

Abstract

High code complexity in a software (high coupling and low cohesion) is one of the problem in software maintainance and easy to evolve when the requirement is added. There are several ways to reduce the code complexity, one of them is refactoring, that will change the internal structure of the software but it doesn't change the behavior or functionality. Refactoring simplify code structure in the software.

Nowadays, refactoring is used in object oriented programming context. However, this days new programming technique appeared, that is aspect oriented programming. Aspect oriented programming is a method to encapsulate crosscutting concern so it is easier to handle. Crosscutting concern is a function that can't be encapsulated into an object that can make a problem in evolution and software maintainance. Based on result of analysis, implementing refactoring can reduce coupling between modules and increase the functionality value from a module (cohesion).

This final task implement refactoring technique into the aspect oriented programming that adapted from the refactoring of object oriented programming. For the study case, this final task using administration software clinic of obstetric and gynecology UMMI bengkulu.

Key Word : object, aspect, refactoring, crosscutting concern, coupling, cohesion