Design Pattern Book

Java Design Patterns Reference and Examples

GoF Creational Patterns

Abstract Factory	Sets of methods to make various objects.
Builder	Make and return one object various ways.
Factory Method	Methods to make and return components of one object various ways.
Prototype	Make new objects by cloning the objects which you set as prototypes.
Singleton	A class distributes the only instance of itself.

GoF Structural Patterns

Adapter	A class extends another class, takes in an object, and makes the taken object behave like the extended class.
Bridge	An abstraction and implementation are in different class hierarchies.
Composite	Assemble groups of objects with the same signature.
Decorator	One class takes in another class, both of which extend the same abstract class, and adds functionality.
Facade	One class has a method that performs a complex process calling several other classes.
Flyweight	The reusable and variable parts of a class are broken into two classes to save resources.
Proxy	One class controls the creation of and access to objects in another class.

GoF Behavorial Patterns

Chain Of Responsibility	A method called in one class can move up a hierarchy to find an object that can properly execute the method.
Command	An object encapsulates everything needed to execute a method in another object.
Interpreter	Define a macro language and syntax, parsing input into objects which perform the correct opertaions.
Iterator	One object can traverse the elements of another object.
Mediator	An object distributes communication between two or more objects.
Memento	One object stores another objects state.
Observer	An object notifies other object(s) if it changes.
State	An object appears to change its` class when the class it passes calls through to switches itself for a related class.
Strategy	An object controls which of a family of methods is called. Each method is in its` own class that extends a common base class.
Template	An abstract class defines various methods, and has one non-overridden method which calls the various methods.
Visitor	One or more related classes have the same method, which calls a method specific for themselves in another class.

More Java Design Pattern

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