A study of Design Pattern abstraction method for implementation of Web based Component in the security business domain

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Abstract

It is recognized that the current main paradigm of software technology is building Internet/Intranet based environment and Object Oriented Technology (OOT) for reuse and ease of maintenance of software. And it is said that the vicissitude of information technology is depends on development of software component that enables reuse and ease of maintenance by most staffer working for software development technology. Therefore reusable component development that uses systematic paradigm is necessary.

Component development using OOT should be regarded as not only conventional Object Oriented Programming but also Component-Oriented Programming. The methodology of component modeling is also important in order to use Component-Oriented Programming to build large and complex systems. There is an analysis and design method, UML using Object Oriented methodology for that.

Furthermore, the standardized method to apply Object Oriented Design to programming is design pattern. It is an important tool or method that enables to maximize reuse and modularity, which is the largest merit of Object Oriented method, with UML.

In this paper, we will present Design Pattern abstraction method for implementation of Web based Component, especially for reuse and ease of maintenance of security business application, and will show problems and the solution of them, which arise when we apply Design Pattern to determine component units in the security business domain.