Layers

Context

A large system that requires decomposition.
Mix of high-level and low-level concerns
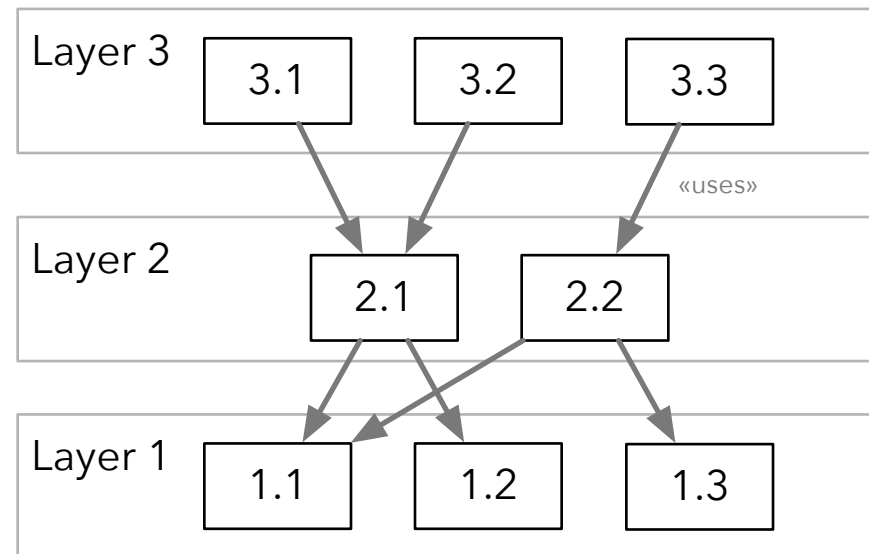Several operations are at the same level of abstraction

Forces

- Late changes should have limited ripple effect
- Interfaces should be stable, may be standardized
- Parts should be interchangeable
- Other systems may reuse lower layers
- Responsibilities should be grouped for comprehension and maintainability
- Further decomposition is needed for team structure and design.

Solution

Therefore, structure your system into an appropriate number of layers and place them "on top" of each other.

– Buschmann, et. al., Pattern Oriented Software Architecture, Vol 1.

Examples: TCP stack, MVC

Related: Microkernel, Virtual Machine

Question: What makes a good or bad implementation of Layers?