

SCRATCH PROGRAMMING

Lesson 4: Create a Music Sprite

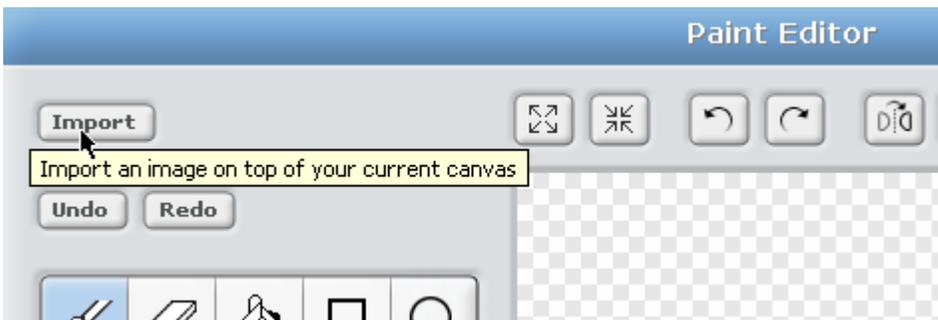
In this lesson 3, we make our sprite dance to the beat. In this lesson, I will show you how to start and stop music by using variables. We will also create a Music Sprite that will handles music, and let dancer1 handle just with dancing.

Step 1: Create a Music Sprite

Let's create a Music Sprite or a sprite that controls playing and stopping of background music. To create a new sprite, click  to open Paint Editor.

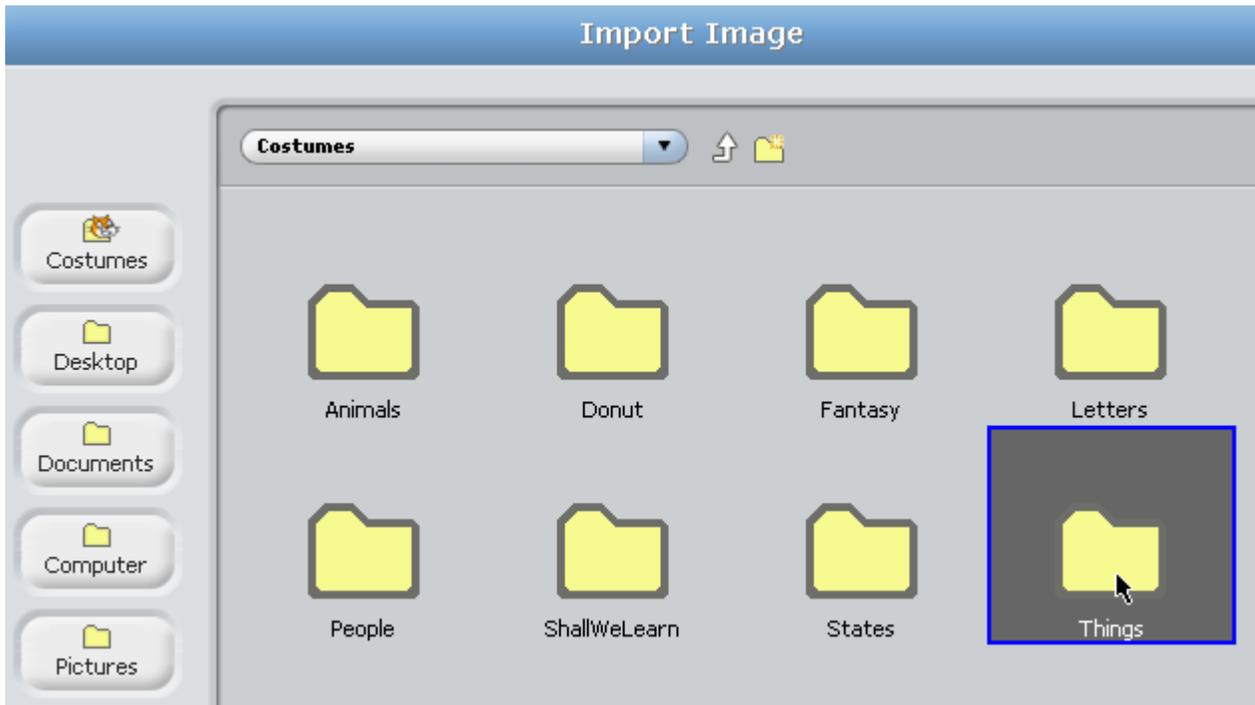


Instead of drawing our own, this time we will import an image. Click "Import".

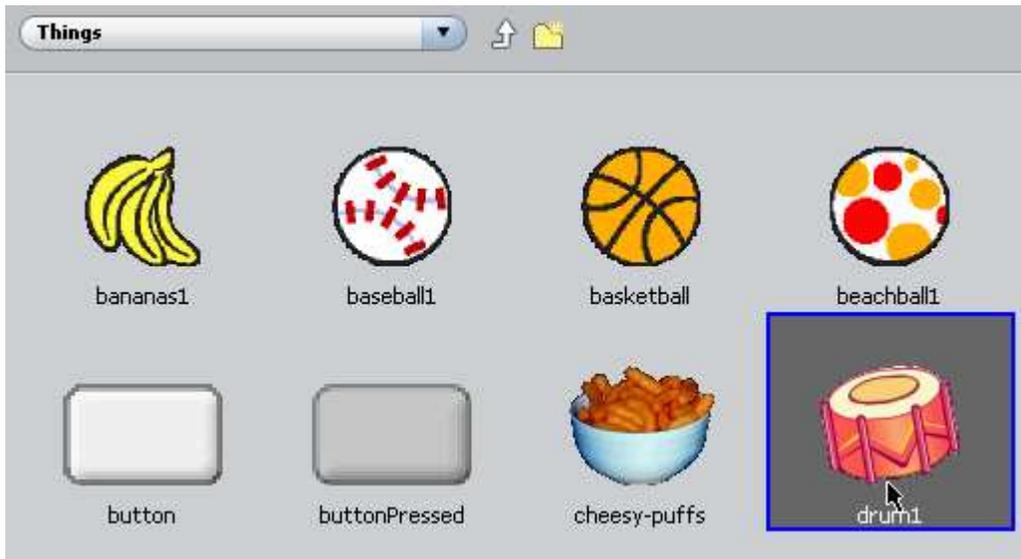


Click "Costumes" if it's not already selected. Then open "Things" folders.





Select "drum1" or whatever image you like. Then click "OK" to save.

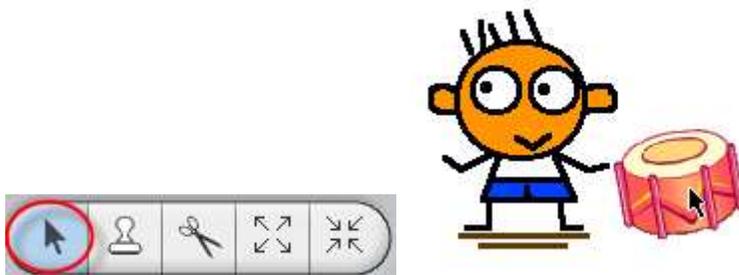


Rename this new sprite to "hip-pop". It's seems big for me so I shrink it with "Shrink Sprite" tool.





Then use "Move" tool to move the "hip-pop" sprite to wherever you see fit. I place it next to dancer1's feet.



Step 2: Move Music Loop to the Music Sprite

Drag the Music Combo Block from dancer1's Scripts Tab.



Drop it to be over sprite "hip-pop" icon. Wait until the "hip-pop" sprite is highlighted before releasing the mouse.

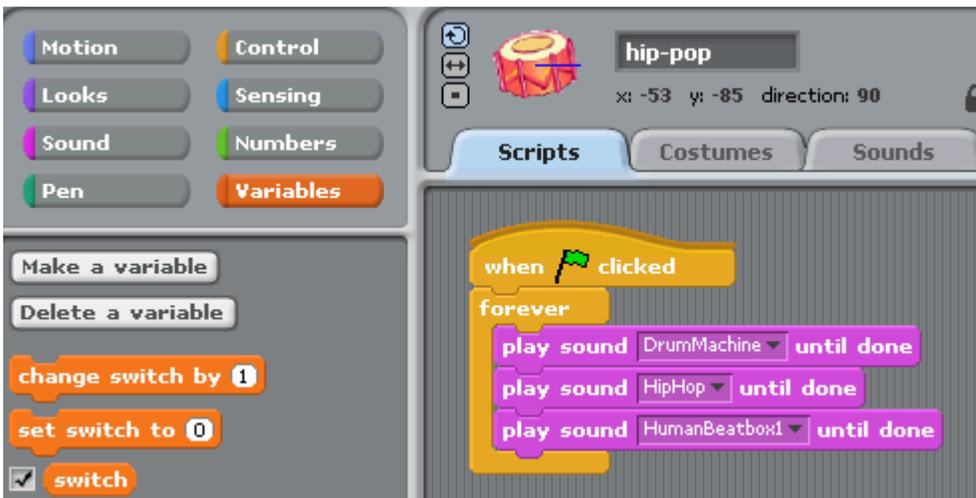


Sprite "hip-pop" now has the music combo block from "dancer1". Delete this same combo block from "dancer1".



Step 3: Turn Music On and Off

To turn music on and off, we need to create a virtual switch. Like a real switch, a virtual switch can be on or off. To create a virtual switch, we use Variables. Select "Variables" Tool Box, and click "Make a variable" button. Then enter "switch" for Variable name.



I would like this switch to work this way:

When the animation first starts, the music is playing and the switch is on. Click the "dancer1" sprite to turn it OFF, and click the "hip-pop" sprite to turn it ON again. If the switch is ON, music is ON; if the switch is OFF, music is OFF.

For this switch to work, we need following blocks:

- one  block from  tool kit
- one  block from  tool kit
- one  block from  tool kit



For  sprite, we will add three new combo blocks. The first combo block turns the switch ON (set music on to 1) when  is clicked.



The second combo block turns the switch ON again (set music on to 1) when "hip-pop" is clicked.



Finally, the third combo block keeps checking if the switch is OFF (switch = 0). If OFF, then stops all sounds.





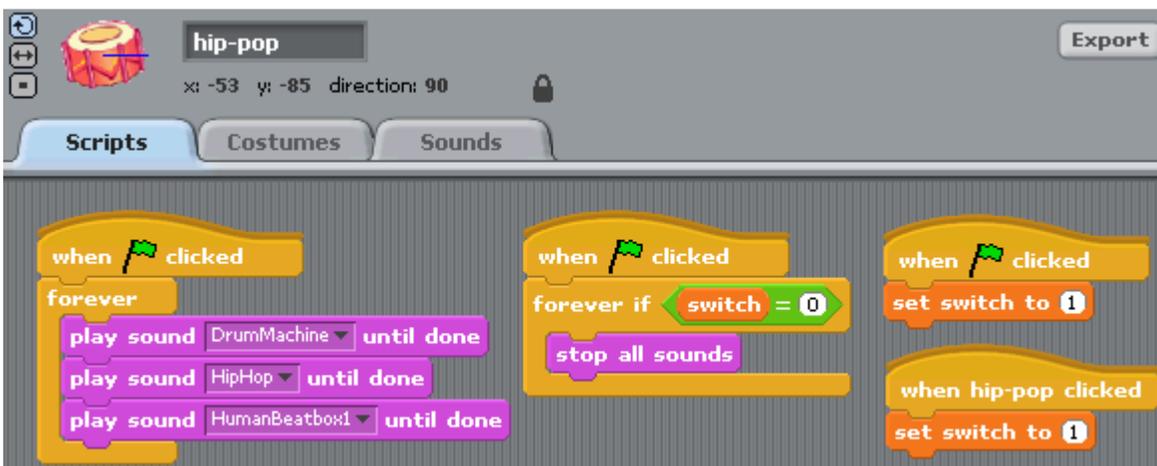
For "dancer1" sprite, we will add one combo block. This combo block will turn the switch OFF if "dancer1" is clicked.



Your "dancer1" sprite should have these combo blocks.



Your "hip-pop" sprite should have these combo blocks.



THIS CONCLUDES LESSON 4.