Swinburne University of Technology

COS20007 Object Oriented Programming

Counter Class

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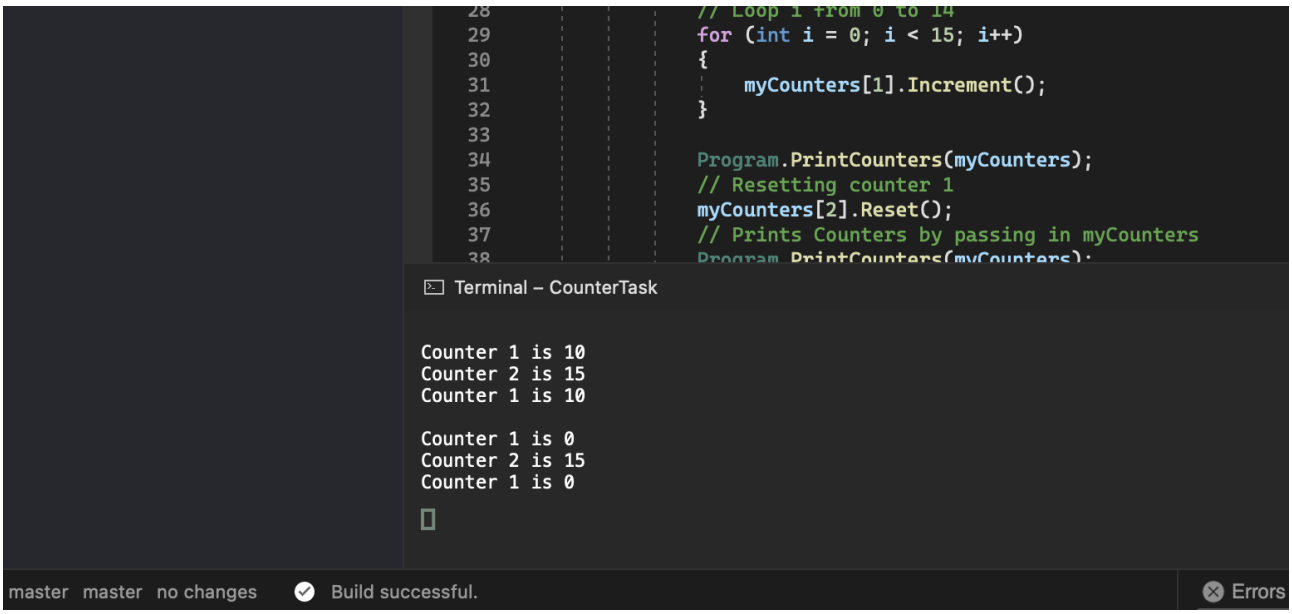
```
using System;
using System.Drawing;
namespace CounterClass
{
    internal class Program
    {
        private static void PrintCounters(Counter[] myCounters)
        {
            foreach (Counter counter in myCounters)
            {
                // The {0} marker means inject the 1st value following the string at
↪   this point.
                Console.WriteLine("{0} is {1}", counter.NameCounter, counter.Tick);
            }
            Console.ReadLine();
        }
        public static void Main(string[] args)
        {
            Counter[] myCounters = new Counter[3];
            myCounters[0] = new Counter("Counter 1");
            myCounters[1] = new Counter("Counter 2");
            myCounters[2] = myCounters[0];

            // Loop i from 0 to 9
            for (int i = 0; i < 10; i++)
            {
                myCounters[0].Increment();
            }
            // Loop i from 0 to 14
            for (int i = 0; i < 15; i++)
            {
                myCounters[1].Increment();
            }

            Program.PrintCounters(myCounters);
            // Resetting counter 1
            myCounters[2].Reset();
            // Prints Counters by passing in myCounters
            Program.PrintCounters(myCounters);
        }
    }
}
```

```
using System;

public class Counter
{
    //the fields enable the counter to know its count and name values
    private int _count;
    private string _name;

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

    public string NameCounter
    {
        //get method is read only
        get
        {
            return _name;
        }
        //set method is write only
        set
        {
            _name = value;
        }
    }

    public int Tick
    {
        get
        {
            return _count;
        }
    }

    public void Increment()
    {
        _count += 1;
    }

    public void Reset()
    {
        _count = 0;
    }
}
```


// Loop 1 from 0 to 14
for (int i = 0; i < 15; i++)
{
myCounters[1].Increment();
}
Program.PrintCounters(myCounters);
// Resetting counter 1
myCounters[2].Reset();
// Prints Counters by passing in myCounters
Terminal – CounterTask
Counter 1 is 10
Counter 2 is 15
Counter 1 is 10
Counter 1 is 0
Counter 2 is 15
Counter 1 is 0
master master no changes
Build successful.
Errors