

## Composition

```
using System;

class Door
{
    protected string color;
    public Door()
    {
        color = "Blue";
    }
    public Door(string color)
    {
        this.color = color;
    }

    public string Color
    {
        get { return color; }
        set { color = value; }
    }
    public void ShowData()
    {
        Console.WriteLine("I am a door, my color is {0}.", color);
    }
}

class House
{
    protected int area;
    protected Door door;
    public House(int area)
    {
        this.area = area;
        door = new Door();
    }
    public int Area
    {
        get { return area; }
        set { area = value; }
    }
    public Door Door
    {
        get { return door; }
        set { door = value; }
    }
    public virtual void ShowData()
    {
        Console.WriteLine("I am a house, my area is {0} m2.", area);
    }
}

class Person
{
    protected string name;
    protected House house;
    public Person() {
```

```

name = "***";
house = new House(100);
}
public Person(string name, House house)
{
    this.name = name;
    this.house = house;
}

public string Name
{
    get { return name; }
    set { name = value; }
}
public House House
{
    get { return house; }
    set { house = value; }
}
public void ShowData()
{
    Console.WriteLine("My name is {0}.", name);
    house.ShowData();
    house.Door.ShowData();
}
}
class TestHouse
{
    static void Main()
    {
        House SmallHouse = new House(60);
        Person myPerson = new Person();
        myPerson.Name = "Jihad";
        myPerson.House = SmallHouse;
        myPerson.ShowData();
        Console.ReadKey();
    }
}

```