

RSCG nr 9 : AutoDeconstruct

Info

Nuget : <https://www.nuget.org/packages/AutoDeconstruct>

You can find more details at : <https://github.com/JasonBock/AutoDeconstruct/blob/main/docs/Overview.md>

Author : Jason Bock

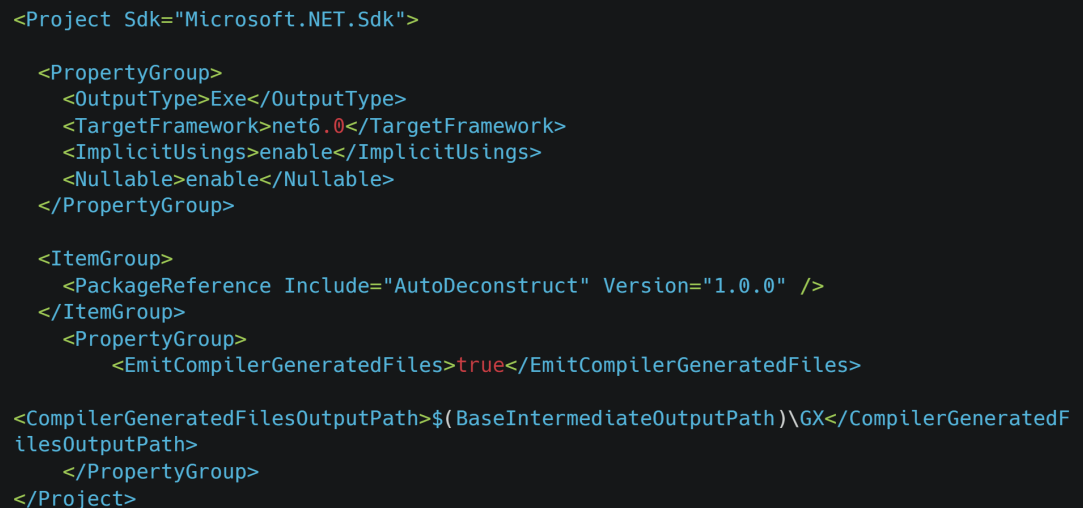
Source : <https://github.com/jasonbock/autodeconstruct>

About

Automatically add deconstruct for all types in an assembly

How to use

Add reference to the AutoDeconstruct in the csproj

A screenshot of a code editor with a dark background and light-colored text. The code is XML for a .csproj file. It includes a Project element with Sdk="Microsoft.NET.Sdk". Inside, there is a PropertyGroup with OutputType="Exe", TargetFramework="net6.0", ImplicitUsings="enable", and Nullable="enable". There is also an ItemGroup containing a PackageReference for "AutoDeconstruct" with version "1.0.0". Another PropertyGroup contains EmitCompilerGeneratedFiles="true" and a CompilerGeneratedFilesOutputPath. The code is as follows:

```
<Project Sdk="Microsoft.NET.Sdk">

  <PropertyGroup>
    <OutputType>Exe</OutputType>
    <TargetFramework>net6.0</TargetFramework>
    <ImplicitUsings>enable</ImplicitUsings>
    <Nullable>enable</Nullable>
  </PropertyGroup>

  <ItemGroup>
    <PackageReference Include="AutoDeconstruct" Version="1.0.0" />
  </ItemGroup>

  <PropertyGroup>
    <EmitCompilerGeneratedFiles>true</EmitCompilerGeneratedFiles>

    <CompilerGeneratedFilesOutputPath>$(BaseIntermediateOutputPath)\GX</CompilerGeneratedFilesOutputPath>
  </PropertyGroup>
</Project>
```

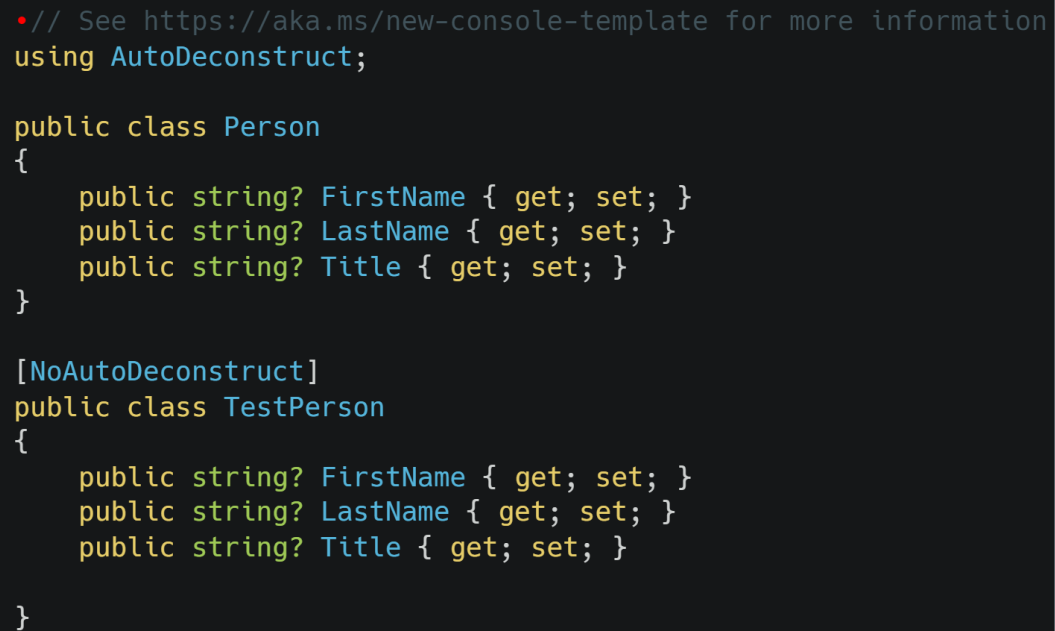
This was for me the starting code

I have **coded** the file Program.cs



```
•// See https://aka.ms/new-console-template for more information
Console.WriteLine("Hello, World!");
var p = new Person();
p.FirstName = "Test";
p.LastName = "Ignat";
var (_, l, _) = p;
Console.WriteLine($"Last name is {l}");
```

I have **coded** the file Person.cs



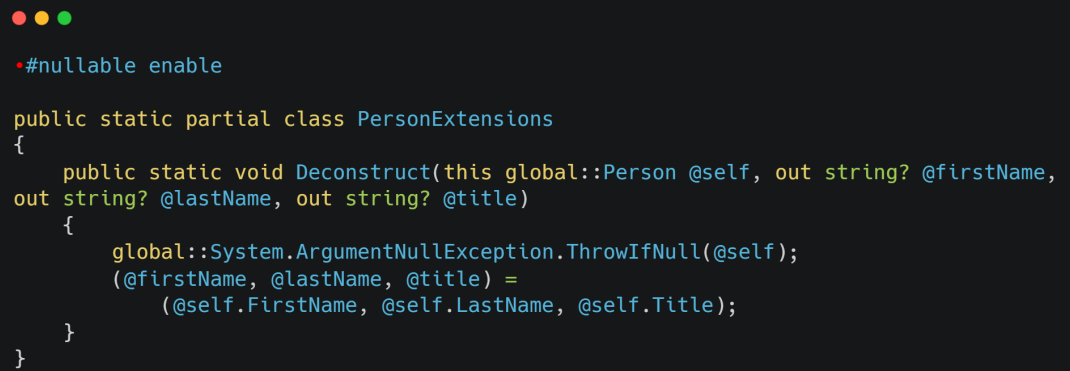
```
•// See https://aka.ms/new-console-template for more information
using AutoDeconstruct;

public class Person
{
    public string? FirstName { get; set; }
    public string? LastName { get; set; }
    public string? Title { get; set; }
}

[NoAutoDeconstruct]
public class TestPerson
{
    public string? FirstName { get; set; }
    public string? LastName { get; set; }
    public string? Title { get; set; }
}
```

And here are the *generated* files

The file *generated* is AutoDeconstruct.g.cs



```
•#nullable enable

public static partial class PersonExtensions
{
    public static void Deconstruct(this global::Person @self, out string? @firstName,
    out string? @lastName, out string? @title)
    {
        global::System.ArgumentNullException.ThrowIfNull(@self);
        (@firstName, @lastName, @title) =
            (@self.FirstName, @self.LastName, @self.Title);
    }
}
```

You can download the code and this page as pdf from https://ignatandrei.github.io/RSCG_Examples/v2/docs/AutoDeconstruct

You can see the whole list at https://ignatandrei.github.io/RSCG_Examples/v2/docs/List-of-RSCG