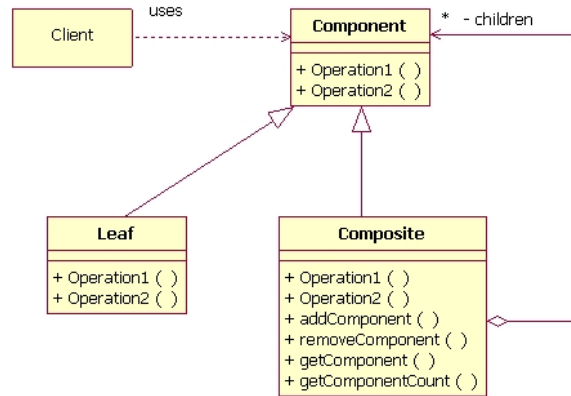


بالنسبة للرسومات فقط يتم حفظ شكل الرسمة

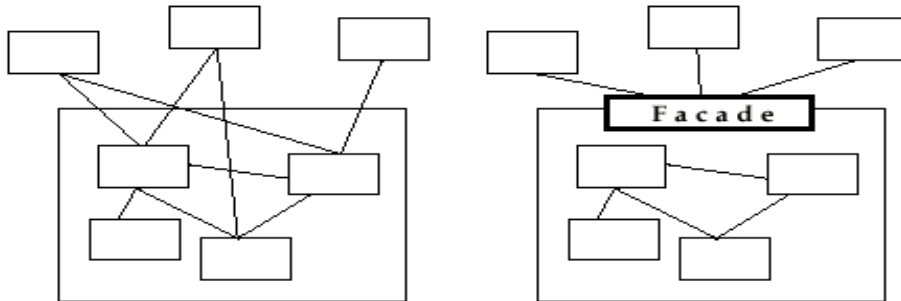
Composite Pattern:

Models tree structures that represent part-whole hierarchies with arbitrary depth and width. The Composite Pattern lets client treat individual objects and compositions of these objects uniformly



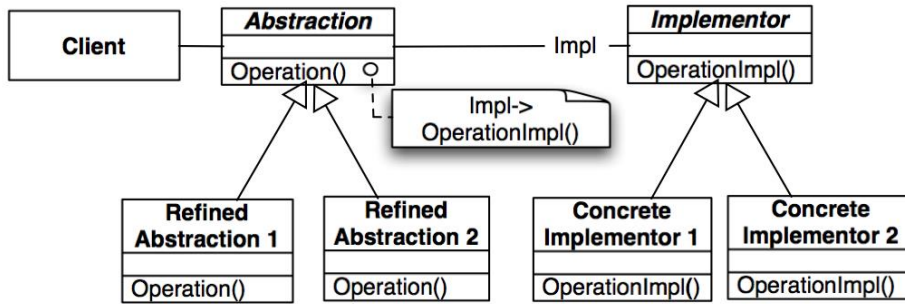
Façade Pattern:

Provides a unified interface to a set of objects in a subsystem. A facade defines a higher-level interface that makes the subsystem easier to use (i.e. it abstracts out the gory details). It allows to provide a closed architecture.

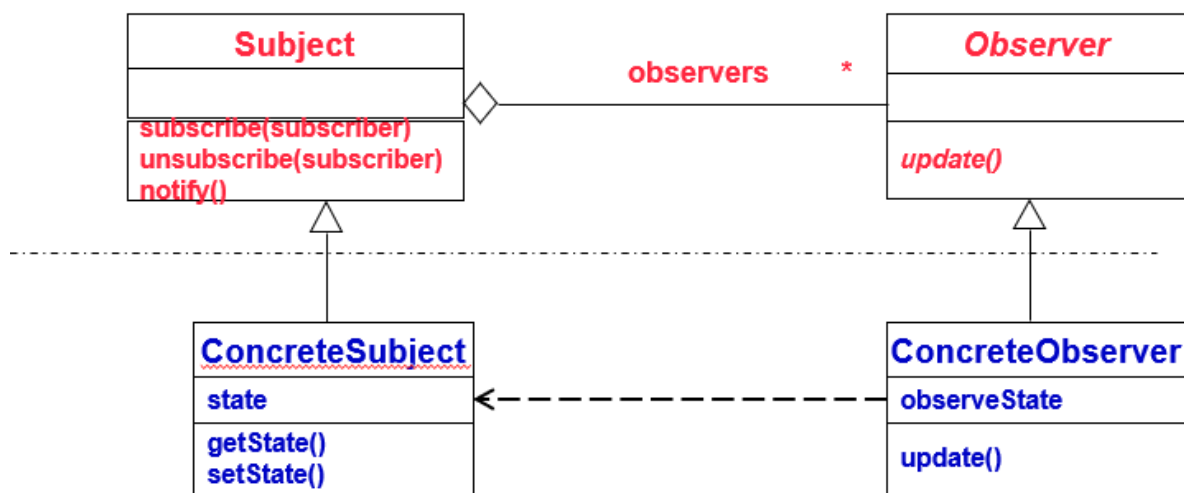


Bridge Pattern (Handle/Body pattern):

Use a bridge to “decouple an abstraction from its implementation so that the two can vary independently”. Allows different implementations of an interface to be decided upon dynamically. Design decision that can be realized any time during the runtime of the system/

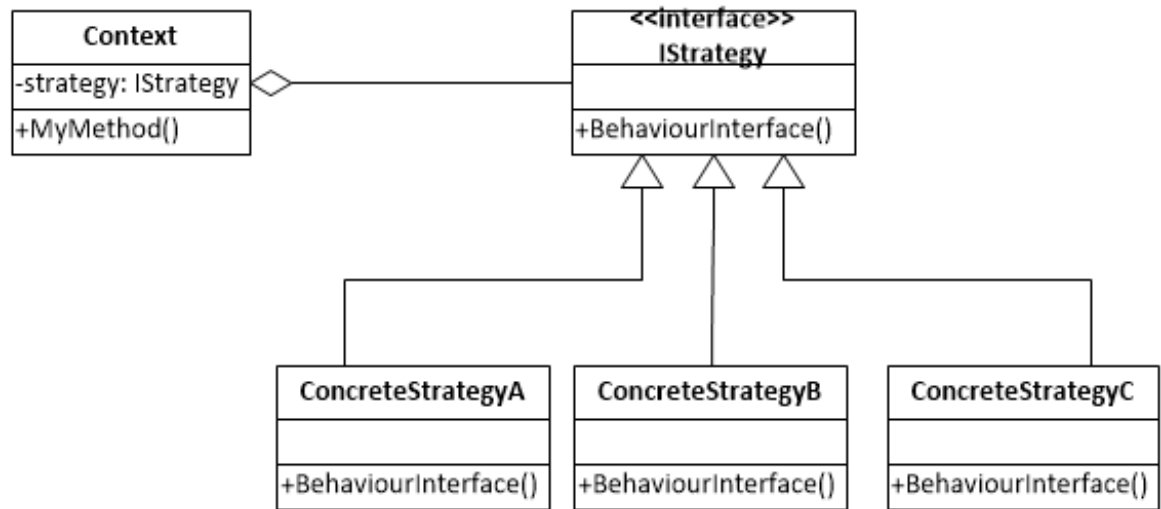


Observer Pattern:



Strategy Pattern:

Define a family of algorithms, encapsulate each one, and make them interchangeable. Strategy lets the algorithm vary independently from clients that use it.



A façade should be offered by all subsystems in a software system who a services.

The adapter design pattern should be used to interface to existing components.

The bridge design pattern should be used to interface to a set of objects.