

Abstract

Software development is a series of computer science activities to create, design, deploy, and support software. During the software development process, there are several challenges and obstacles, such as creating reusable code. In implementing reusable code, professional skills are needed, namely the programmer must know which code fragments are reusable. This is certainly a difficulty for novice programmers. In order for the system to be built to have a reusable code, this research uses a design pattern. For the pattern to be used in this study, it is based on the existing design problems in the baseline application and the process of selecting a design pattern based on six approaches. In this study, using two of the six approaches, namely reviewing the causes of a system to be redesigned and followed by identification of the intent of each pattern. There is one relevant pattern to overcome design problems in baseline applications, namely the Mediator Pattern. The results of this study can be concluded that by implementing the Mediator Pattern can affect code reuse as evidenced by the reusability index value between before and after the application of the pattern there is an increase. In addition, there is also a positive impact that can reduce the level of coupling in a system. However, there is also a negative impact obtained, namely it can increase the level of complexity.

Keywords: *design pattern, code reuse, Mediator Pattern*