

# Supporting Material for ".NET and Linux" tech talk

## Code Snippets

### Unguarded Code

```
var registryValue =  
    Registry.GetValue("HKEY_CURRENT_USER", "value", "blarg");  
  
Console.WriteLine(registryValue);
```

This code will raise a type initializer exception if run on a non-Windows system.

It will also generate a compile-time warning: **“warning CA1416: This call site is reachable on all platforms. ‘Registry.GetValue(string, string?, object?)’ is only supported on: ‘windows’”**

### Guarded Code

```
var registryValue = (OperatingSystem.IsWindows())  
    ? Registry.GetValue("HKEY_CURRENT_USER", "value", "blarg")  
    : $"Registry does not exist in {Environment.OSVersion}";  
  
Console.WriteLine(registryValue);
```

This code will run successfully on all platforms. It will not generate a compile-time warning, as the compiler will see that the code is guarded.

## Simple IoT Example

This is a simple code example for blinking an LED on a breakout board attached to a Raspberry Pi.

```
using System;  
using System.Device.Gpio;  
using System.Threading;  
  
Console.WriteLine("Blinking LED. Press Ctrl+C to end.");  
int pin = 18;  
using var controller = new GpioController();  
controller.OpenPin(pin, PinMode.Output);  
bool ledOn = true;  
while (true)  
{  
    controller.Write(pin, ((ledOn) ? PinValue.High : PinValue.Low));
```

```
Thread.Sleep(1000);  
ledOn = !ledOn;  
}
```

Full example is [here](#).

## Links

[Download .NET](#) - Downloads for .NET, including ASP.NET Core.

[Install .NET on Linux Distributions](#)

[.NET Runtime Identifier \(RID\) catalog](#)

[.NET IoT](#) - Develop apps for IoT devices with the .NET IoT Libraries.

[Writing cross platform P/Invoke code](#)

## Language Comparison - Go

[go.dev](#) - Go home page

[Tutorial: Get Started with Go](#)

[Go by Example](#) - Annotated example programs.

[Go GOOS and GOARCH](#) - Platform targeting values.

## Language Comparison - Rust

[Rust Programming Language](#) - Rust home page

[Rust by Example](#) - Collection of runnable example programs illustrating various Rust concepts.

[Rust Cookbook](#) - Collection of simple examples that demonstrate good practices to accomplish common programming tasks.

[Platform Support](#)

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