



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:
 - A distributed system consists of a hierarchy of subsystems (components), in which each high-level subsystem consists of a number of lower-level ones. Classes reside at the bottom level of the hierarchy. At each level, related subsystems/classes interact in a complex manner, and the interaction algorithm varies depending on the states of the subsystems/classes involved. On the other hand, the state of each subsystem depends on the states of its constituents. The goal is to design the system so that coupling is reduced and interaction algorithms can be easily switched at runtime.
2. Study Chapter 4 of the POSA book (available on the course webpage). Then have a look at [this book](#), and briefly introduce two idioms from among Items 15 to 33 (Chapters 4 and 5) that you have used in programming without knowing that they are actually idioms.