

Applying evolution programming search based software engineering (SBSE) in selecting the best open source software maintainability metrics

ABSTRACT

The nature of an Open Source Software development paradigm forces individual practitioners and organization to adopt software through trial and error approach. This leads to the problems of coming across software and then abandoning it after realizing its lack of important qualities to suit their requirements or facing negative challenges in maintaining the software. These contributed by lack of recognizing guidelines to lead the practitioners in selecting out of the dozens available metrics, the best metric(s) to measure quality OSS. In this study, the novel results provide the guidelines that lead to the development of metrics model that can select the best metric(s) to predict maintainability of Open Source Software.

Keyword: Open source software; Search base software engineering; Evolutionary programming; Maintainability