



Assignment 2

1. In the following situation, use a combination of GoF and GoV patterns to achieve the goals stated. Provide a brief discussion on the potential deficiencies of your proposed solution:
 - In a distributed critical system, a number of subsystems interact with each other. The security of the system and its subsystems is of utmost importance, and in order to ensure security, the whole system and each of its subsystems should be protected. It is also necessary to monitor the interactions among the subsystems. Security methods impose a heavy load on system resources and slow down the system; hence, they are not applied at the same level all the time: application of these methods (on the system as a whole, on each subsystem, and on the interactions among subsystems) depends on the desired level of security and the current level of risk. The goal is to design the system so that the desired level of security is provided, while system resources are used sparingly.
2. Study Chapter 4 of the POSA book (available on the course webpage); then, browse through the idioms listed at <http://c2.com/cgi/wiki?JavaIdioms>, and briefly introduce two idioms from the following groups: **"Memory management and reference/value semantics"** and **"Use of interfaces"**. Choose those idioms that you have used in programming without knowing that they are actually idioms.