



# **TOON SHADER USER MANUAL VERSION 1.0**

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# Introduction

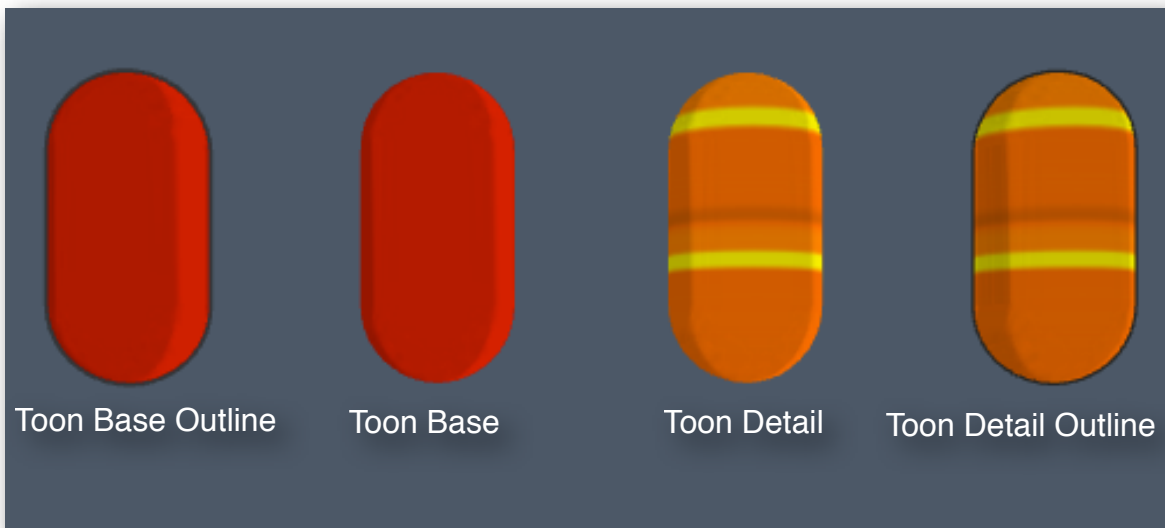
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Hi,

Thanks for your interest in the Toon Shader !

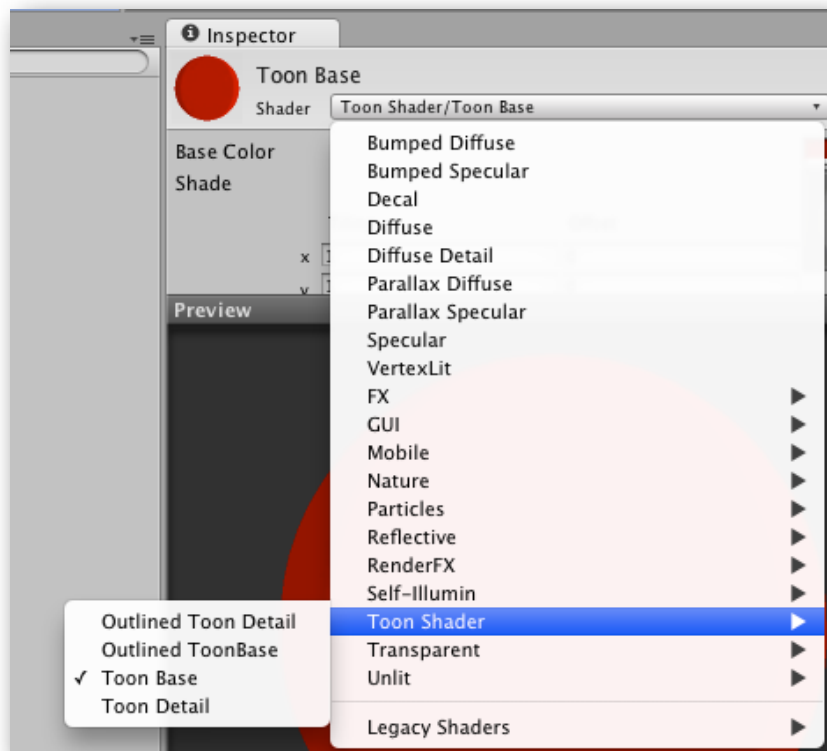
Toon shader is a fast shader that produces beautiful toon shading. It is compatible with IOS, web, PC and Mac platforms. I hope that you will find it useful in your projects !

There are four variants of the Toon Shader : Toon Base, Toon Base Outlined, Toon Detail, Toon Detail Outlined. We will examine how they work and how you can use them in the following sections.

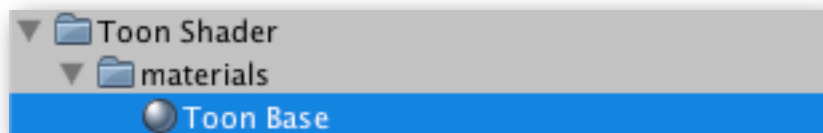


# Toon Base

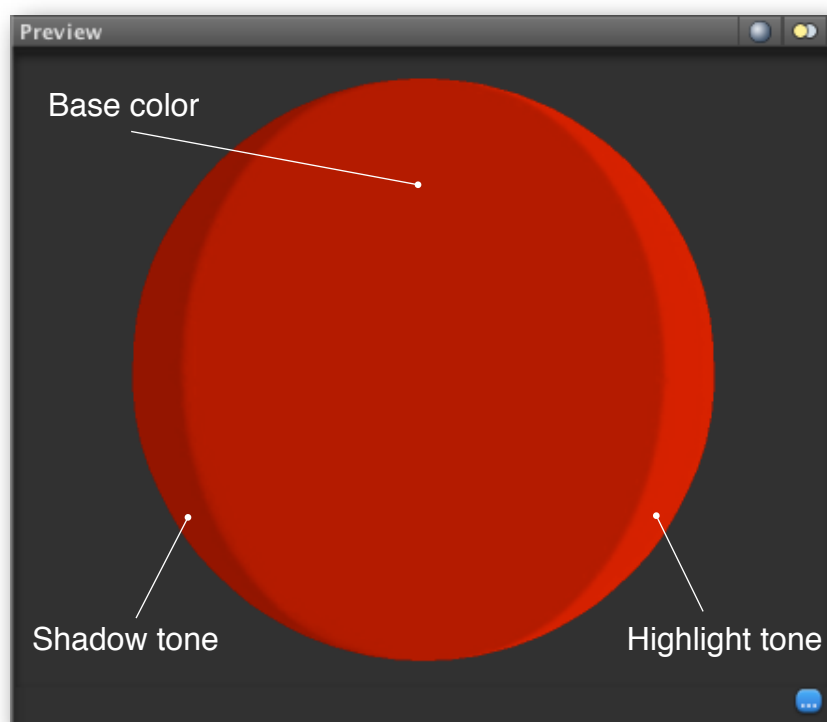
You can find Toon Base, as well as all other Toon shader variants under the Toon Shader submenu



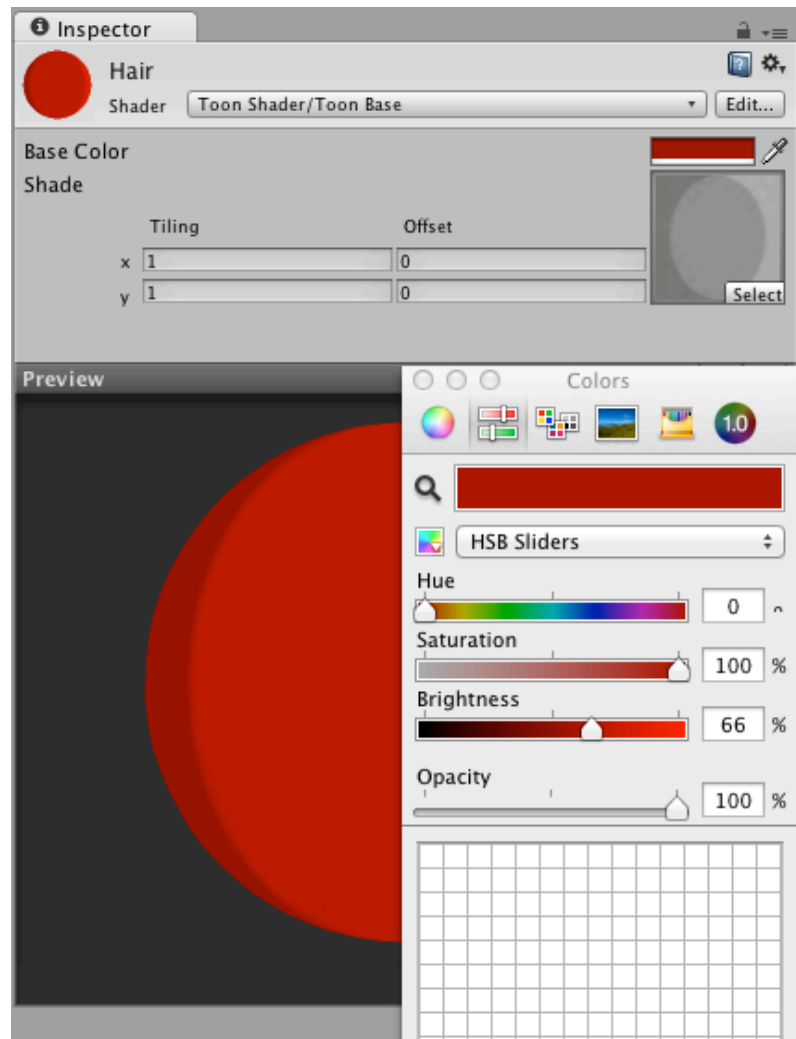
For convenience, I have also included a material called Toon Base that shows how to set up the shader



Toon Base takes as input a base color and produces two more tones, a darker “ shadow “ tone at the left and a lighter “highlight “ tone at the right. Those two tones gently follow the shape of the mesh.



User can modify the base color. The two other tones are automatically calculated and applied to the model.



The above color, when applied to the mesh that represents the hair in this model, gives the following results :

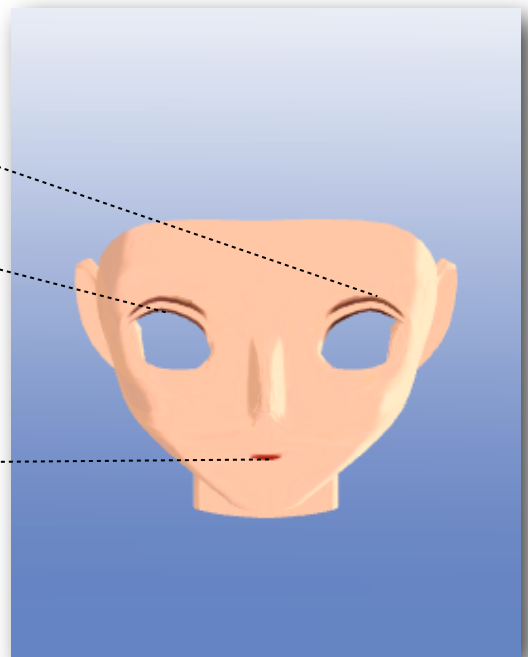
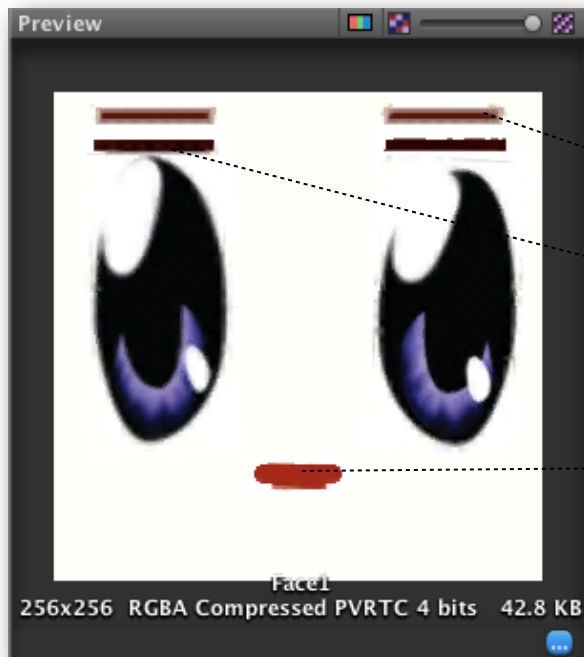
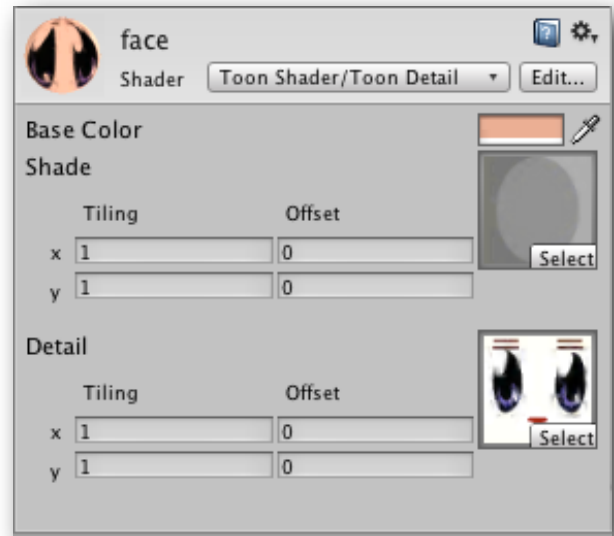


# Toon Detail

Toon Detail applies the same lighting technique but mixes it with a texture, allowing the user to add extra detail.

User can modify the base color ( same principles as before still apply ), as well as a texture, called Detail.

In the example below, the texture is used to create character's eyebrows, upper eyelashes and mouth.

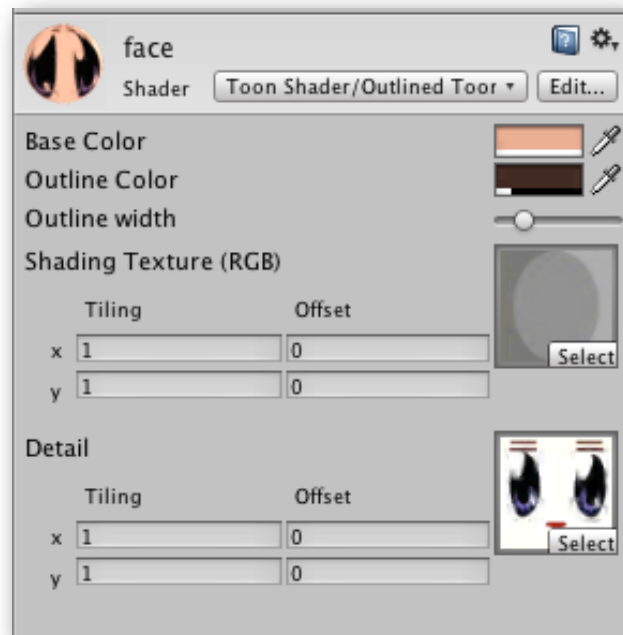


# Toon Outline

Toon Base Outline and Toon Detail Outline behave add an outline to the above shaders.

User has control over the same shader properties like before, plus outline thickness, color and transparency.

Also, the outline thickness is modified with distance, i.e. is less thick as object goes far away from the camera and thicker as objects approach the camera.



# Best Practices

This shader should be used with meshes that have smooth normals.

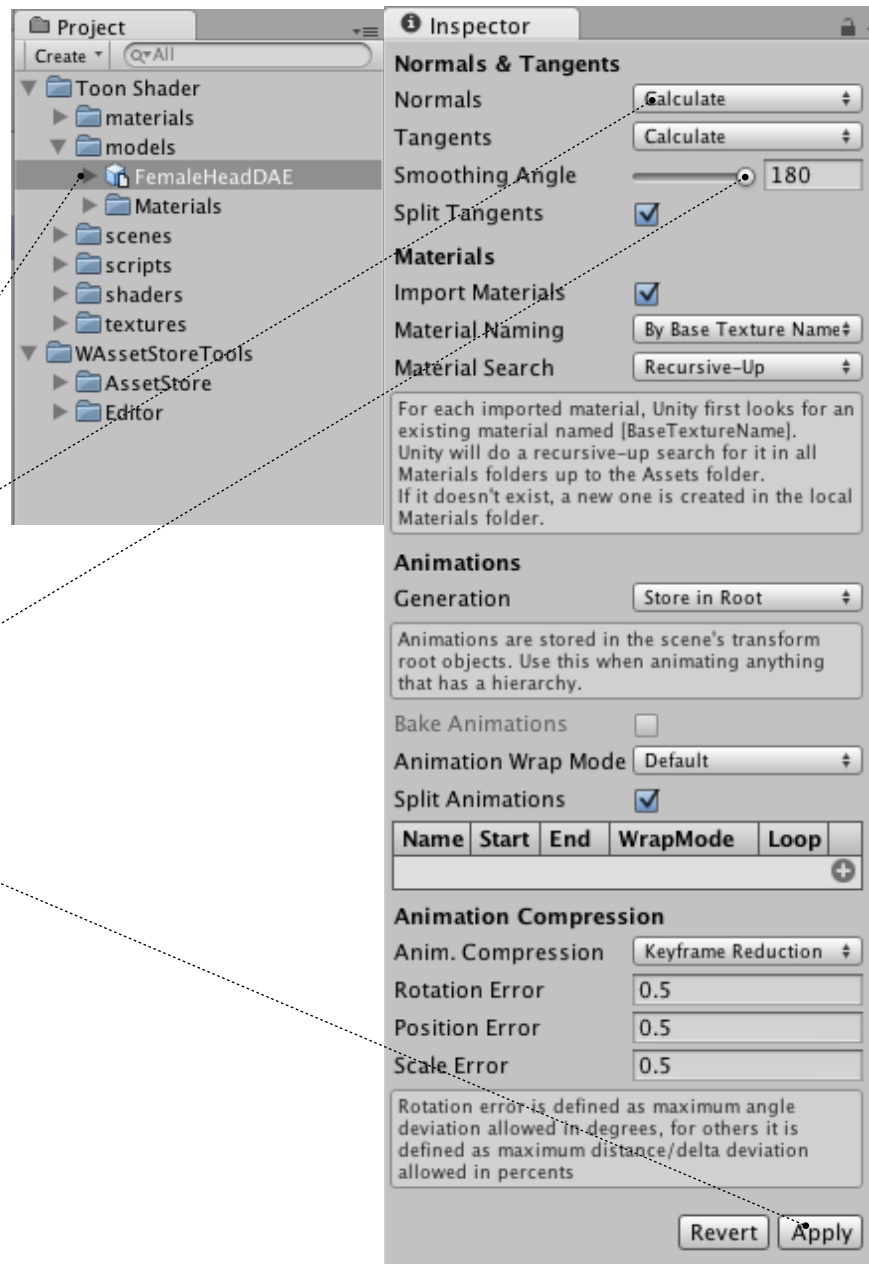
To smooth the normals of an imported mesh in unity, do the following :

Select the mesh in the Project view

At the inspector, set the Normals to Calculate

Move the Smoothing angle slider to 180.

Click Apply.





## Contact and Greetings :)

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Feel free to contact me about questions, suggestions at unity forums or at my email : ippobour at gmail dot com.

Many thanks to Texel, Daniel Brauer, Martin Krauss, Jessy Anders, Neil Carter, Michael Garforth, Eric Haines, Keli Hlodversson, Tenebrous, fholm, airship, duckets, Tak, LittleAngel and all the other people who helped me over time to create this shader.

Kind regards,  
-Ippokratis