

day53 Scratch movement

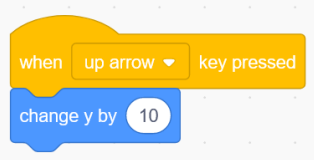
Due: Wednesday 1/24

We have two projects today. First we're going to do some fun things with moving sprites around.

## 1. Up/Down/Left/Right arrows

First, make a new project. Delete the cat. Add a sprite of your choosing that is not the cat.

In the sprite, drag over a When <key> pressed block. Change the key to "up arrow". Go to the Motion block area and find the "change y by 10" block. Put this under the up arrow block. You should have this:



Repeat for the down arrow (you can duplicate this set by right clicking on it, remember, to right click on a Chrome book tap the track pad with two fingers). For the down arrow the change block should be "change y by -10" (that's negative 10 so it goes down).

Verify that your code works. Do the up arrow, the down arrow, and your sprite moves around, up and down.

Do the same thing for the left and right arrows, but for them use "change x by -10" and "by 10".

Now you've got a fully mobile sprite, controllable by the keyboard.

## 2. Scene changing

Go to backdrops and add two backdrops. Delete the blank white backdrop.

Go back to your sprite. Get the following parts:



The if/then block is from Control, the > block is from Operators, the x blocks are from Motion and the next backdrop block is from Looks. In the "right arrow" code group, add the if statement. In the diamond condition area add a greater than block to say if x position is greater than 220. Inside the if, add a "set x to -220" block, and the next backdrop block.

Test your code. Now, when you do the right arrow and the sprite goes all the way to the right, it pops over to the left, like it went from one scene to another. The backdrop should change as you do this so that it seems like the sprite is going from place to place. Make sure the up and down arrows move the sprite around appropriately as well (no need to change the backgrounds for them, though.)

When you are done, turn in a share link, then go on to our second assignment.