



HAPPY FLOWER

QUICKSTART GUIDE

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Introduction

This document has been written to be a QuickStart guide for any that wish to make their own maps using Happy Flower, LEGO Universe's in-game level editor.

This guide is aimed at people who are new to level editing, or to those who need a refresher.

If you have your own tips for Happy Flower or simply want to share feedback, feel free to contact me!

Version history

Date	Author	Comment	Version number
12/02/2020	Yui	Updated texture selection to include apply all option.	V1.6
15/12/2019	Gie Vanommeslaeghe / Neal Spellman	Added inspector page, updated bouncer page.	V1.5
7/12/2019	Gie Vanommeslaeghe	Updated server link, made some corrections	V1.4
6/12/2019	Gie Vanommeslaeghe	Added flair, bouncer, and other smaller chapters	V1.3
6/12/2019	Gie Vanommeslaeghe	Added terrain and more smaller chapters	V1.2
6/12/2019	Gie Vanommeslaeghe	Added vignette and starting point chapters	V1.1
5/12/2019	Gie Vanommeslaeghe	Base document	V1.0

Trivia

A fun thing to know is that Happy Flower was originally called "Death Blow".

Thinking LEGO wouldn't appreciate this name very much, they then changed it to "Happy Flower", named after a rattle toy LEGO made:



Setting up

Getting the client and tools

One thing you should know is that Happy Flower is only accessible through the Alpha client.

This client likes to delete your config folder for the live LEGO Universe, and vice-versa. So we suggest making a backup of that in case you have a custom config for the live game.

What you'll need is either the lwoPatcherCLI or regular lwoPatcher. Both will work, but CLI is recommended as it will automatically download all available files for the client, rather than relying on downloading game files as you play / work.

- lwoPatcherCLI:
<https://cdn.discordapp.com/attachments/299808228076683265/642304991343673364/lwoPatcherCLI.zip>
- lwoPatcher:
<https://cdn.discordapp.com/attachments/299808228076683265/641974389520465925/lwoPatcher.zip>

(lwoPatcherCLI may work better on Linux, though this hasn't been tested)

Another great tool to have is NifSkope:

- Windows: http://cache.lbbstudios.net/public/NifSkope/NifSkope_LU_Win32.zip
- Linux (64-bit): http://cache.lbbstudios.net/public/NifSkope/NifSkope_LU_Linux.zip

Although this document really isn't for adding new content into the game, NifSkope is always a handy tool when working on LEGO Universe content.

To start the client download, simply extract the zip to your preferred location and start the patcher. In the case of lwoPatcherCLI, all you need to do is let it run.

It will automatically download all the files it can, and they are printed onto the console. The application will exit on its own when it's done downloading everything.

You'll have to edit the client's boot.cfg to set the AUHSERVERIP to localhost.

Getting the server

Download the server zip: <http://cache.lbbstudios.net/public/HF/localHFserver.zip>

There are also other servers available, but this one doesn't require you to set up a MySQL server.

If you are interested in that, you'll have to compile: <https://github.com/DarwinAnim8or/lwoWorld>

Starting Happy Flower

First, start the lwoAuth.exe and lwoWorld.exe. Then open up the LEGO_MMOG.exe to start the client.

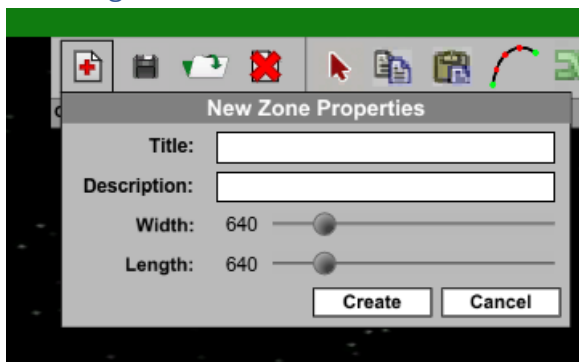
You can load in using any username or password. When you've loaded in, **type `"/hfedit on"`** (without quotes) **in chat and press enter to load Happy Flower.**

Keyboard Shortcuts

Keyboard combination:	Result:
Ctrl+O	Open map
Ctrl+S	Save map
Ctrl+Shift+P	Place starting point
W	Enter "Move" mode
E	Enter "Rotate" mode
S	Enter "Scale" mode
Delete key	Removes the selected object

File control

Creating a new zone

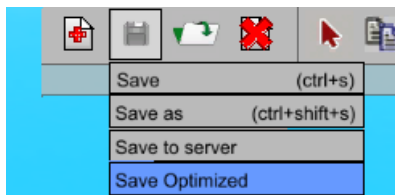


Press the new file icon, then fill in the information as shown in the dialog box.

Note that the new zone will take on the skybox and fog settings from the zone you are currently in (in this case, Venture Explorer). These can of course be changed later. A good idea might be to load a zone like Avant Gardens of Nimbus Station and then create yours, to copy their lighting.

Saving a zone

To open the save menu, press the floppy disk icon in the taskbar.



Then, choose either "Save" or "Save as". "Save to server" is most likely not available unless if the server you're connected to supports this feature. If you're running a local server, just use the "Save" or "Save as" buttons.

If you are saving a zone to send off to players, please use "Save Optimized".

Opening a zone

Press the Load button:  and select the luz you want to load.

Moving around in Happy Flower

Moving around in happy flower can be tricky at first, although if you're an artist who uses Maya, then you'll probably find it to be not that different.

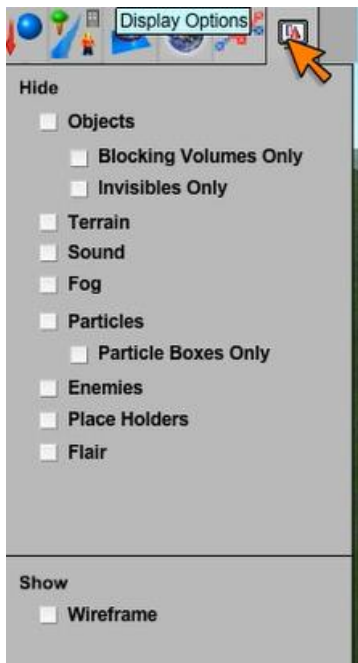
To move on the X and Z directions, hold down the right mouse button and drag it around.

To move on the Y axis (up or down), hold down Control and then hold the right mouse button and drag.

Holding down shift as well with any of these combinations will speed it up.

If you hold down ALT and drag the mouse while holding the right mouse button, you can "look around"

Display options



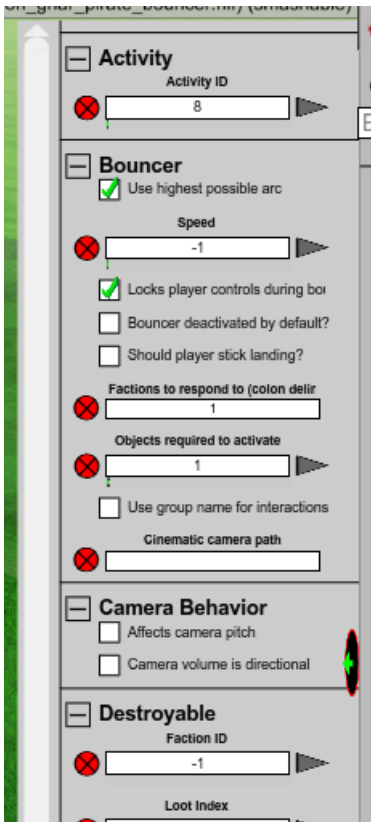
In the display tab you can tick the checkboxes to hide or unhide certain object types.

The list should be self-explanatory, but do note that you don't need to save your zone with certain boxes ticked. Objects like "Blocking volumes" are always hidden to the player during normal gameplay.

These settings are also not saved in general and will be reset each time you reload Happy Flower.

The Inspector

Happy Flower features an inspector where you can modify the values for the components each object has. To open it, click on this icon:



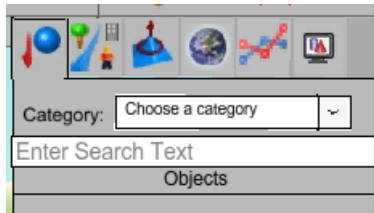
Here you can change all sorts of values on each of the components of an object, make it smashable, etc!

Placing a starting point

To place a starting point into your map, simply press Ctrl+Shift+P to place one. You can rotate it and move it around like any other object.

The arrow underneath the S points in the direction the player will be facing when he first loads into the map.

Place a new object



- Press the objects tab and choose a category from the dropdown menu.
- You can also use the search box.
- Click on the object you'd like to spawn from the list.
- Left-click on the terrain where you'd like your object to be spawned.
- Keep left clicking to spawn more, or click the select icon to go back to normal.
- You can now select and further manipulate the object(s) for it to be how you like.

Tip: if clicking the select mode button doesn't work, spawn one more object somewhere and hit the delete key. It'll go back to select mode then.

Placing or editing a bouncer

Placing a bouncer is *nearly* identical to placing a regular object.

1. Go to the "Bouncers" category in the objects tab.
2. Select your bouncer from the list and place it down.
3. Once you've spawned it, or if you want to edit a bouncer, select it.
4. The orange "target" marker will spawn for that bouncer. Click on it and move it like any other object
5. Done!

If you have a bouncer that is also a quickbuild, the process is similar, just one extra object for where you want the player to "build" your object.

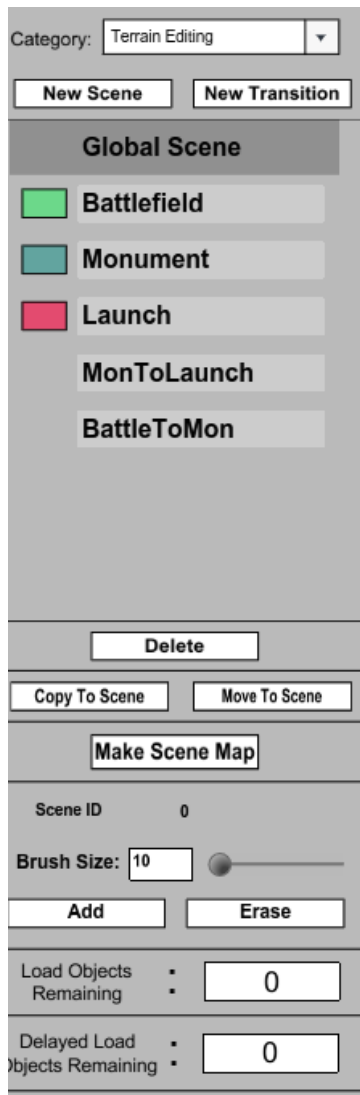
NOW to actually make the bouncer bounce a player, select the bouncer itself (so you can see the target and / or quickbuild marker), **open the inspector**.

For the bouncers, set the speed high enough so that you see the green bouncer path in the editor. Most LU bouncers seem to use a value around 65-100.



Scenes

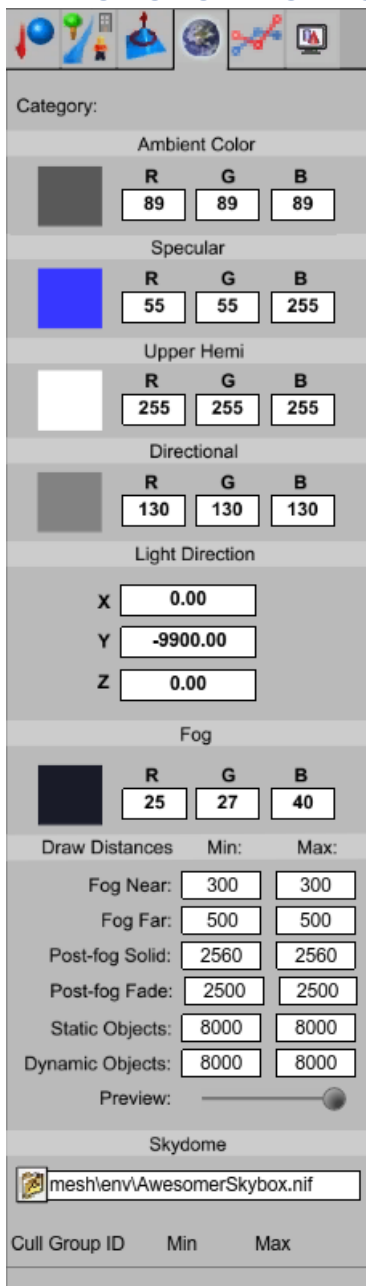
To view the scenes and transitions, press this button:



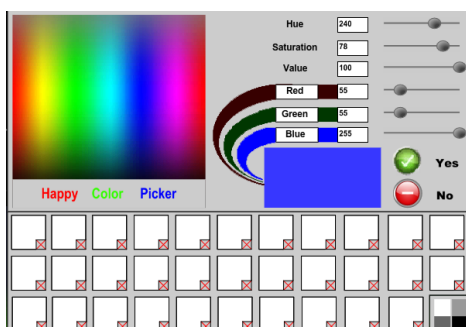
the Scenes and transitions tab

Here you can view or edit certain scenes for your map. It's a good idea to split up your zone into various scenes so that players don't need to have the entire map loaded all the time.

Changing lighting, fog or the skydome for your zone



To change any of the colors for your lighting, click on the colored box left of them. This will bring up the Happy Color Picker:



To change the skydome, hit the folder icon next to it. Most other fields should be self-explanatory.

Vignettes

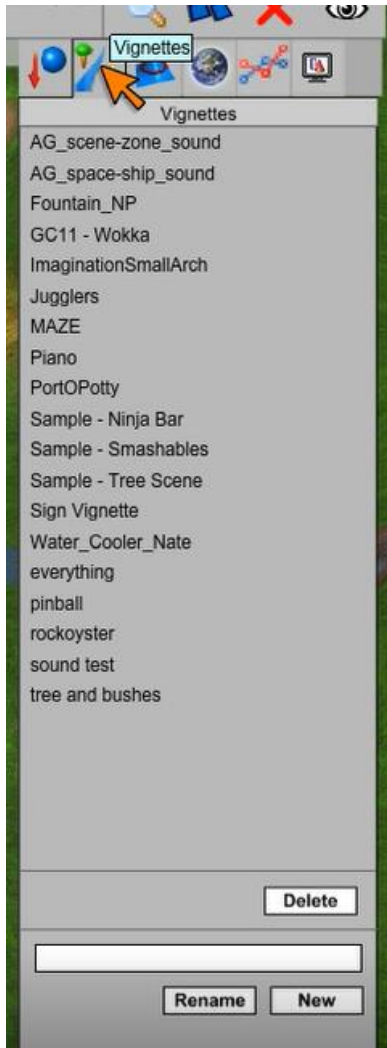
What is a vignette?

A vignette is basically a group of objects.

Let's say you've placed down a group of objects, and you'd like to save this group and their positions and rotations so that you can easily plop it down somewhere else.

This can be useful in case you want to have a lot of objects such as trees or rocks in the background of your level.

The Vignettes tab



< The vignette tab

This tab contains:

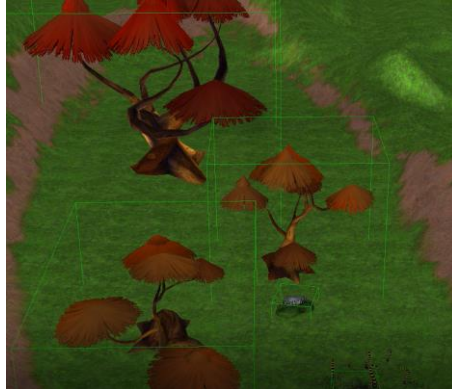
1. A list of all existing vignettes
2. A delete button to delete the selected vignette
3. A textbox for either renaming or creating a vignette

Creating a vignette

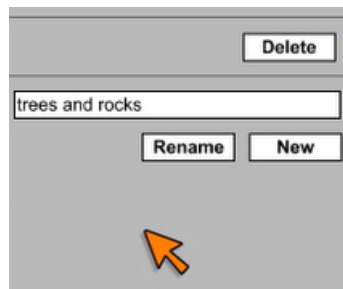
First, go into select mode:



Then, **hold down control and left click and drag** to select all the objects you'd like to add to your selection. The objects that are selected will have their bounding-boxes shown.



Then, go over to the vignettes tab as shown above, and under the list you'll see a textbox.



Enter the name you want to give to your vignette into the textbox as shown here, then click "New" to save it. You'll see your vignette appear in the list above.

Placing a vignette

1. Go to where you'd like to place your vignette
2. Left-click on a vignette in the list of the vignette tab
3. Left-click on the terrain where you would like the vignette to be placed.

You can see the objects for your vignette are all selected. You can move them around or scale them as if they were one single object.

Note that when you select anything else or otherwise deselect the vignette, it can no longer be moved as one object!

Terrain IO

The convert terrain tab



Importing a terrain

To import a terrain, open up the “Convert Terrain” dialog as shown above.

Click on the folder icon and navigate to where you saved your previously exported terrain.

Note: Always pick the base name for your terrain, so don’t pick terrain_shadow.bmp, but pick terrain.bmp.

Once you’ve picked the correct file, you can enable or disable importing of the various maps by ticking the checkboxes under the file path.

The two input boxes (showing 200.0 in the picture) at the “Import height” checkbox signify the *minimum* and *maximum* height of your imported terrain.

Once done, hit the “Import” button.

Exporting a terrain

To export your terrain, simply press the “Export” button and select an output folder and name for your terrain. We recommend making a new folder for your terrain somewhere outside of the client’s /res folder.

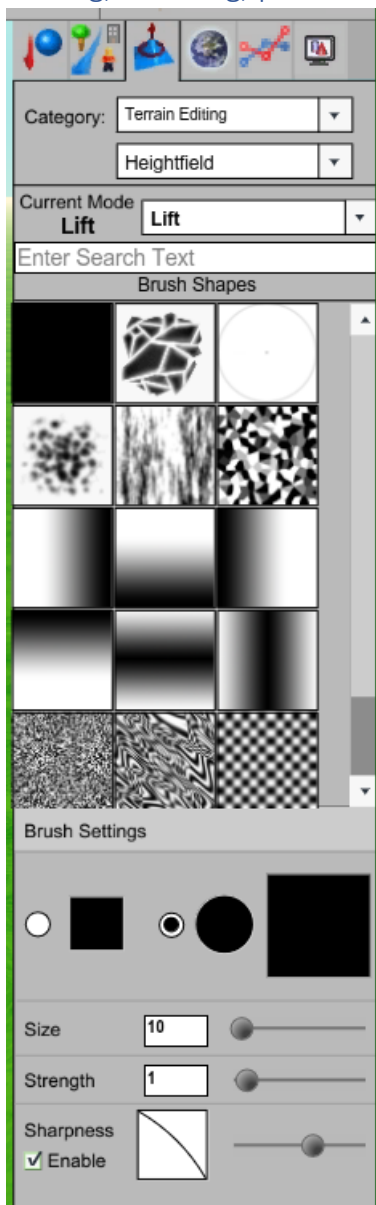
The game will export the following files for a terrain named “terrain”:

terrain.bmp	Heightmap
terrain.dae	3D model
terrain.obj	3D model
terrain_blend.bmp	Blendmap
terrain_color.bmp	Colormap
terrain_shadow.bmp	Shadowmap

You can then edit these files as you see fit, but note that you cannot import the 3D models of your terrain. These are meant to bake in lighting for example, which can then be saved and imported using the bitmap files.

Terrain editing

Raising, lowering, plateau's and blending



The terrain tab

First, open up the terrain tab to go into terrain-edit mode.

Here you can select your brush and it's settings.

To raise the terrain, click on this icon:



To plateau (make all the terrain you're painting the same height as where you clicked), press:




To lower, press this:



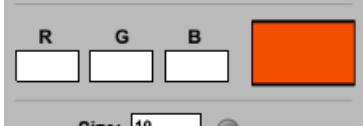
To smooth the transition between a high and low point, press the blend icon:



Tinting (coloring) your terrain

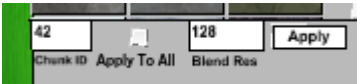
Press the tint button: 


You can select your brush as in the other modes (raise, lower, etc), but now you can make use of the color option:



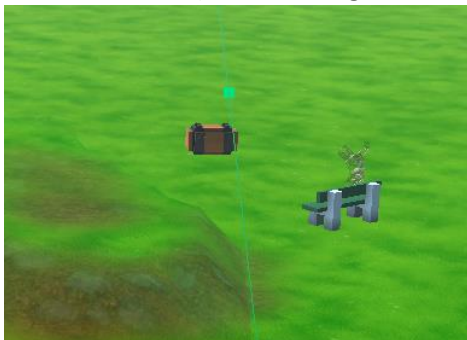
Click on the colored box to bring up the Happy Color Picker. Then you can just paint on the terrain as per usual.

Selecting and painting textures

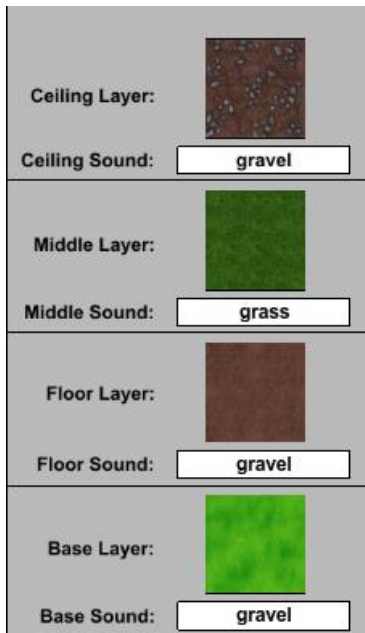
This one is a bit tricky, as it's fairly non-standard. If you want it to apply to all chunks, and not just the one you have selected, click "Apply to all" here: 

To open up the texture menu, click on: 

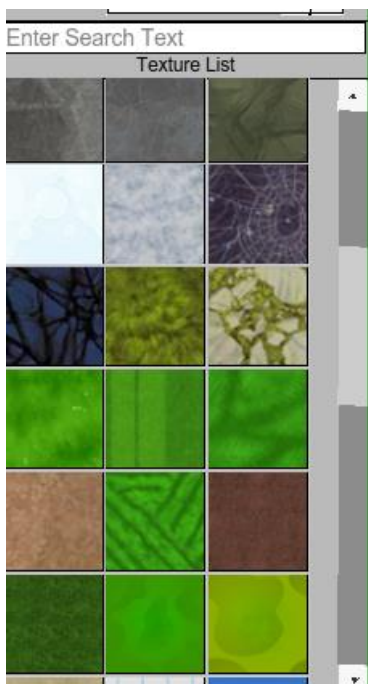
Then, click on a section of terrain you want to edit the textures for by left clicking on it. You can now see the bounds (shown with green lines and boxes) for that chunk.




Then, left click on a layer where you want to change the texture:

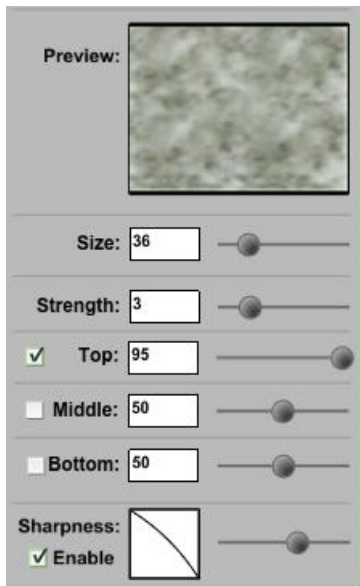


Then you can select the texture from the texture picker:




And it will immediately apply.

Now go back to paint texture: 

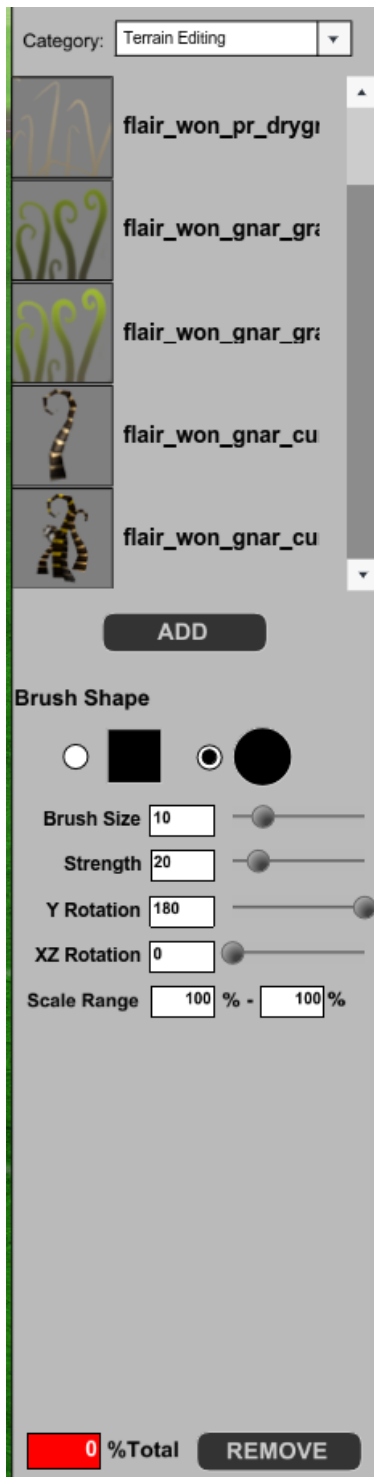


Using this panel, you can mix the various layers you selected. In the image shown, I'm only painting with the "ceiling" layer, at with an opacity of 95. You can see the result of your texture mixing in the Preview panel.

Flair (vegetation)

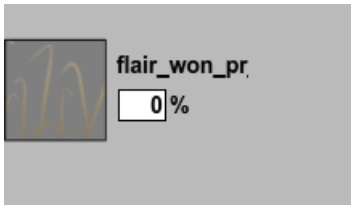
First, click on the flair button: 

You will see this tab:



Let's say we want to add some flair to our terrain.

First, we'd select our desired flair from the list. Then, click on the "add" button.



You have not added this flair to your current brush.

You can add as many as you'd like.

Then, type in the spawn chance of this particular flair while you're painting. The default is 0 (none).

If you put it at 20% and try painting on the terrain, you'll see that it'll spread around some flair.

Holding down Control allows you to delete flair again.

If you'd like to remove a flair piece from your brush selection, select it and click on "Remove".