

Abstract

Maintaining MDB application is very difficult. This application development still uses structural method, so its design is not optimal yet compared to object-oriented method. Designing software in object-oriented is very hard, and designing reusable object-oriented software is even harder. You must find pertinent objects, factor them into classes at the right granularity, define class interfaces and inheritance hierarchies, and establish key relationships among them. The design should be specific to the problem at hand but also general enough to address future problems and requirements.

This final project will redesign and reimplement an application which called MDB using design patterns. The patterns which used are Creational Pattern, Structural Pattern, and Behavioral Pattern. And the interpreter is PHP 5's interpreter.

The conclusions expected from the final project are convert MDB's code maintainable and has high level reusability that easy to change to address future requirements.

Keywords: *Design patterns, reusability, readability*