

ShaderlabVSCode

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Introduction

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

[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

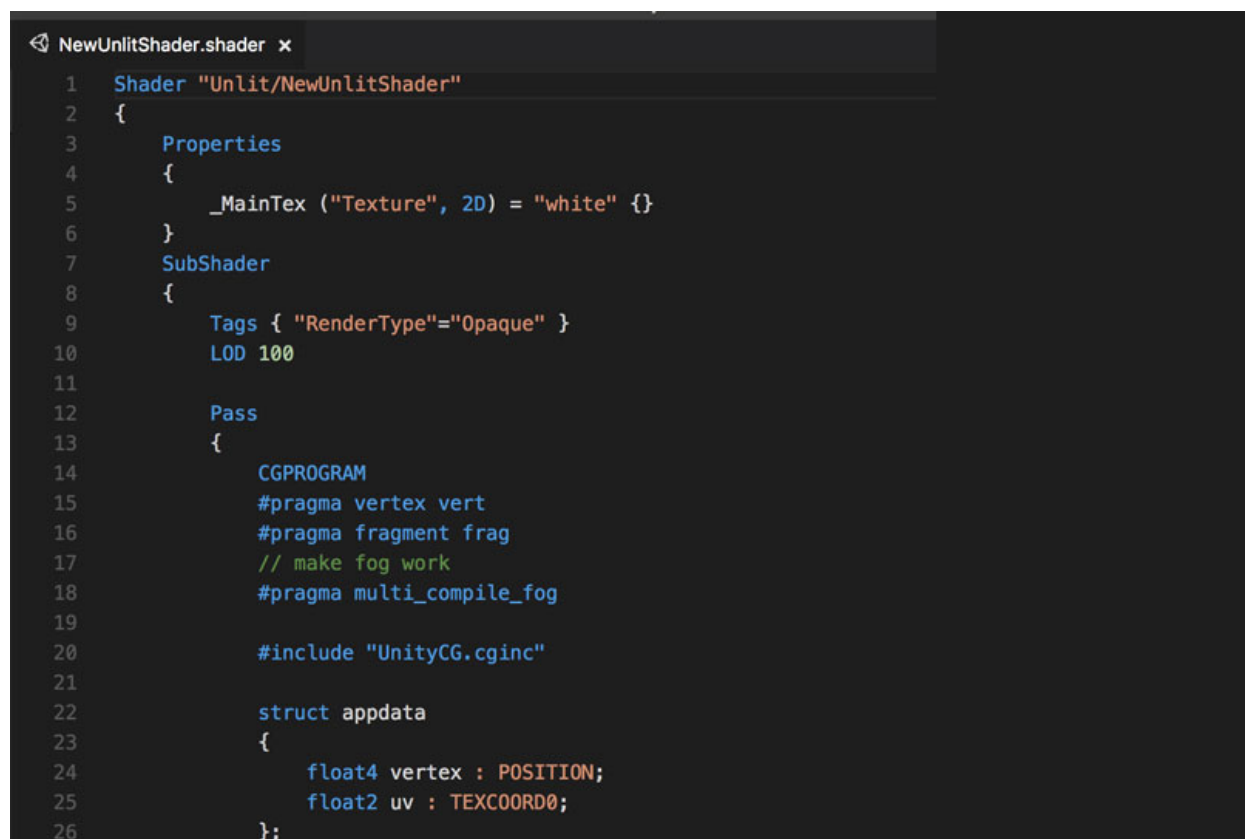
Running On Windows

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.

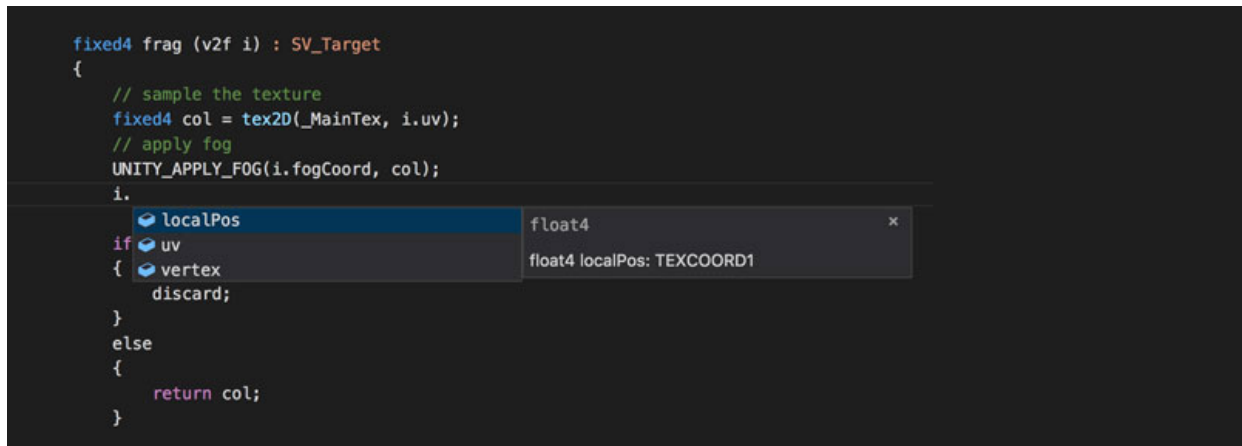
Features

Syntax Highlighting

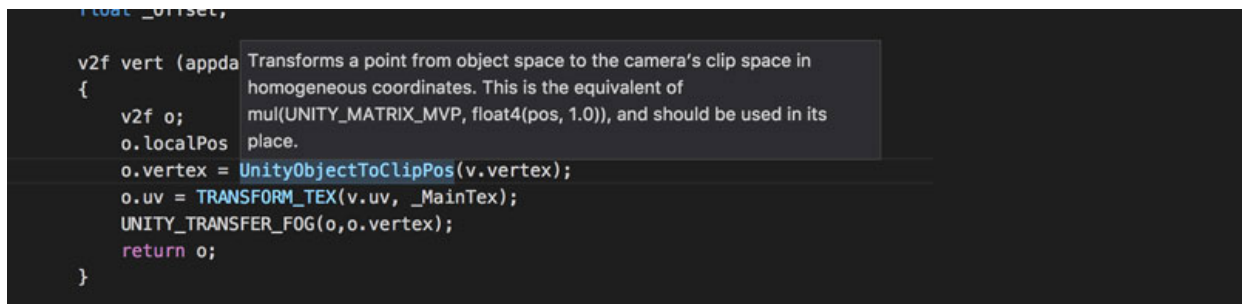


```
1 Shader "Unlit/NewUnlitShader"
2 {
3     Properties
4     {
5         _MainTex ("Texture", 2D) = "white" {}
6     }
7     SubShader
8     {
9         Tags { "RenderType"="Opaque" }
10        LOD 100
11
12        Pass
13        {
14            CGPROGRAM
15            #pragma vertex vert
16            #pragma fragment frag
17            // make fog work
18            #pragma multi_compile_fog
19
20            #include "UnityCG.cginc"
21
22            struct appdata
23            {
24                float4 vertex : POSITION;
25                float2 uv : TEXCOORD0;
26            };
```

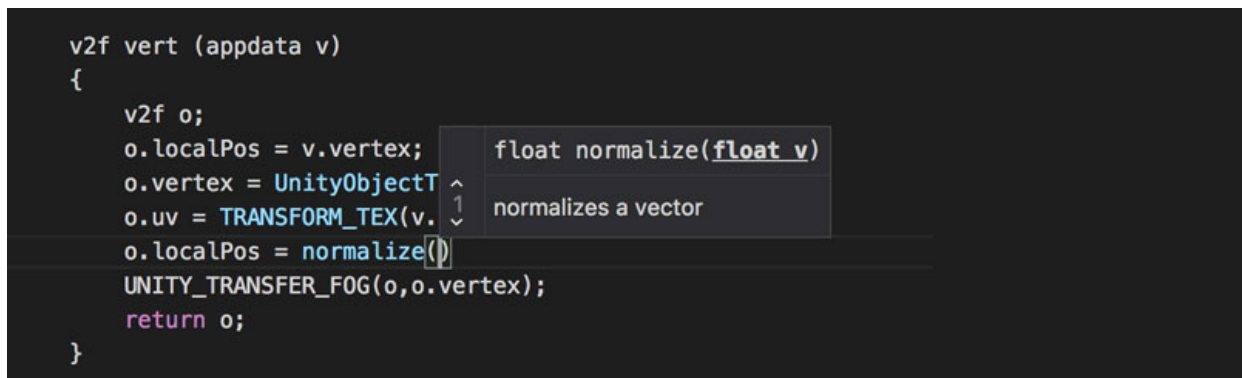
Code Completion and Basic Intellisense



Hover Information

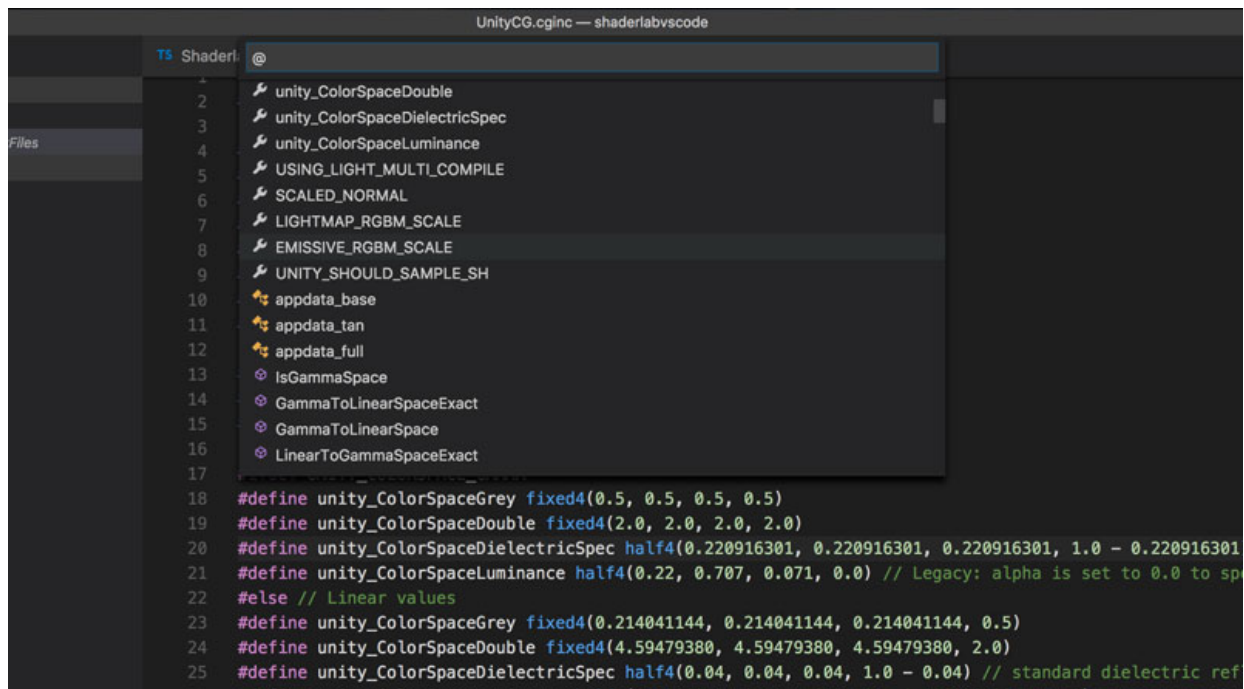


Signature Help



Document Symbols

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



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
cgp	CGPROGRAM...ENCG
for	for loop
fallback	Fallback
glp	GLSLPROGRAM...ENCGLSL
if	if { ... }
ifelse	if {...} else {...}
incucg	#include "UnityCG.cginc"
inclight	#include "Lighting.cginc"
incautolight	#include "AutoLight.cginc"

props	Properties
prop2d	<code>2D</code> type property
propcube	<code>Cube</code> type property
propc	<code>Color</code> type property
propv	<code>Vector</code> type property
propf	<code>Float</code> type property
proprange	<code>Range</code> type property
region	<code>//#region ... //#endregion</code>
region2	<code>//region ... //endregion</code>
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 area and select **Format Document** menu in context menu
2. Open **Command Palette** and type "Format Document", and then press `ENTER` key on keyboard.

Misc Features

1. Region Mark

There are two ways:

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

Features in Unity Editor

1. Download Visual Studio Code

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

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

2. Update Data of ShaderlabVSCode Extension

Update data of completion, hover information or intellisense from web

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

3. 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>

Release Notes

V1.1.3

- Auto Format
 - use tab or spaces can be configured by `editor.insertSpaces` VSCode settings

V1.1.2

- Add more completions from UnityCG.cginc.
- Fix document symbols show incorrectly in some scenarios.

V1.1.1

- Intellisense
 - Add macros code completion support
 - Add more completion items from UnityCG.cginc, there are:
 - UnityWorldSpaceViewDir
 - UnityWorldToClipPos
 - UnityViewToClipPos
 - UnityWorldToViewPos
 - UnityObjectToWorldDir
 - UnityWorldToObjectDir
 - UnityObjectToWorldNormal
 - UnityWorldSpaceLightDir
 - Fix methods intellisense was broken by ':' in parameters
- Format Document
 - Improve format for macros
- Syntax Highlighting
 - Add highlight for `#ifdef` and `#ifndef`
- Add document symbols support, press `CTRL + SHIFT + O` on Windows or `CMD + SHIFT + O` on macOS to open it.

V1.1.0

- Intellisense
 - Fix intellisense was broken by "," in structs and fields in some scenario
- Format Document
 - Fix format for [XX]PROGRAM..END[XX] structure
 - Make #define to match levels
- Experiment:
 - Add .hlsl and .cg file support

V1.0.9

- Intellisense
 - Fix wrong result when there are duplicate name of variables
- Syntax Highlighting
 - Add highlighting for custom functions

V1.0.8

- Format Document
 - Improve format for Operators

V1.0.7

- Intellisense
 - Fix Intellisense broken by '+', '-', '*', '/' in some scenarios
- Format Document
 - Improve format for preprocessor directives
- Syntax Highlighting
 - Improve color of preprocessor directives

V1.0.6

- Format Document:
 - fix colon formation is incorrect in #pragma line
- Intellisense
 - Fix wrong code completion result in #pragma line which is triggered by colon
 - Update description for `clip` and `cos` cg method in code completion item

V1.0.5

- Add region mark support(Required VSCode version 1.17.0 +). ShaderlabVSCode now supports two type markers:
 - `//#region` and `//#endregion`, snippet is `region`
 - `//region` and `//endregion`, snippet is `region2`

V1.0.4

- Intellisense
 - Add Unity defined Values support, like _Time
 - Fix duplicate members when include same cginc files multiple times

V1.0.3

- Intellisense
 - Fix bug variable broken by semicolon
- Editor
 - Improve compability

V1.0.2b3

- Auto Format:
 - Add format document feature
- Intellisense:
 - supports builtin types, like half, fixed and float
 - supports completion of fields of types
 - supports completion of method return type
- Bug Fixes:
 - Fix bug structure fields are broken by comments

V1.0.1b2

- Add code snippets support
- Update hover information for some keywords
- Fix wrong fields data get from struct in some scenarios
- Fix bug that Variable and Properties Info broken by whitespace

v1.0.0b1

- First beta release

For more information

Visit site <http://www.amlovey.com>