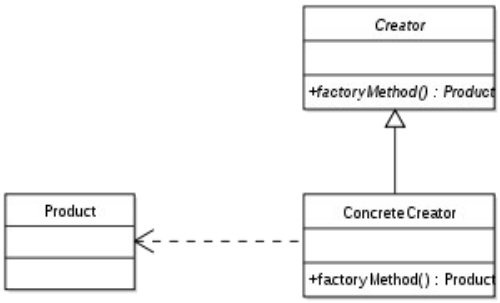
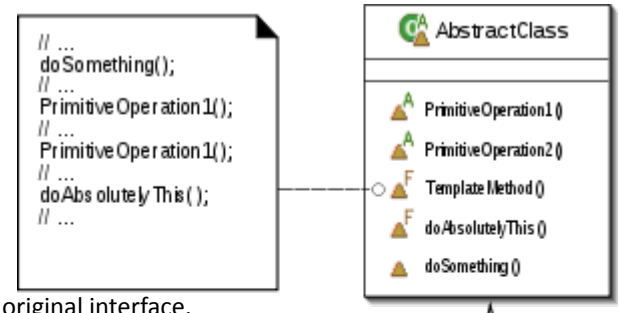
- Factory Method

implement the concept of factories and deals with the problem of creating objects (products) without specifying the exact class of object that will be created.



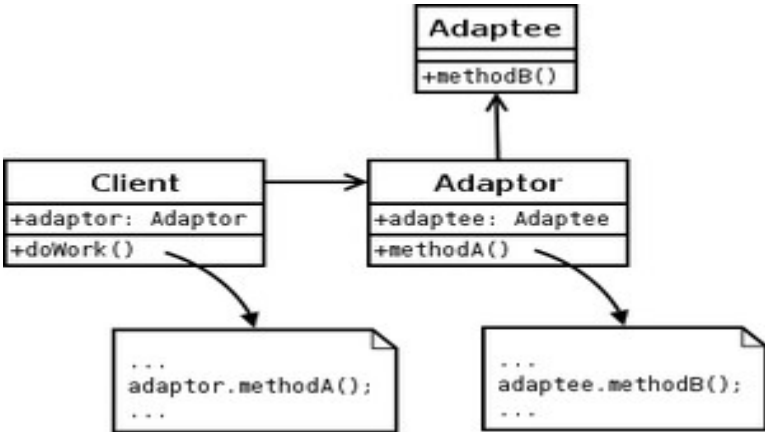
- Template Method

a behavioral design pattern that defines the program skeleton of an algorithm in a method, called template method, which defers some steps to subclasses. It lets one redefine certain steps of an algorithm without changing the algorithm's structure



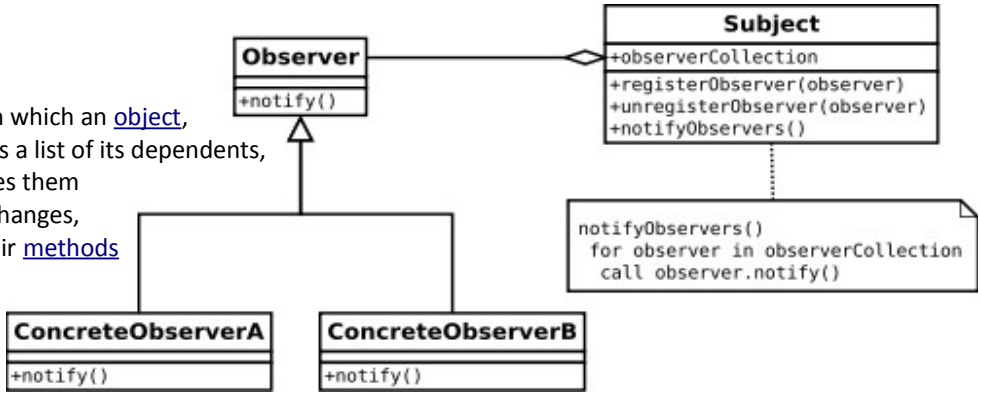
- Adaptor

a design pattern that translates one interface for a class into a compatible interface.[1] An *adapter* allows classes to work together that normally could not because of incompatible interfaces, by providing its interface to clients while using the original interface.



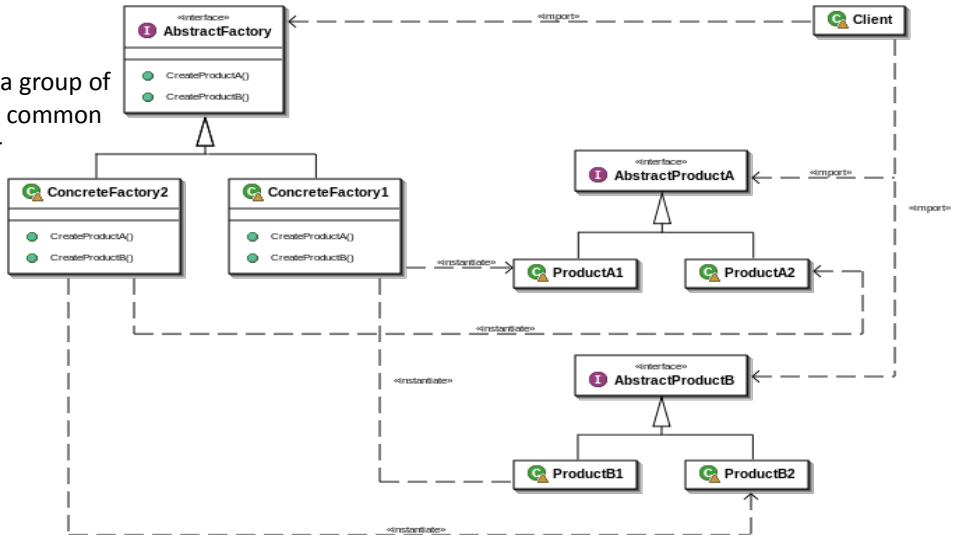
- Observer

a software design pattern in which an object, called the subject, maintains a list of its dependents, called observers, and notifies them automatically of any state changes, usually by calling one of their methods



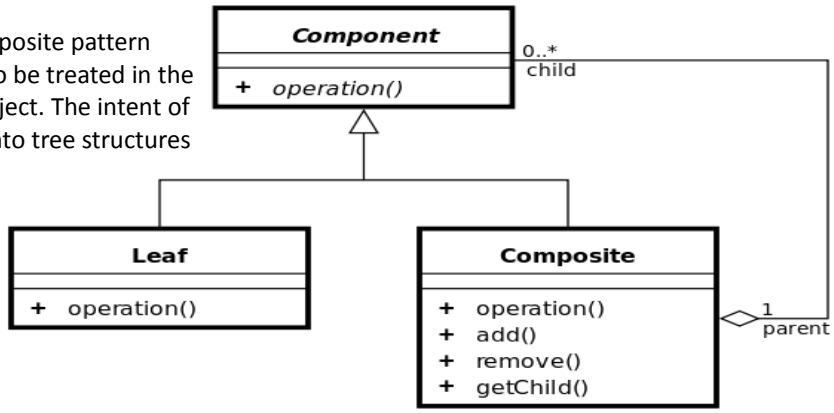
- Abstract Factory

provides a way to encapsulate a group of individual factories that have a common theme without specifying their concrete classes



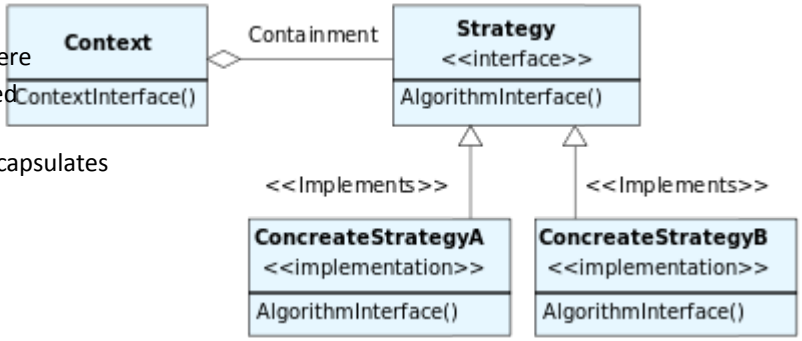
- Composite

a partitioning design pattern. The composite pattern describes that a group of objects are to be treated in the same way as a single instance of an object. The intent of a composite is to "compose" objects into tree structures to represent part-whole hierarchies



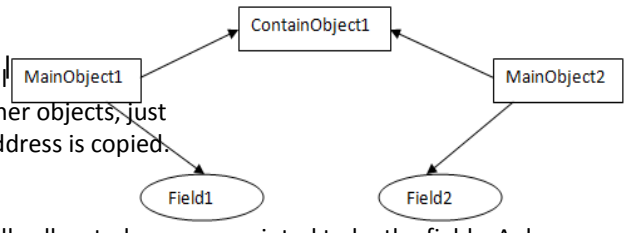
- Strategy

a particular software design pattern, where by an algorithm's behaviour can be selected at runtime. Formally speaking, the strategy pattern defines a family of algorithms, encapsulates each one, and makes them interchangeable



- Shallow Copy

Shallow copy is a bit-wise copy of an object. A new object is created that has an exact copy of the values in the original object. If any of the fields of the object are references to other objects, just the reference addresses are copied i.e., only the memory address is copied.



- Deep Copy

A deep copy copies all fields, and makes copies of dynamically allocated memory pointed to by the fields. A deep copy occurs when an object is copied along with the objects to which it refers.