day50 Scratch backgrounds and costumes
Due Friday 1/12/24

In this assignment you will set up a project that switches between three backgrounds and which features a sprite that is animated. Typing the space key makes everything reset back to a standard starting position and background.

Steps:

1. Create a new project. Rename it "Scratch – costumes"

2. Go to the Stage/Backdrops area (bottom right of the editing window). Click the add button and add three different backdrops. Then on the far left, click on the Backdrops tab. Delete the empty/blank backdrop.

3. In the script area for the backdrops (in the middle of the window) add a green flag clicked block, and under that a repeat forever, a wait 3 seconds, and a next backdrop block. It should look like this:
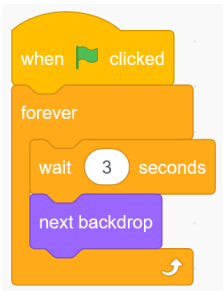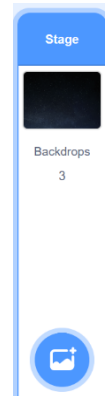
4. Add a when space key pressed block, then under that a block that sets the backdrop to a specific one (your choice) and then a stop other scripts in this sprite block. This should look like the image to the right except yours will be whatever backdrop you choose to start and end on, not Nebula, which was my choice.
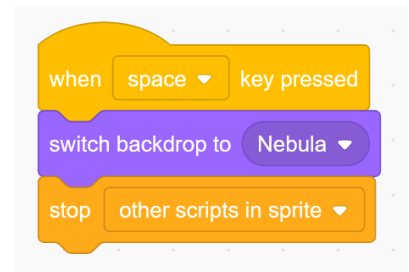

5. Now, go back to the cat sprite and delete it. Now, add an animal sprite that has motion animation costumes. What?! How can I tell, well, click the new sprite button and then go to animals and hold your mouse over several of the sprites to see their costumes in action. For example, the bat (the first animal) flaps its wings if you hold the mouse over it. You can see four different bat costumes, that when you cycle through them, make it look like the bat is flying. Many of the animal sprites have several costumes. The default cat has two that make it look like it is walking for example.

Choose a sprite that is NOT the cat that has two or more costumes that make it look like it is walking/flying/moving.

6. In this sprite, create a green flag script that makes the sprite walk across the screen and slowly change costumes while it is doing it. Be sure to include an "if on edge bounce" block and a "set rotation style left-right" block. Your code should look close to this:
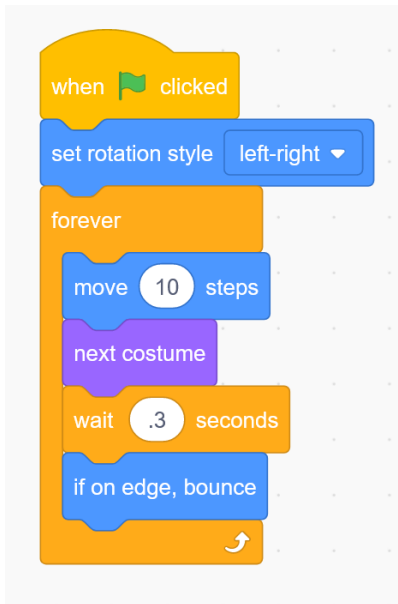
That's .3 seconds (point three). You need a wait block in there or the motion is crazy fast.

7. Add a space key pressed code group that moves the sprite back to the left of the screen, points it to 90 degrees, and stops other scripts in the sprite. This block will look like this t the right.
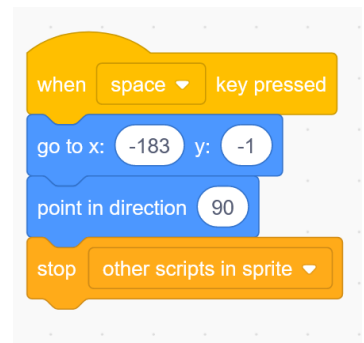
8. **Test your program.** The sprite should not be the cat, but instead should be another sprite that has walking/moving costumes built in to it. When you click the green flag your sprite should walk/fly/crawl across the screen in an animated way (switching costumes, not too quickly) and when it hits the right side it should turn around and come back the other way. It should not flip upside down when it changes directions. Meanwhile, the background should change every 3 seconds. Typing the space key should set the background to a specific background, the sprite should go back to the left side of the screen, and everything should stop.

9. Add another sprite, your choice, that starts out very small and slowly gets bigger and bigger, while also changing with a visual effect. Clicking on that sprite makes it get small again and resets the visual effects. This goes on and on, except when the space key is pressed, this sprite gets small and clears the visual effect, and stops.

10. **After you test your program, click the Share button and copy and turn in a share link.** If you do not have a Share button, watch the video in Wednesday's assignment that shows you how to get a Share button.