inspectors and measurers are compared and discussed. For this experiment, the measurers used the COSMIC – ISO 19761 to measure the functional size and find defects. Results show significant increase in defects identification when both inspection and functional size measurement are used to find and report defects.

Keywords: Functional requirements, COSMIC, FSM, Functional size measurement, inspection, review.