

You will practice using Properties and Iterating a list.

The Medal Class

Due: *Demonstration due at the end of the class*

Code the Pet class below.
The class comprise of few properties, a constructor and a ToString() method. All the properties are public readonly.

Medal
Class
Properties
+ «property setter absent» Name : string
+ «property setter absent» TheEvent : string
+ «property setter absent» Color : string
+ «property setter absent» Year : int
+ «property setter absent» IsRecord : bool
Methods
+ «constructor» Medal(name : string , theEvent : string , color : string , year : int , isRecord : bool)
+ ToString() : string

Description of class members

Properties:
All the properties have public getter and the setter is absent making them all readonly properties.
Name – this is a string representing the holder of this object. The getter is public and the setter is absent.
TheEvent – this is a string representing the event of this object. (Event is a reserved word in C#). The getter is public and the setter is absent.
Color – this is a string representing the color of this object (Of course the only colors should be Gold, Silver and Bronze, but the only this can be achieved to is by using Enums which will be covered in the next class). The getter is public and the setter is absent.

If the event is not a record event then the "(R)" should not be present in the output. The ToString() method is the best place to implement this feature.

Test Harness
Insert the following code statements in the **Main()** method of your Program.cs file:

```
//create a medal object
Medal m1 = new Medal("Horace Gwynne", "Boxing", "Gold", 2012, true);
//print the object
Console.WriteLine(m1);
//print only the name of the medal holder
Console.WriteLine(m1.Name);

//create another object
Medal m2 = new Medal("Michael Phelps", "Swimming", "Gold", 2012, false);
//print the updated m2
Console.WriteLine(m2);
```

```
        }, "Bronze", 2012,
false));
medals.Add(new Medal("Brent Hayden", "Swimming", "Bronze", 2012, false));
//prints a numbered list of 16 medals.
Console.WriteLine("\n\nAll 16 medals");

//prints a numbered list of 16 names
Console.WriteLine("\n\nAll 16 names");

//prints a numbered list of 9 gold medals
Console.WriteLine("\n\nAll 9 gold medals");

//prints a numbered list of 9 medals in 2012
Console.WriteLine("\n\nAll 9 medals");

//prints a numbered list of 4 gold medals in 2012
Console.WriteLine("\n\nAll 4 gold medals");

//prints a numbered list of 3 world record medals
Console.WriteLine("\n\nAll 3 records");

//saving all the medal to file Medal.txt
Console.WriteLine("\n\nSaving to file");
```