# Visitor Pattern

## Homework number 5 – Visitor Pattern

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Description of the assignment:

The assignment is implemented in a very simple way. The main idea is clearly shown in the implementation.

First we created the interface <<IComputerPart>> with one single method “Accept” which takes as a parameter one object of type of class which implements <<IComputerPartVisitor>> interface.

After that we created 4 classes that implement the <<IComputerPart>> interface.

Respectively we implemented their “Accept” methods in a proper way.

Next an interface called <<IComputerPartVisitor>> was created with several “Visit” methods each taking as a parameter different objects of classes which implement the <<IComputerPart>> interface.

After that we created one class called “Visitor” which implements this interface.

In the “Main” method of the application we clearly showed the idea of the pattern. After creating an object of type “Computer” and invoking its method “Accept” with a parameter a new object of class Visitor, we clearly see the results printed on the screen.

Some explanations about the pattern:

In Visitor pattern, we use a visitor class which changes the executing algorithm of an element class. By this way, execution algorithm of element can vary as and when visitor varies.

In essence, the visitor allows one to add new virtual functions to a family of classes without modifying the classes themselves; instead, one creates a visitor class that implements all of the appropriate specializations of the virtual function.

Attached there is also a picture of the class diagram. Everything is clearly specified on it.