Unity's Shader Graph
Devyn Sowry

"Shader Graph enables you to build shaders visually. Instead of writing code, you create and connect nodes in a graph framework. Shader Graph gives instant feedback that reflects your changes, and it's simple enough for users who are new to shader creation."

How To Use

*It's recommended to use Shader Graph with Scriptable Render Pipelines (URP/HDRP)
*If using the Built-In Render Pipeline, you must manually install Shader Graph from the Package Manager

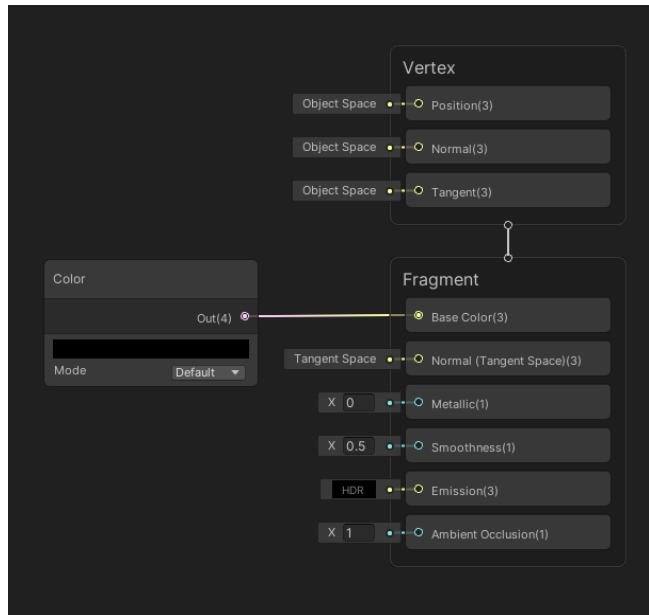Create a new Shader Graph Asset: **Right click** > **Create** > **Shader Graph**
You can select template stacks for standard shading models (Lit, Unlit, etc)

Double click on an asset to open it in the Shader Graph window
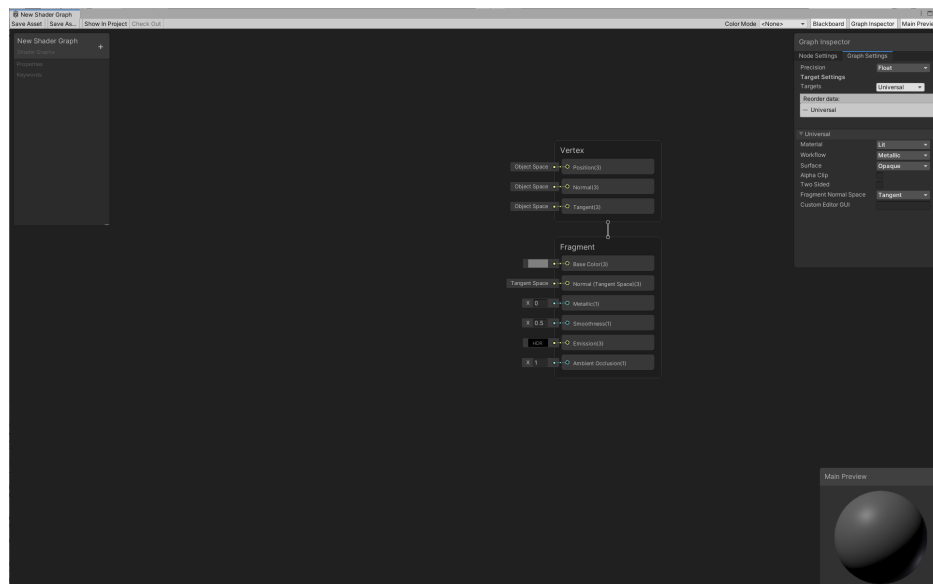
Create a new node: **Right click** > **Create Node**
You can search for which type of node you want to create (ex. Color)

You can connect nodes by dragging the output to the input of a different node

Ex. connect the **Color** node to the **Base Color** of the **Fragment** stack

Always be sure to click the **Save Asset** button in the top left corner of the window

To assign a shader to a material, either:
Right click on the shader > **Create** > **Material**
OR click on the **Shader** dropdown menu in the Inspector for a material and select your new shader in **Shader Graph**

To put your shader into your scene, simply drag and drop the material onto an object OR add it to the object's **Materials** in the **Mesh Renderer**

You can also use properties to alter your shader's appearance. Properties are options that are visible from the Material's Inspector, which lets others change settings in your shader without the need to open the Shader Graph.
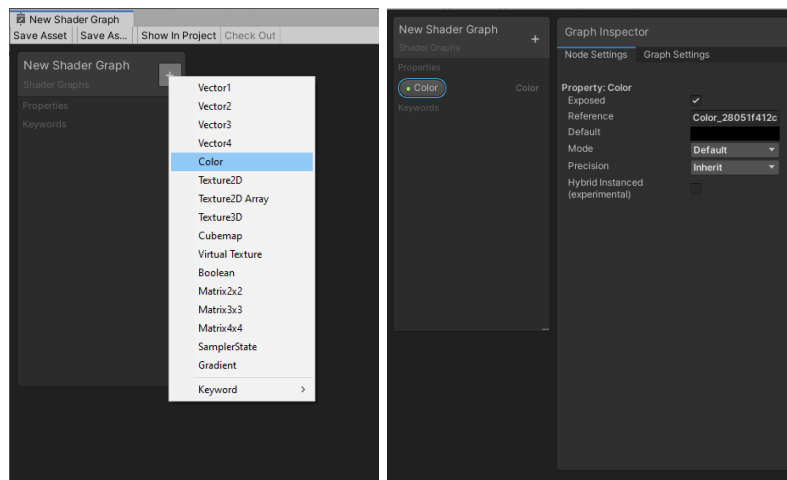
Surface Gradient Bump Mapping

"Surface Gradient Bump Mapping is a framework for the layering and compositing of bump maps in Shader Graph"

Install the package via the Package Manager (not officially released)

Access the **Surface Gradient Bump Mapping Subgraphs** in Shader Graph via the Create Node Menu

Use the **Surfgrad From Texture Subgraph** to sample a normal or height texture and output a surface gradient
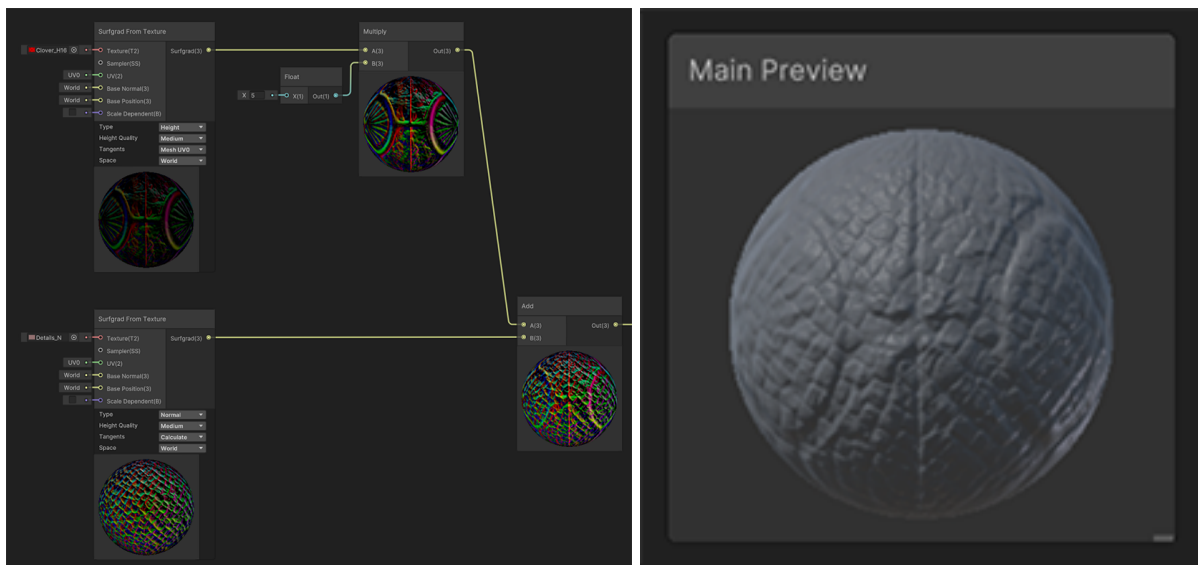
Resolve the **Surfgrad** back to a normal to connect it to the **Shader Graph Master Stack** using the **Surfgrad Resolve** Subgraph

Works Cited

[Shader Graph](#)
[About Shader Graph](#)
[Getting started with Shader Graph](#)
[My first Shader Graph](#)
[About Surface Gradient Bump Mapping](#)
▶ Basics of Shader Graph - Unity Tutorial