

T4 Extensions

Devart T4 Editor	https://www.devart.com/t4-editor/
Tangible Engineering T4 Editor	https://t4-editor.tangible-engineering.com/T4-Editor-Visual-T4-Editing.html
Resharper T4 Extension	https://plugins.jetbrains.com/plugin/13469-fo rtea/

Microsoft Documentation on T4

Overview of T4	https://docs.microsoft.com/en-us/visualstudio/modeling/code-generation-and-t4-text-templates?view=vs-2019
Writing a T4 Template	https://docs.microsoft.com/en-us/visualstudio/modeling/writing-a-t4-text-template?view=vs-2019
TextTransform.exe	https://docs.microsoft.com/en-us/visualstudio/modeling/generating-files-with-the-texttransform-utility?view=vs-2019

Template Header

Define Language and Debugging	<code><#@ template debug="false" hostspecific="true" language="C#" #></code>
Define File Extension	<code><#@ output extension=".cs" #></code>
Reference Built In Assembly	<code><#@ assembly name="System.Core" #></code>
Reference External Assembly	<code><#@ assembly name="\$(projectDir)\Assemblies\KellermanSoftware.NET-Code-Generator-Logic.dll" #></code>
Include Another Template	<code><#@ include file="\$(projectDir)\Includes\CSharpHelper.tt" #></code>

Control Blocks

```
<#
  for(int i = 0; i < 4; i++)
  {#>
      This is index <#= i+1 #>
  }#>
```

Videos on T4 Templates

C# Code Generation Using T4 Templates	https://www.youtube.com/watch?v=kGvwOww7KQ8
Code Generation with T4 Templates	https://www.youtube.com/watch?v=XK17iNvJqQs

Text Template Utility Methods

```
WriteLine("Some Text")
Write("Some Text")
PushIndent("t")
ClearIndent()
```

Class Feature Block

```
<#+
    private string GetTemplateDirectory()
    {
        return Path.GetDirectoryName(Host.TemplateFile);
    }
    private void SaveOutput(string outputFileName, string subDirectory= "") {
        string templateDirectory = GetTemplateDirectory();
        if (!string.IsNullOrEmpty(subDirectory)) {
            templateDirectory = Path.Combine(templateDirectory, subDirectory);
        }
        string outputFilePath = Path.Combine(templateDirectory, outputFileName);
        if (!Directory.Exists(templateDirectory)) {
            Directory.CreateDirectory(templateDirectory);
        }
        File.WriteAllText(outputFilePath, this.GenerationEnvironment.ToString());
        this.GenerationEnvironment.Clear();
    }
#>
```



By **Greg Finzer** (GregFinzer)
cheatography.com/gregfinzer/
www.kellermansoftware.com

Published 2nd September, 2020.
 Last updated 2nd September, 2020.
 Page 1 of 1.

Sponsored by **Readable.com**
 Measure your website readability!
<https://readable.com>