

SPRITE ANIMATION IN UNITY

HOW TO MAKE 'EM, USE 'EM,
AND BE HAPPY WITH YOUR-
SELF ABOUT IT.



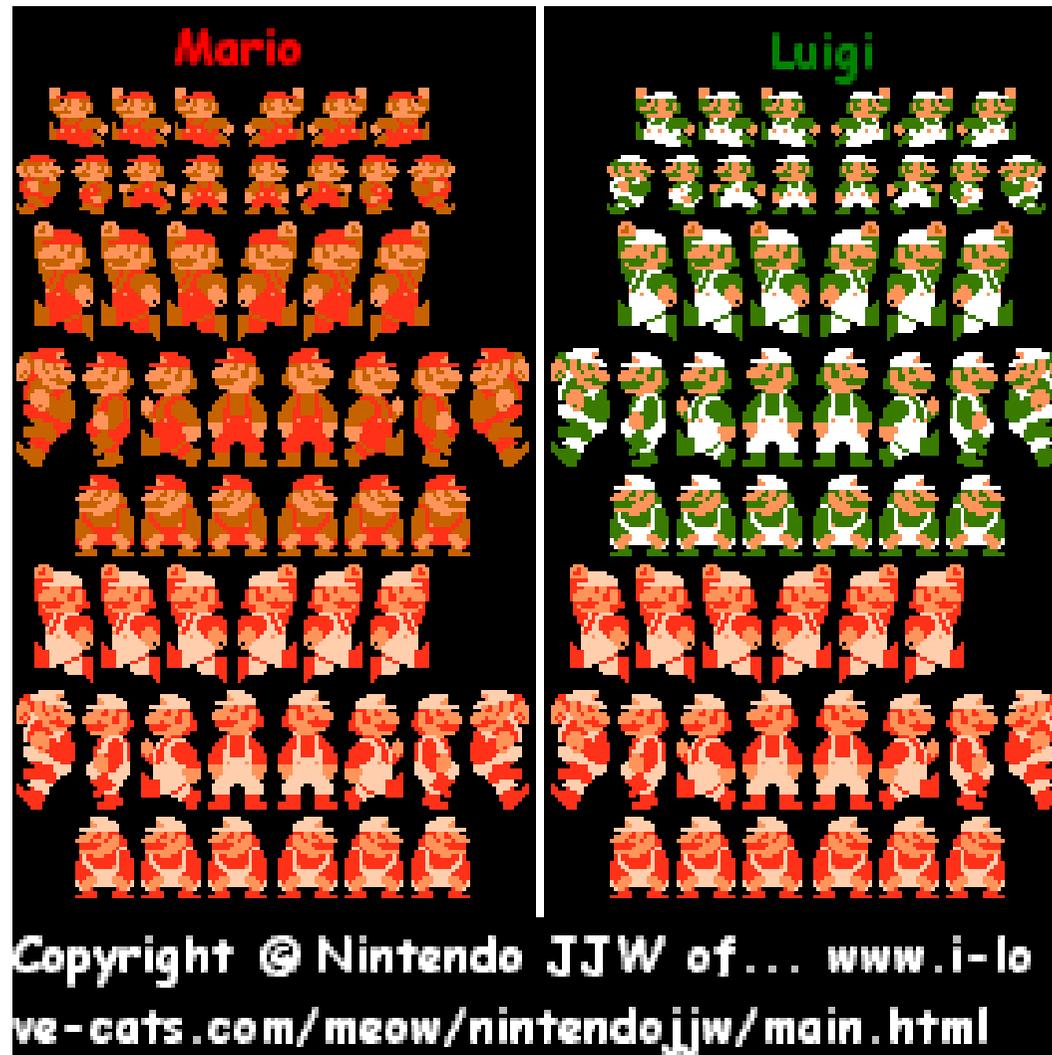
The plan, Stan.

- Basic definition of sprites.
- We go over how to use sprite manager (you do the steps with me) and create the “Simon” sprite.
- We talk about how to activate the sprites from a script (you can use my script).
- We build a little interactive environment.

What are sprites?

- A computer graphic that may be manipulated/instantiated.
- Sprites are a means of getting animation into your game.
- Often there is a “spriting system”, which performs functions similar to Flash, (displaying frames in order).
- Many moons ago, you had to make your own sprite sheet.

This is a sprite sheet!



Spritesheets give a memory-efficient means of displaying animation.

- Check out Big King demo.
- Show big king sprite sheets.
- Spriting with big king reduced the texture folder size from 49.3 megabytes to around 4.2.

Steps to creating a sprite (An incredible 17-step program!)

1. Create an empty game object.
2. Add *only* the “Packed Sprite” script.
3. The packed sprite script will add a mesh renderer. Give your object a new material by creating one in the project.
4. Open the “texture animations” section on the packed sprite script—look on the empty object you just put the script on. Set “Size” (the number of animations this sprite will have) to four.

Steps to making a sprite, continued.

5. Name your animations.
6. Set “Loop Cycles” for each animation to -1 (infinity), so that the animations will play until we tell them to do something else.
7. Set your frame rates for each animation (for the Simon Sprite, I advise 15 fps).
8. Look at the sprite timeline by clicking on “Window” → “Sprite Timeline”. Put the window somewhere it will be easy to get to.

Steps to creating a sprite, continued.

9. You can drag your individual frames into the sprite timeline, making sure that you're putting your frames into the correct animation by selecting it with the "drop down" menu (It should have your animation names in it. Try to have them in order, the timeline is a bit hard to work with. You can use "D" to duplicate an individual frame, or "Delete" to get rid of one.
10. Be sure to give your sprite a "Static image" as one of the frames in order to make it appear when your project is not "playing".
11. Preview your sprite animations!

Steps to making a sprite, continued.

12. Have SM2 “Build” your sprite sheet by clicking on the material assigned to your packed sprite in the inspector, clicking on the little gear in the upper right hand corner, and selecting “Build Atlas”.
13. When it’s completed, look in the “Sprite Atlases” folder and see your completed sprite sheet. You’ll want to change the settings on the sprite sheet image if you’re doing pixel art, (set

Steps to making a sprite, FINALLY.

14. Set the material on your sprite to “Sprite → Vertex Colored (fast) to make it unaffected by light, and to make transparency show up.
15. Press play and then stop playing immediately, so you’ll be able to see the static image of your sprite and size it correctly.
16. Click “Auto Resize” and adjust the height and width of your sprite. It should pop into view when it has a height and a width.
17. Test your sprite animations with the “Play Anim on Start” and “Default Anim” boxes. Hooray!

That's all great and fine, but...

- I still don't get it!
 - Go to <http://www.anbsoft.com/> , check out their video.
 - Check out the demo scenes that come in the SM2 package.
- This is useless! What can I do with this?
 - Check out the documentation that comes with the SM2 package, both of which are available on the AIM server in “AIM 2010” → “Simon's Treehouse”. There's a coding reference included.
 - Sit tight.
- Buy Sprite Manager 2, if you'll use it! It's a great tool, and Brady, the wonderful man that made it, is great with tech support. He knows everything.
- Try chucking the “Player Controller” script in the package onto your sprite.