TILEME SYSTEM Guide

v. 064

1. Import TileMe asset.

2. Press GameObject -> Generate texture button in order to open TileMe menu. It will create TileMe screen.



3. Select TileMe_Screen object in hierarchy.

As you can see TileMe has 2 functions - seams removing(main feature) and texture generation (texture generation is a bonus feature and is still in testing).

🔻 🕼 🛛 Tile Me (Script) 🔯		
Script	💽 Tile Me	e O
Seams Remover		Texture Generator
Batch processing		() TileMe/Resources/Input
Texture: 📄	None (Tex	ture2D) O
Select a Texture		

4. First, let's look at TileMe seams remover. You can either choose a texture manually or use batch processing which will load and process all textures in "TileMe/Resources/Input/Main" folder:



Starting from version 0.64 TileMe supports multiple maps (You load them as additional textures and they will be modified accordingly to the main texture).

Important! Normal maps have to be imported as textures before they are processed (just select them and choose Texture Type – Texture in texture import settings).

There is a set of parameters that define Seams removing process, let's go through it:

🖲 🖬 Tile Me (Script)		🔊 🗞			
Script	💽 TileMe	0			
Seams Remover	🗹 Те	xture Generator			
 Batch processing		TileMe/Resources/Input			
Texture: 📕 gr1		0			
Additional Textures:					
Number of Textures:	1	Update			
Texture: 🔤 None (Fexture2D)	0			
V Parameters:					
Downsampling:	16				
Blur:	32				
Offset:	256				
Max Processing Time:	10				
Make seamless					

Downsampling – before processing textures are downsampled in order to speed up the process <u>(it is used to find the prefect cutting</u> <u>seams and doesn't influence output texture resolution)</u>. A rule of thumb for choosing it is texture size / 64 (i.e. 1024/64 = 16). This way it produces high quality results within a few seconds.

Blur defines how blurred the edges (seams) will be. This value should be at least 2 times smaller than offset value (it will be reduced automatically if it's not) Offset tells the program how far from the edge of the image the seam can be. This doesn't necessarily means that they will be this far but they can go as far as the offset value(red line shows the seams):



And, finally, Max. Processing time is used to stop the process when it takes too long for some reason and also because Unity is not available during the process.

As a result we get:



5. Texture generator allows you to create new texture based on a set of predefined textures.

▼ 🕢 Tile Me (Script)		\$,			
Script	IleMe	0			
Seams Remover	🗌 Texture Generator 🗹				
Number of Textures:	2 Update				
Texture: 🔤 📰 gr3		0			
Texture:		0			
Texture: 1024 * 1024					
Parameters:					
Downsampling:	16				
Blur:	32				
final_size:	2048				
Block Size:	256				
Border Offset:	128				
Iterations Offset:	256				
Adjust Textures	Power: 1				
Max Processing Time:	10				
Generate					

Using "Number of textures field" you can define the number of input textures that will be used for generation. As you can see a few new parameters are introduced here:

Final size defines the output size of the texture (i.e. you can make 4096x4096 textures out of a set of 512x512 texture without a quality loss)

Block size – blocks are pieces or patches taken from random texture that are seamed together. Block size defines the size of such square patch.

Border offset means exactly the same as in seams remover.

Iterations offset tells how far from the random patch app should look trying to find the best one

Adjust Textures is a very important color correction feature that allows making similar texture from rather different ones (Final textures look different not only due to color correction but because patches placement is random and every generated texture is different):



Adjustment power can vary from 1 to 10.

You have also to define a basic texture for texture adjustment. So that the final texture looks closer to it. Al other textures will be adjusted to look more similar.

🕒 Tile Me (Script)		\$,
Script	💽 TileMe	0
Seams Remover	🗌 🛛 Texture Generator 🗹	
Number of Textures:	2 Update	
Texture: Egr3		0
Texture: gr2		0
Texture: 1024 * 1024		
Parameters:		
	Restore Default	
Downsampling:	16	
Blur:	43	
final_size:	2048	
Block Size:	256	
Border Offset:	128	
Iterations Offset:	256	
Adjust Textures	Power: 10	
Basic texture (12):	1	
Max Processing Time:	10	
	Generate	

If, for example, we chose 2^{nd} texture as our basis the final result would look like this:



Currently texture generator doesn't create seamless textures but you can make it seamless using seams remover (will be improved in one of the next updates)

If you have any questions\problems, feel free to contact me: stanislavdol@gmail.com

Thank you for purchasing this asset.