SWINBURNE UNIVERSITY OF TECHNOLOGY

COS20007 OBJECT ORIENTED PROGRAMMING

Counter Class

PDF generated at 21:26 on Wednesday 16th August, 2023

```csharp
namespace CounterTask
{
    public class MainClass
    {
      private static void PrintCounters(Counter[] Counters)
      {
            foreach (Counter c in Counters)
            {
            Console.WriteLine( "{0} is {1}", c.Name, c.Ticks);
            }

      }
        public static void Main(string[] args)
        {
            Counter[] myCounters = new Counter[3];
            int i;
            myCounters[0] = new Counter("Counter 1");
            myCounters[1] = new Counter("Counter 2");
            myCounters[2] = myCounters[0];

            for (i = 0; i <= 9; i++)
            {
                myCounters[0].Increment();
            }
            for (i = 0;i <= 14; i++)
            {
                myCounters[1].Increment();

            }
            PrintCounters(myCounters);

            myCounters[2].Reset();
            PrintCounters(myCounters);

        }

    }
}
```

```csharp
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace CounterTask
{
    public class Counter
    {
        private int _count;
        private string _name;


        public Counter(string name)
        {
            _name = name;
            _count = 0;

        }
        public void Increment()
        {
            _count++;
        }
        public void Reset()
        {
            _count = 0;
        }
        public string Name
        {
            get
            {
                return _name;
            }
            set
            {
                _name = value;
            }
        }
        public int Ticks
        {
            get
            {
                return _count;
            }
        }



    }
}
```

```
Console.WriteLine( "{0} is {1}", c.Name, c.Ticks);
}

}
0 references
public static void Main(string[] args)
{
    Counter[] myCounters = new Counter[3];
    int i;
    myCounters[0] = new Counter("Counter 1");
    myCounters[1] = new Counter
    myCounters[2] = myCounters

    for (i = 0; i <= 9; i++)
    {
        myCounters[0].Incremen
    }
    for (i = 0;i <= 14; i++)
    {
        myCounters[1].Incremen

    }
    PrintCounters(myCounters);

    myCounters[2].Reset();
    PrintCounters(myCounters);
```

Microsoft Visual Studio Debug

```
Counter 1 is 10
Counter 2 is 15
Counter 1 is 10
Counter 1 is 0
Counter 2 is 15
Counter 1 is 0

H:\C#\CounterTask\bin\Debug\net6.0\CounterTask.exe (process 19352) exited with code 0.
Press any key to close this window . . .
```

No issues found

```
ut from: Build
tarted...
- Build started: Project: CounterTask, Configurat
ing analyzers to speed up the build. You can exec
erTask -> H:\C#\CounterTask\bin\Debug\net6.0\Cour
=== Build: 1 succeeded, 0 failed, 0 up-to-date, 0
=== Build started at 9:23 PM and took 01.314 seco
```