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UNITYCODER.COM	NORMAL MAP MAKER V1.2

Unity Editor Plugin for Creating Normal(bump) Maps from Textures

Table of Contents

Normal Map Maker

INTRODUCTION

"Normal Map Maker" is a simple Unity editor plugin for creating normal (bump) maps from textures.
(It can also create basic specular maps).

*Ps. This is not meant as a super production quality normal map generator, there are professional tools for that. Rather it is a "poor man's" tool for quickly creating basic bump & specular maps for testing.

** Also specular map is a separate texture, you cannot use the built-in "Bumped Specular"-shader.
(but "BumpedSpecularSeparate.shader" is included)

BENEFITS

- Quickly create normal(bump) and specular textures from any images

FEATURES

- Create normal (bump) map from any texture
- Adjustable bumpiness strength
- Median filter with adjustable strength
- Basic (separate) specular map creation
- Adjustable brightness cutoff
- Adjustable specular contrast
- Progress bar with cancel button
- Automatically set [x] Read/Write enabled for source texture (for temporarily)
- Automatically set created texture "Texture type: Normal Map"
- Textures are created to the same folder as the source with added suffix "_normal" or "_specular"
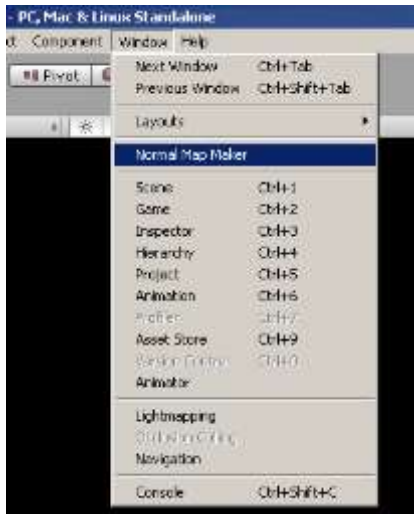- C# source (inside custom namespace)

INSTALLATION

Import the package from the Asset Store and you are done.
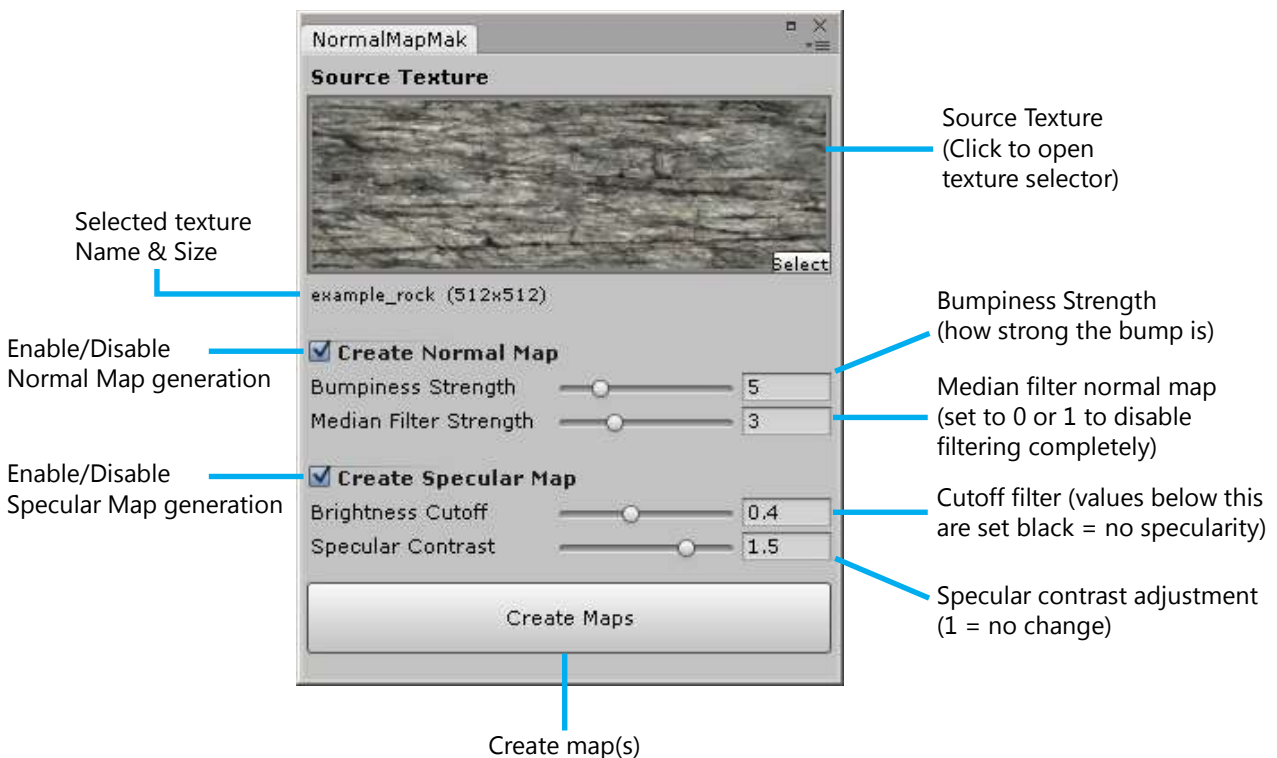New menu item is created under: *Window / Normal Map Maker*

INSTRUCTIONS

USAGE

Select menu item: *Window / Normal Map Maker*

USER INTERFACE

Source Texture
(Click to open
texture selector)

Selected texture
Name & Size

Bumpiness Strength
(how strong the bump is)

Enable/Disable
Normal Map generation

Median filter normal map
(set to 0 or 1 to disable
filtering completely)

Enable/Disable
Specular Map generation

Cutoff filter (values below this
are set black = no specularity)

Specular contrast adjustment
(1 = no change)

Create map(s)

WARNING!

- Normal and Specular map files are generated to the same folder of the source texture. Existing (normal/specular) file(s) are overwritten.
- Example: if source filename is "sourceimage.png", map files are created as *"sourceimage_normal.png"*, *"sourceimage_specular.png"*

## PACKAGE FILE STRUCTURE

Package files:


```
Extensions/
- unitycoder_com/
- - Demo_NormalMapMaker/
- - - Materials/
- - - - example_bump.mat
- - - Scenes/
- - - - scene_normalmap_test.scene
- - - Shaders/
- - - - BumpedDiffuseFixNormal.shader
- - - - BumpedSpecularFixNormal.shader
- - - - BumpedSpecularSeparate.shader
- - - - BumpedSpecularSeparateFixNormal.shader
- - - Textures/
- - - - example_rock.png
- - DemoRunTime/
- - - Materials/
- - - - runtimesampleMaterial
- - - Scenes/
- - - - scene_runtimeSample
- - - Scripts/
- - - - NormalMapMakerRuntimeDemo


- - NormalMapMaker/
- - - Editor/
- - - - NormalMapMaker.cs (the actual editor script)
- - - Documentation/
- - - - README_NormalMapMaker12.pdf (this file)
- - - Scripts/
- - - - NormalMapTools.cs (runtime tools)
```
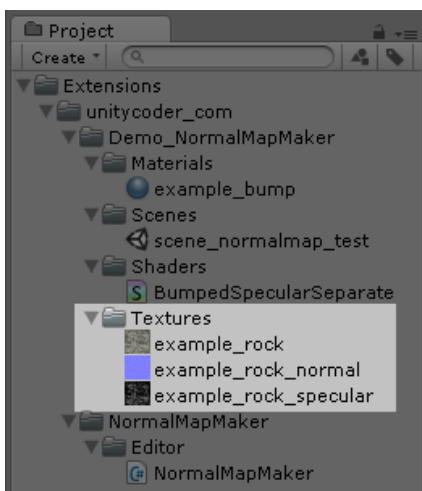
TUTORIAL

- Open "scene_normalmap_test.scene" (You'll see default plane a with texture)
- Start NormapMapMaker (from Window/Normal Map Maker)
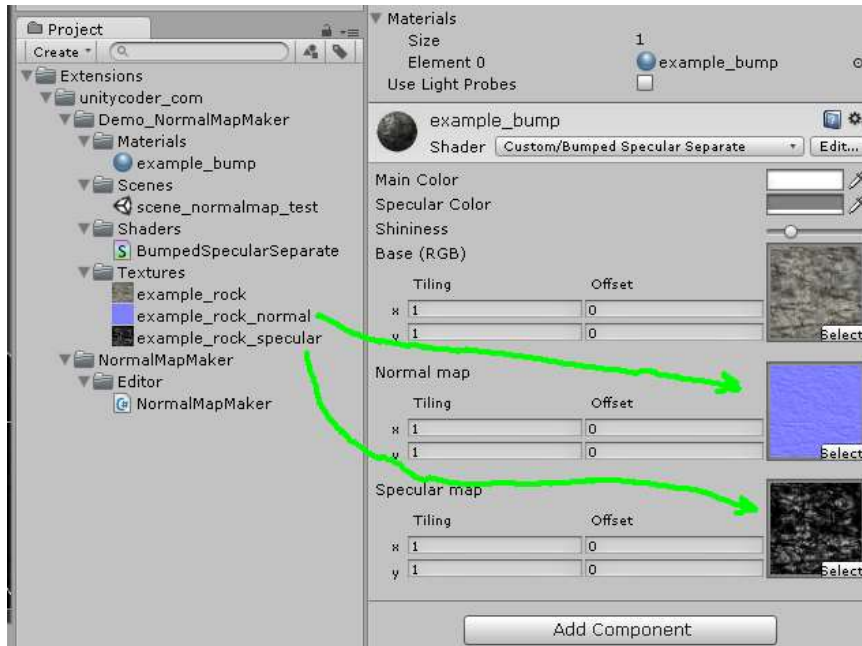- Select source texture "example_rock"

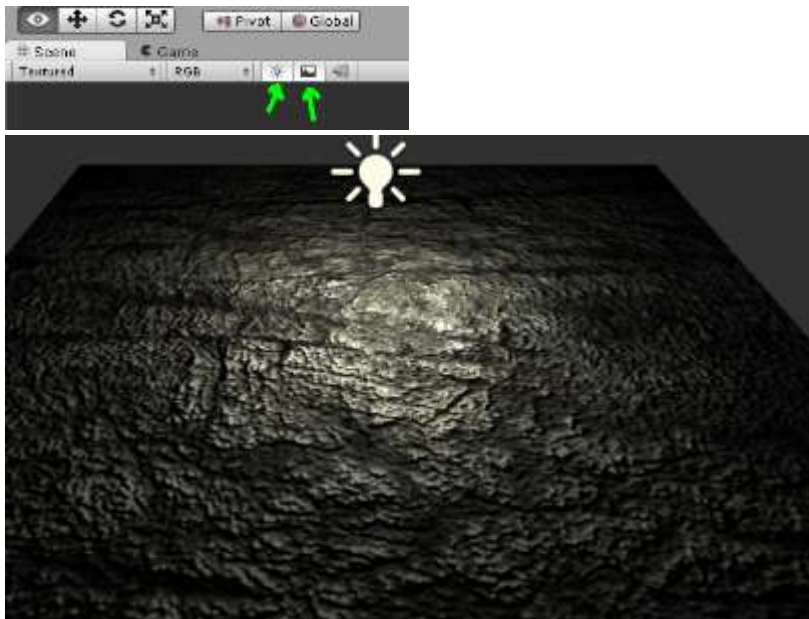- Use default values for now, press "Create Maps"
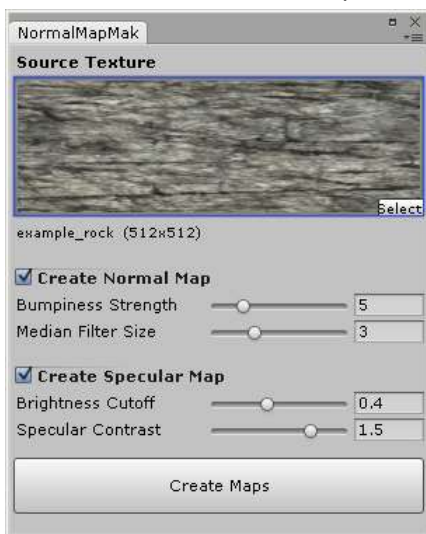
- Textures are created to "Extensions/unitycoder_com/Demo_NormalMapMaker/Textures/" folder:

- Select Plane from hierarchy and assign normal and specular textures to it:

- Now the plane should have bumps visible: (if you have lighting enabled in editor)

- Experiment with the values to get best results for different textures
- You can download some test textures from : http://www.cgtextures.com/

Note!

- "BumpedSpecularSeparate.shader" is a special shader with separate Specular texture (Unity's builtin "Bumped Specular" takes specular map from base texture alpha channel, not from external specular texture file). Source: http://answers.unity3d.com/questions/306921/add-specular-map-to-shader.html

RUNTIME VERSION

In the 1.2 update runtime version of the code was added.

See example scene:
 Extensions/ unitycoder_com/ DemoRunTime/Scenes/scene_runtimeSample.scene and from the scripts folder "NormalMapMakerRuntimeDemo.cs", which loads a texture from the web & creates normal map from it. (see code comments for more details how to use the "NormalMapTools" methods)

Note!

Because at runtime it's not possible to generate suitable texture format for unity normal maps, the bumped shaders need to be modified when using runtime generated normal maps. Read more here:
http://forum.unity3d.com/threads/creating-runtime-normal-maps-using-rendertotexture.135841/#post-924587

3 Shaders with that fix are included: "BumpedDiffuseFixNormal", "BumpedSpecularFixNormal"," BumpedSpecularSeparateFixNormal".

FUTURE IDEAS

Feel free to post ideas, any feedback / custom requests about features you would like to see in this product. Also you can email me requests for other asset store script ideas.

Some possibilities:

- Option to save specular map into source texture alpha (so then you can use default Bumped Specular shader) ***New 1.2:** Runtime version has code to combine RGB + Specular into single RGBA32 texture
- Unity5 support (for quickly creating basic test materials for the new super standard shader)

WEBSITE

Product website/blog:
http://unitycoder.com/blog/2013/07/16/normal-specular-map-generator-from-texture/