Abstract

Code maintenance has been increased when the similar code fragments is reduced in the software systems. Refactoring is a change made to the internal structure of software to make it easier to understand and cheaper to modify without changing its observable behavior based on code, the refactoring mechanism is used to discover the clone detection. The proposed algorithm insists semantic relevance between files, classes and methods towards c# applications. The delayed duplicate detection refactoring technique uses the code analyzer and semantic graph for quickly detect the duplicate files in the application. The implemented clone refactoring technique enhances the Semantic Relevance Entity Detection algorithm which provides better performance and accurate result for unifying the process of clone detection and refactoring.
- Abdulaziz Alkhalid, Mohammad Alshayeb, Sabri Mahmoud, "Software refactoring at the function level using new adaptive K-Nearest Neighbor algorithm", Journal of...


**Index Terms**

Computer Science  
Security

**Keywords**

Refactoring; Code clones; Clone detection; Parsing; Source code fragments; Delayed duplicate detection; Abstract Syntax Tree (AST).