# ShaderlabVSCode



# Introduction

ShaderlabVSCode is a Visual Studio Code extension for Unity Shaderlab progamming.

**Documents** | **Forum** | **Email** |**Asset Store**

# Installation

## Running On Mac

1. Import ShaderlabVSCode unity package into Unity Editor.
2. Download Visual Studio Code for macOS.
3. Double-click on the downloaded archive to expand the contents.
4. Drag `Visual Studio Code.app` to the `Applications` folder, making it available in the Launchpad.
5. Launch VS Code, Open the `Command Palette (⇧⌘P)` and type 'install from vsix' and then press `Enter` key on keyboard.
6. Select the vsix file under `ShaderlabVSCode/VSCodePlugin/` folder of Unity Project
7. Restart Visual Studio Code

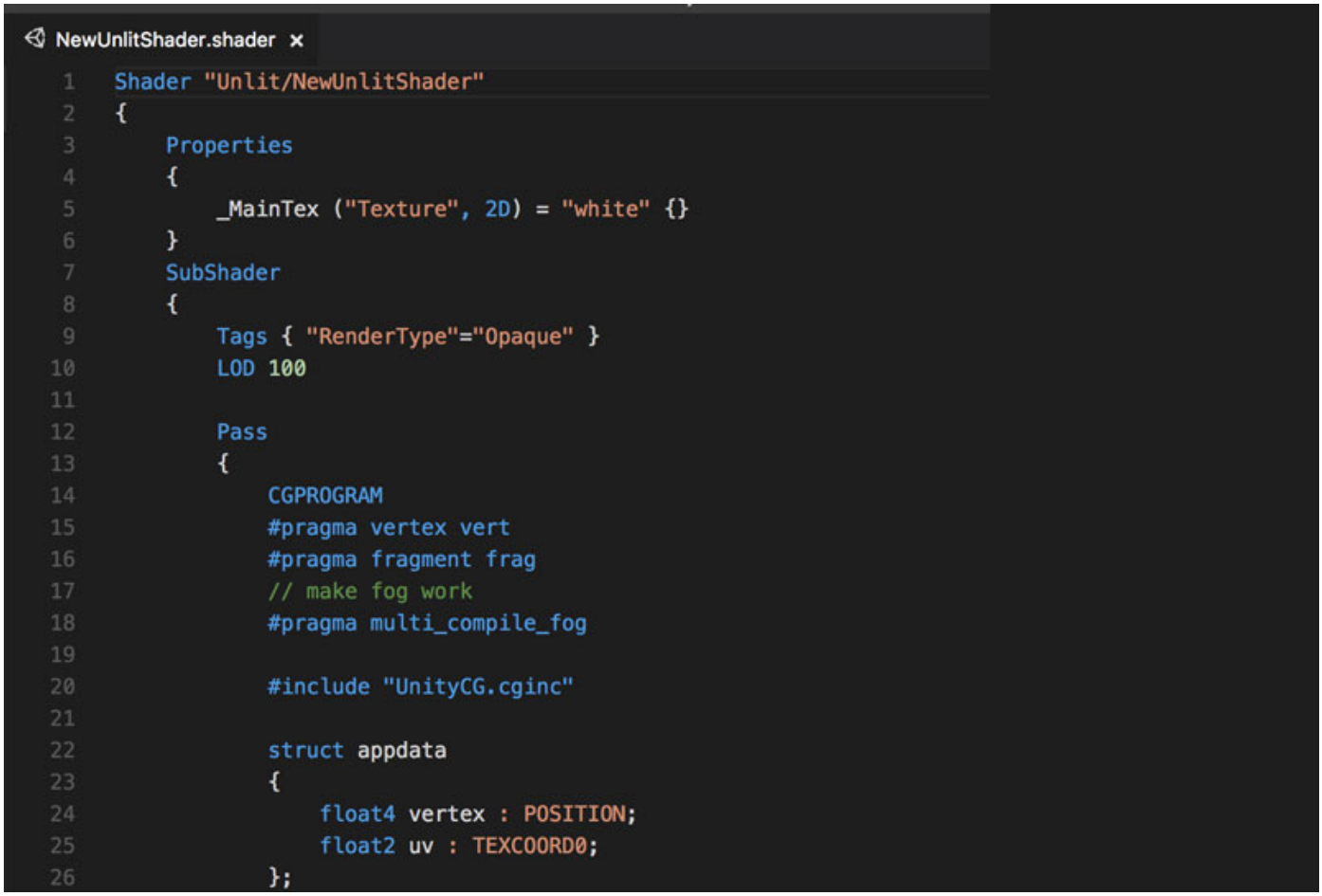
## Running On Windows

1. Import ShaderlabVSCode unity package into Unity Editor.
2. Download the Visual Studio Code installer for Windows.
3. Once it is downloaded, run the installer (VSCodeSetup-version.exe). This will only take a minute.
4. By default, VS Code is installed under C:\Program Files (x86)\Microsoft VS Code for a 64-bit machine.
5. Launch VS Code, Open the `Command Palette (CTRL+SHIF+P)` and type 'install from vsix' and then press `Enter` key on keyboard.
6. Select the vsix file under `ShaderlabVSCode/VSCodePlugin/` folder of Unity Project
7. Restart Visual Studio Code

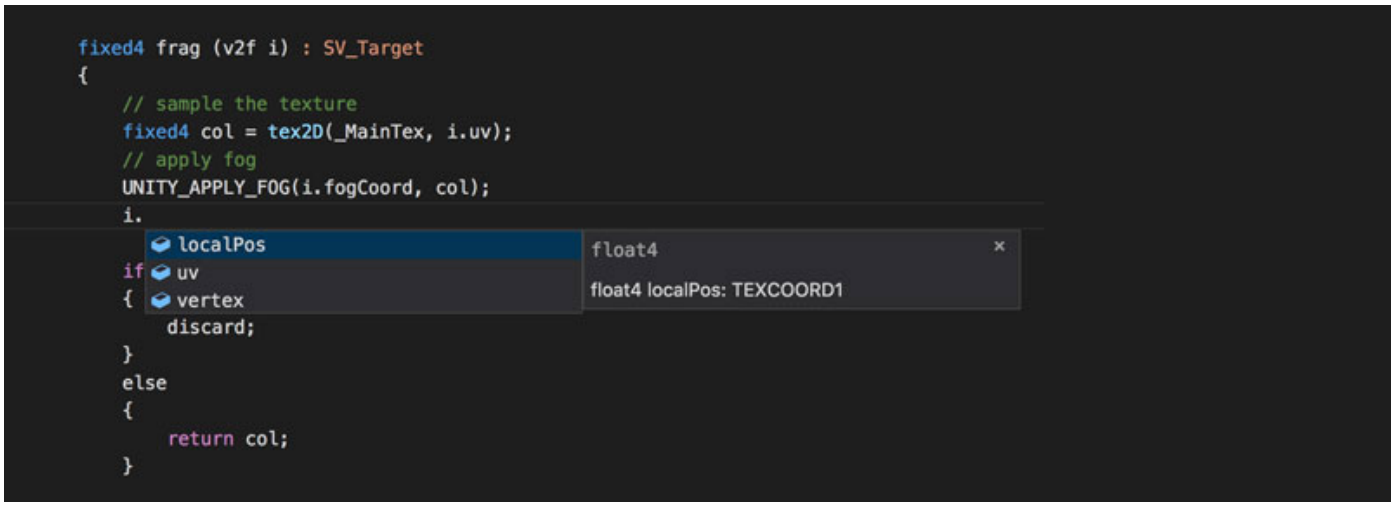
> Note: .NET Framework 4.5.2 is required for VS Code. If you are using Windows 7, please make sure .NET Framework 4.5.2 is installed.

# Features

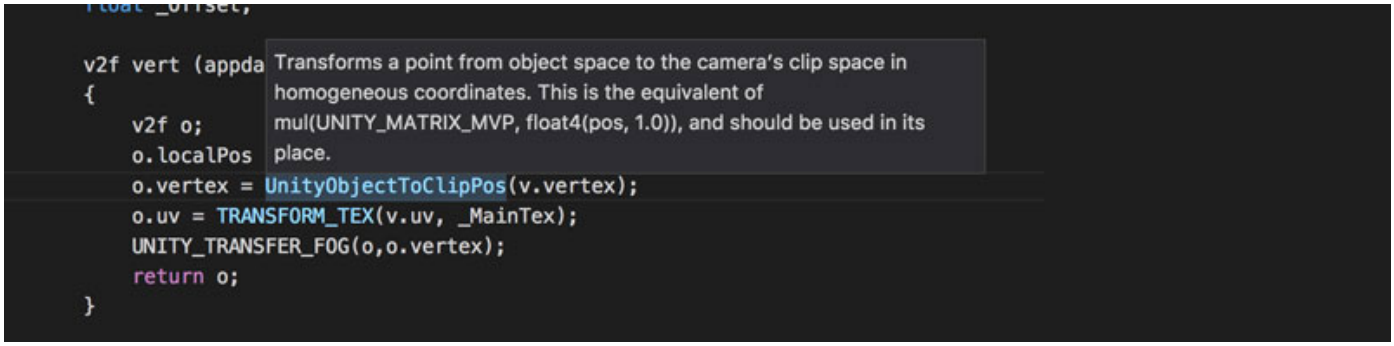
## Syntax Highlighting



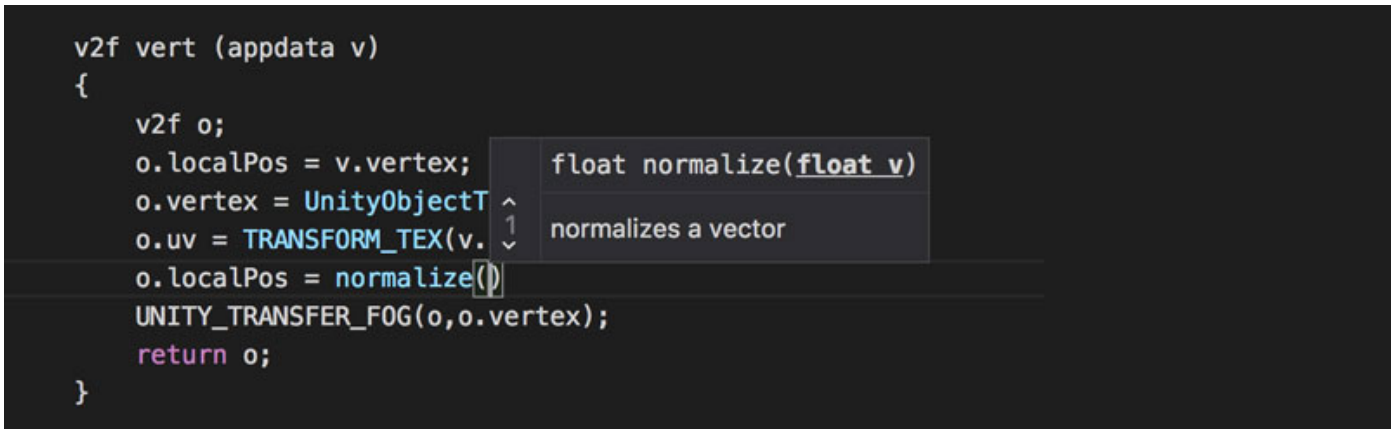

## Code Completion and Basic Intellisense




## Hover Information

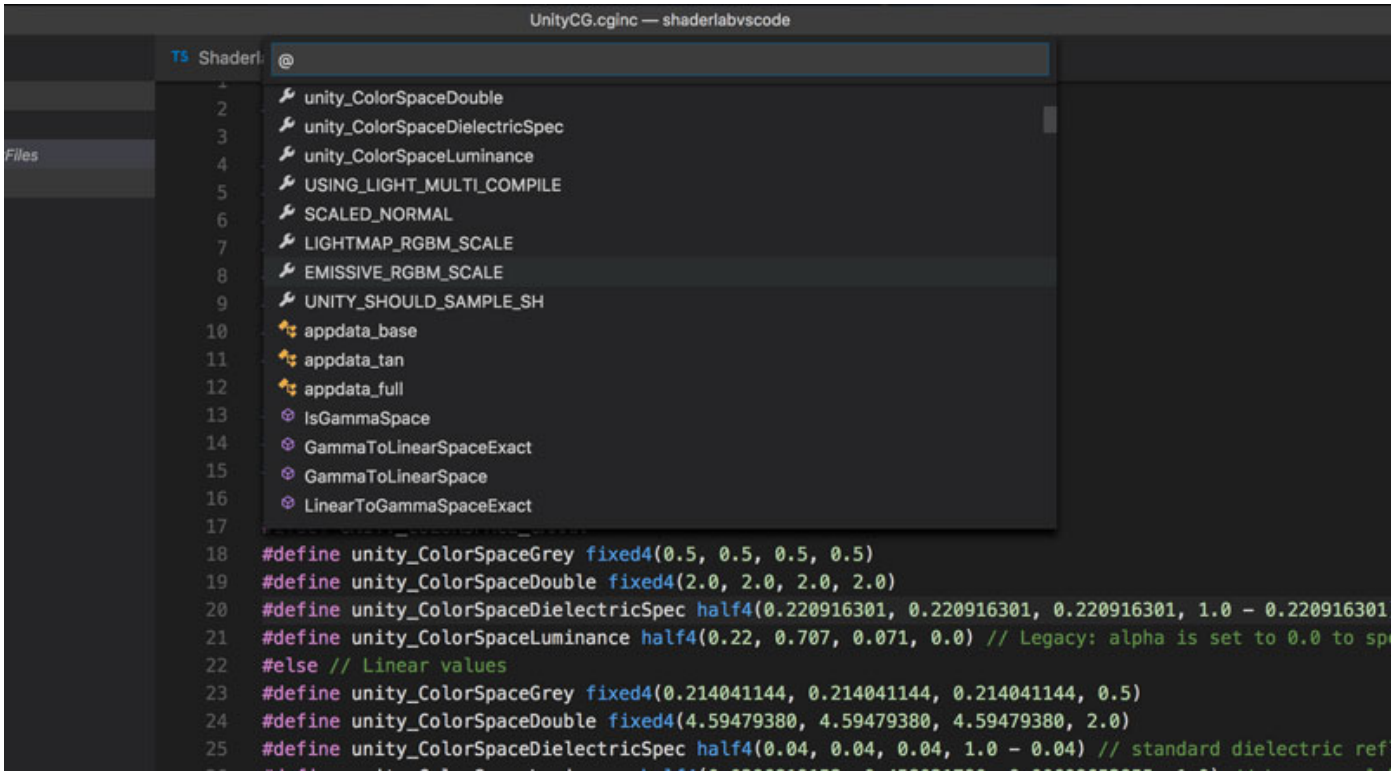


## Signature Help




## Document Symbols

Press `CTRL + SHIFT + o` on Windows or `CMD + SHIFT + o` on macOS.




## Go To Definition

`This feature is available in 1.2.4 +`

Press `F12` to trigger `Go To Definition` command Or Click the `Go To Definition` in right click context menu

## Code Snippets

Below are the snippets:

| Snippets | Description |
| --- | --- |
| blend1_1 | Blend One One |
| blendsa_1-sa | Blend SrcAlpha OneMinusSrcAlpha |
| blend1_1-sa | Blend One OneMinusSrcAlpha |
| blend1-dc_1 | Blend OneMinusDstColor One |
| blenddc_0 | Blend DstColor Zero |
| blenddc_sc | Blend DstColor SrcColor |
| for | for loop |
| fallback | Fallback |
| cgp | CGPROGRAM...ENCG |
| glp | GLSLPROGRAM...ENCGLSL |
| hlp | HLSLPROGRAM...ENDHLSL |
| if | if { ... } |
| ifelse | if {...} else {...} |
| inc | #include "" |
| incpkg | #include "Pakcages |
| incucg | #include "UnityCG.cginc" |
| inclight | #include "Lighting.cginc" |
| incautolight | #include "AutoLight.cginc" |
| props | Properties |
| prop2d | `2D` type property |
| propcube | `Cube` type property |
| propc | `Color` type property |
| propv | `Vector` type property |
| propf | `Float` type property |
| proprange | `Range` type proprety |

| | |
|---|---|
| region | //#region ... //#endregion |
| region2 | //region ... //endregion |
| shader | Shader { ... } |
| subshader | SubShader { ... } |
| struct | structure |
| tags | Tags { ... } |
| tagstt | Tags with both of RenderType and Queue is Transparent |

# Auto Format

## Format Document

Two ways to format document:

1. Right click the editor are and select **Format Document** menu in context menu
2. Open **Command Palette** and type "Format Document", and then press `ENTER` key on keyborad.

## Format Selection

Two ways to format selection:

1. Right click the editor area and select **Format Selection** menu in context menu
2. Open **Command Palette** and type "Format Selection", and then press `ENTER` key on keyborad

## Place Open Brace On New Line

In Settings, there is an item under `ShaderlabVScode` section named `Formatting: Style`, check or uncheck the `Place open brace on new line` will toggle differnt format style.

Below is not place open brace on new line

```
float test() {

}
```

Below is place open brace on new line

```
float test()
{

}
```

## Macros Alignment Modes

In Settings, there is an item under `ShaderlabVScode` section named `Formatting: Style`, change the `Macros alignment modes` to set formatting mode for macros.

### Indentation with hierachy

```
Subshader
{
    Pass
    {
        CGPROGRAM
        void MacroTest()
        {
            float c;
            #if 0
                c = 0;
                #if 1
                    c = 1;
                #endif
            #endif
        }
        ENDCG
    }
}
```

### Indentation without hierachy

```
Subshader
{
    Pass
    {
        CGPROGRAM
        void MacroTest()
        {
            float c;
         #if 0
                c = 0;
         #if 1
                c = 1;
         #endif
         #endif
        }
        ENDCG
    }
}
```

### No Indentation but with hierachy

```
Subshader
{
    Pass
    {
        CGPROGRAM
        void MacroTest()
        {
            float c;
#if 0
            c = 0;
    #if 1
            c = 1;
    #endif
#endif
        }
        ENDCG
    }
}
```

### No Indentation and without hierachy

```
Subshader
{
    Pass
    {
        CGPROGRAM
        void MacroTest()
        {
            float c;
#if 0
            c = 0;
#if 1
            c = 1;
#endif
#endif
        }
        ENDCG
    }
}
```

## Misc Features

### Region Mark

There are two ways:

- `//#region` and `//#endregion`
- `//region` and `//#endregion`

## Features in Unity Editor

### Download Visual Studio Code

Jump to url which can download latest version of Visual Studio Code

> Selection: **Tools** -> **ShaderlabVSCode** -> **Download Visual Studio Code**

### Update Data of ShaderlabVSCode Extension

Update data of completion, hover information or intelisense from web

> Selection: **Tools** -> **ShaderlabVSCode** -> **Update Data of VSCode Extension**

### Report an Issue

Two ways to report an issue:

1. Send Email to amlovey@qq.com
2. Open a issue on https://github.com/amloveyweb/amloveyweb.github.io/issues

# For more information

Visit site http://www.amlovey.com/shaderlabvscode/#/