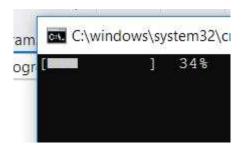


A Console Progress Bar in C#



Easily add progress reporting to your console apps

Download demo - 6.7 KB



Introduction

I write a lot of console apps, often tools and utilities that generate source code and other files. Sometimes, this generation can take some time and it would be nice to be able to report progress to the user.

I've seen a lot of progress bars for Winforms and WPF but not much of anything for the console, and yet it strikes me as something pretty useful.

Using this Mess

You can call <code>ConsoleUtility.WriteProgressBar()</code> to report a progress with a known amount of work to be done, or <code>ConsoleUtility.WriteProgress()</code> to report a progress with an unknown amount of work to be done. The first parameter in any case is the progress. For the open ended progress (<code>WriteProgress()</code>), the first parameter is simply an integer value that gets incremented each time. For the bar, it's a number between 0 and 100, inclusive. The second parameter should be <code>false</code> the first time the method is called, and <code>true</code> for subsequent times. This demo code should demonstrate:

```
ConsoleUtility.WriteProgressBar(0);
for (var i = 0; i <= 100; ++i)
{
    ConsoleUtility.WriteProgressBar(i,true);
    Thread.Sleep(50);
}
Console.WriteLine();
ConsoleUtility.WriteProgress(0);
for (var i = 0; i <= 100; ++i)</pre>
```

```
{
    ConsoleUtility.WriteProgress(i, true);
    Thread.Sleep(50);
}
```

Coding this Mess

The code is short and sweet. The only non-intuitive bits are the use of backspace to overwrite our previous progress and the format string we use to pad the percentage with leading spaces.

```
using System;
namespace CU
   static class ConsoleUtility
       const char _block = '■';
       const string twirl = "-\\|/";
       public static void WriteProgressBar(int percent, bool update = false)
       {
           if(update)
              Console.Write( back);
           Console.Write("[");
           var p = (int)((percent / 10f)+.5f);
           for (var i = 0; i < 10; ++i)
              if (i >= p)
                  Console.Write(' ');
              else
                  Console.Write( block);
           Console.Write("] {0,3:##0}%", percent);
       public static void WriteProgress(int progress, bool update = false)
           if (update)
              Console.Write("\b");
           Console.Write(_twirl[progress % _twirl.Length]);
       }
   }
}
```

This is the code in its entirety, so you don't really even have to download the link. Just copy this if you like.

If you happen to write console utilities, I hope you find this useful.

History

• 6th January, 2020 - Initial submission

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About the Author



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Just a shiny lil monster. Casts spells in C++. Mostly harmless.

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