Abstract

Refactoring Aspect-Oriented Programs

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Refactoring is the process of changing a program to improve its internal structure and reusability, without altering the external behavior of the program. It is a disciplined way to clean up code that minimizes the chances of introducing bugs. In this paper, we propose a systemic approach to refactoring aspect-oriented programs. To this end, we first investigate the impact of existing object-oriented refactorings on aspect-oriented programs. We then propose some new aspect-oriented refactoring that are unique to aspect-oriented programs. Finally, we discuss tool support for automatic refactoring of aspect-oriented programs. We use AspectJ, a general-purpose AOP language, to demanstrate our approach, but our approach is general enough to be appliable to other AOP languages.

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