Title: Apply Design Patterns to Refactor Software Design

Refactoring software design is a method of changing software design while explicitly preserving its unique design functionalities. Presented approach is to utilize design patterns as the basis for refactoring software design. Comparison of a design solution will be made through C++ programming language examples to exploit this approach. Developing reusable component will be discussed, the paper presents that the construction of such components can diminish the added burden of both refactoring and the use of design patterns.