

CoderDojo Athenry

"Above all, be cool"



Every week:

- ✓ Sign in at the door

If you are new:

- ✓ Fill in Registration Form
- ✓ Ask a Mentor how to get started

Make sure you are on the Athenry Parents/Kids Google Group: email coderdojoathenry@gmail.com

Wifi password: **coderdojowireless**

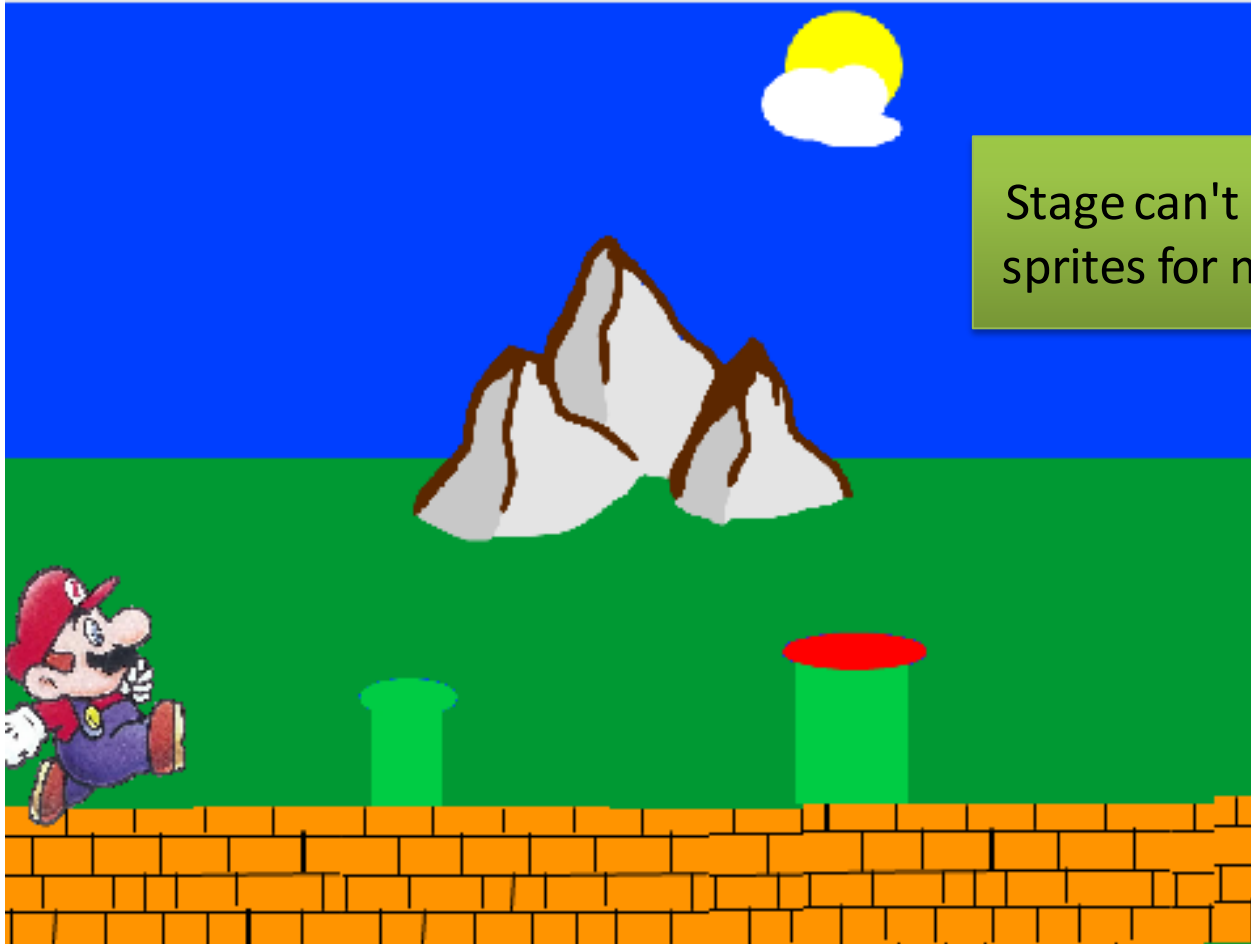
CoderDojo Athenry

SCRATCH Beginners



Code and notes by Martha Fahy

Today's Challenge: Scrolling Backgrounds



Stage can't move: need to use sprites for moving background

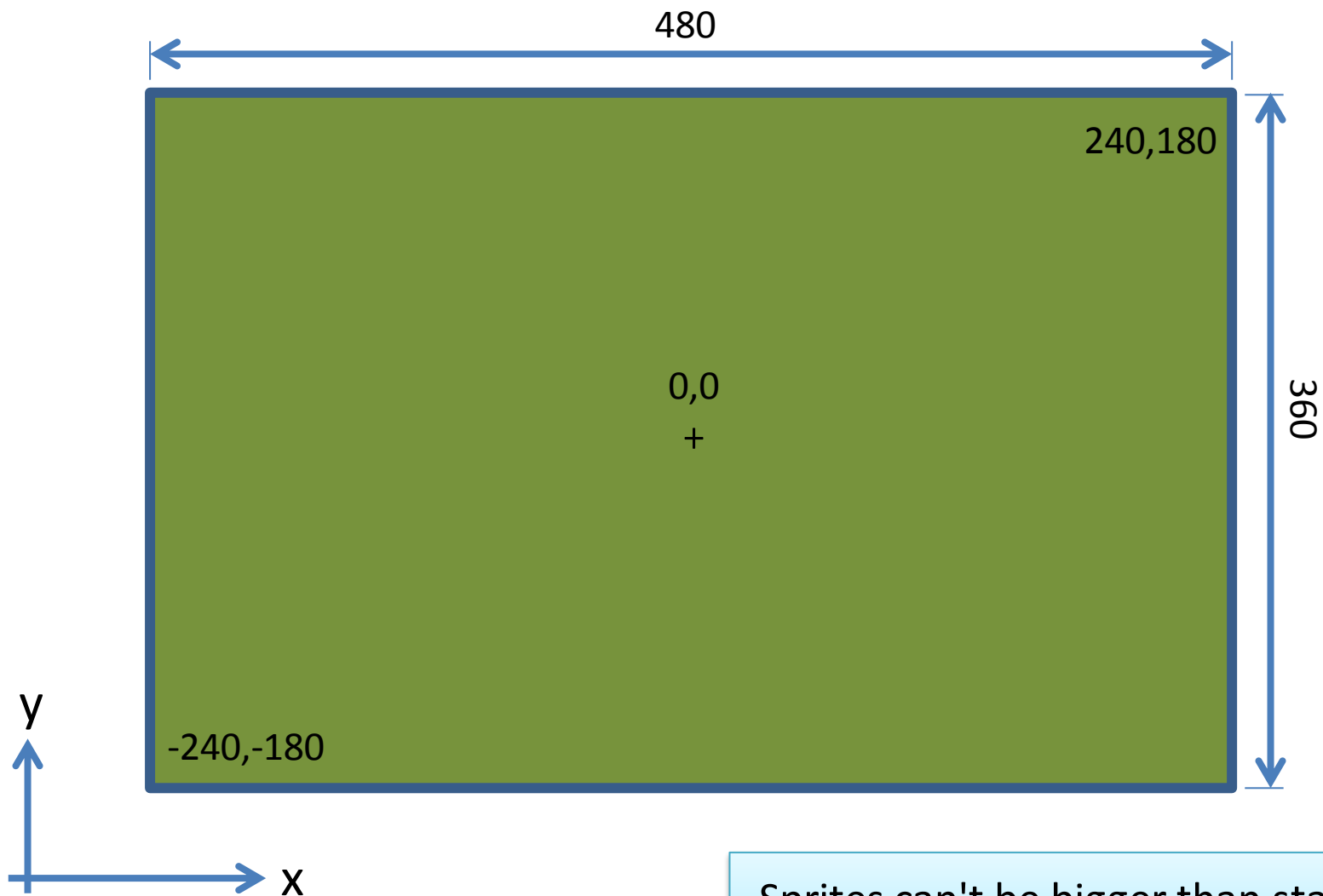
Lets get our Sprites



**Mario: Search online
and save as a .jpg or
.jpeg file and then
import it into Scratch**

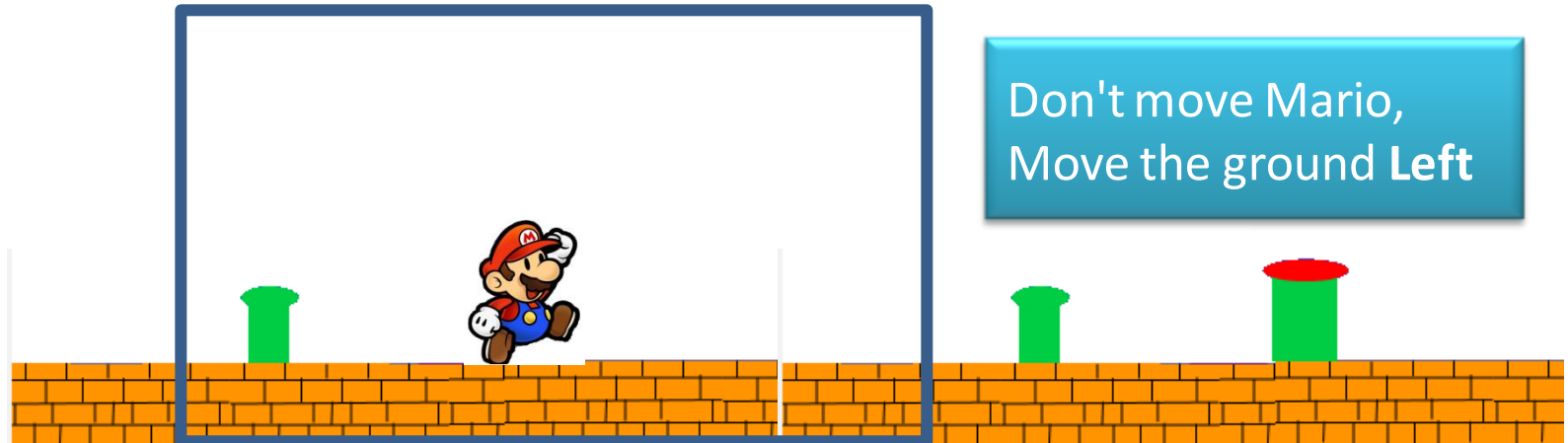


The Scratch Stage



Sprites can't be bigger than stage:
max length is 480 also

To make it look like Mario is moving Right ...



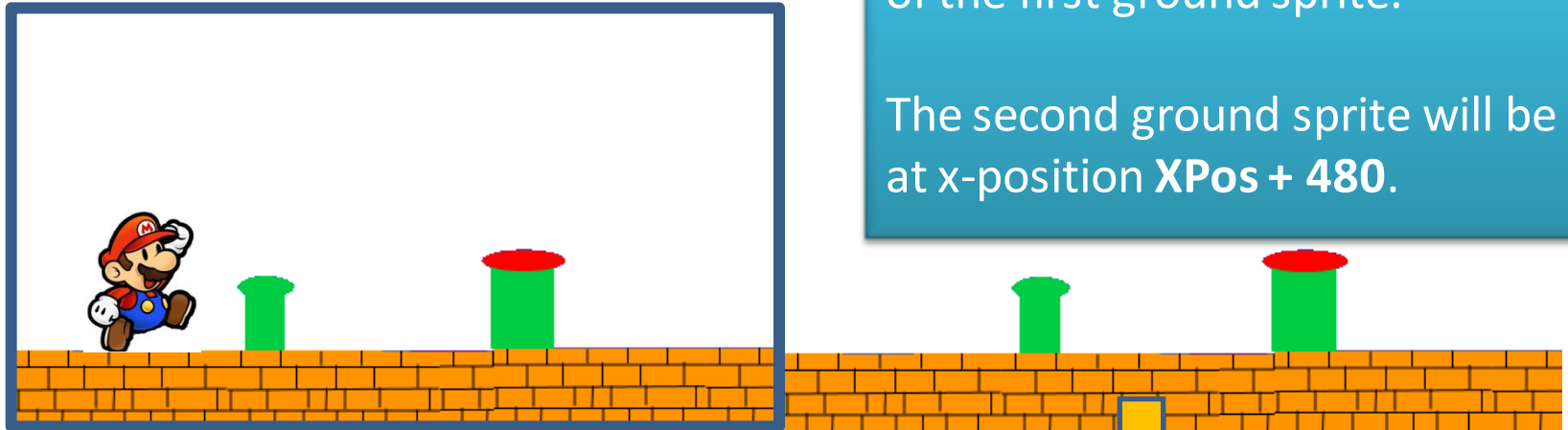
Sprites can't be bigger than stage:
max length of each one is 480,
so we need at least two of them.

Add more to make ground longer.

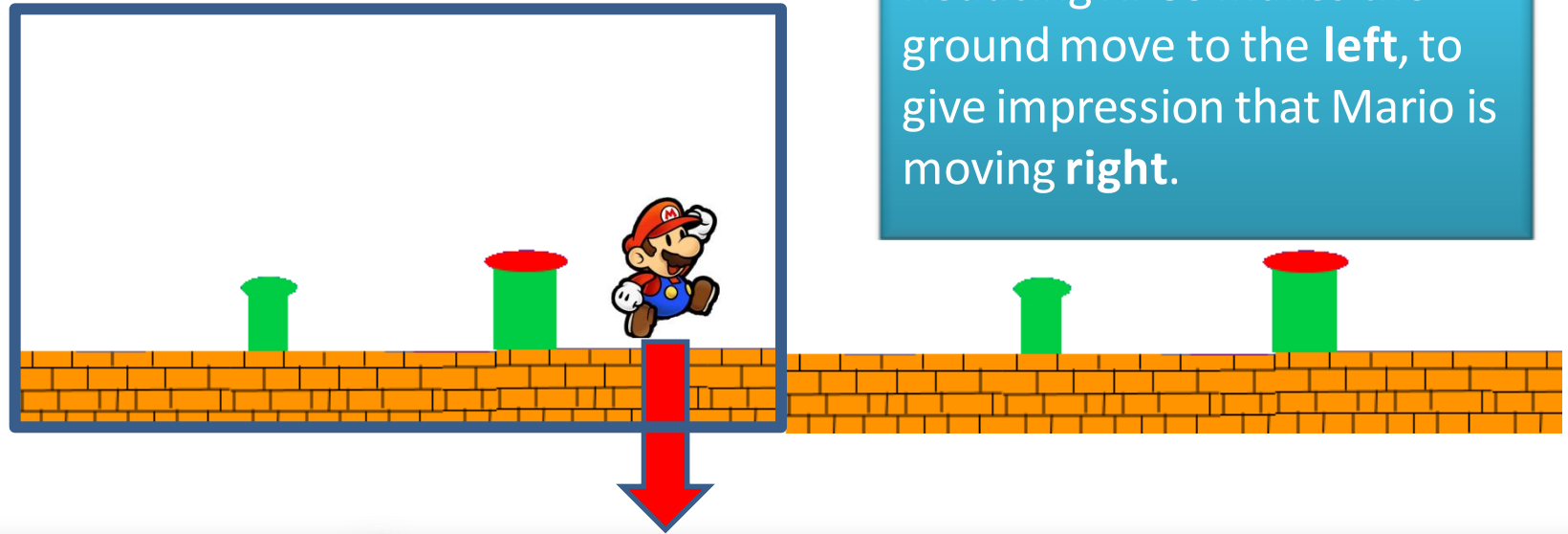
How to do it, Part 1 ...

Make a variable **XPos**: x-position of the first ground sprite.

The second ground sprite will be at x-position **XPos + 480**.



How to do it, Part 2 ...



Reducing XPos makes the ground move to the left, to give impression that Mario is moving right.

when  clicked

set XPos to 0

when right arrow key pressed

point in direction 90

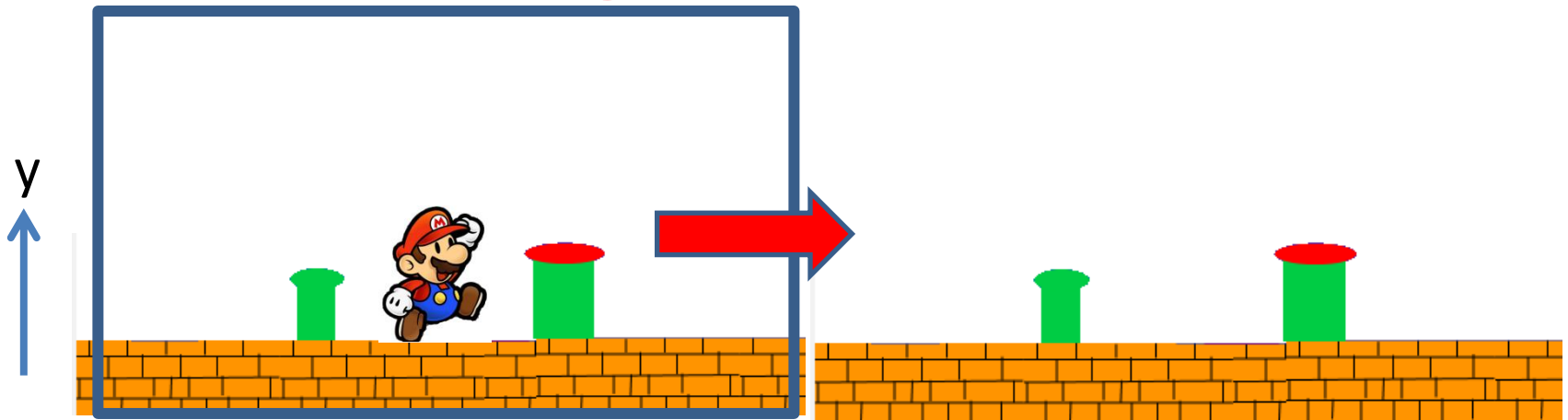
change XPos by -5

when left arrow key pressed

point in direction -90

change XPos by 5

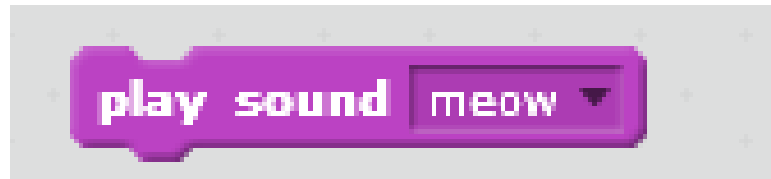
Make Mario stand on the ground ...



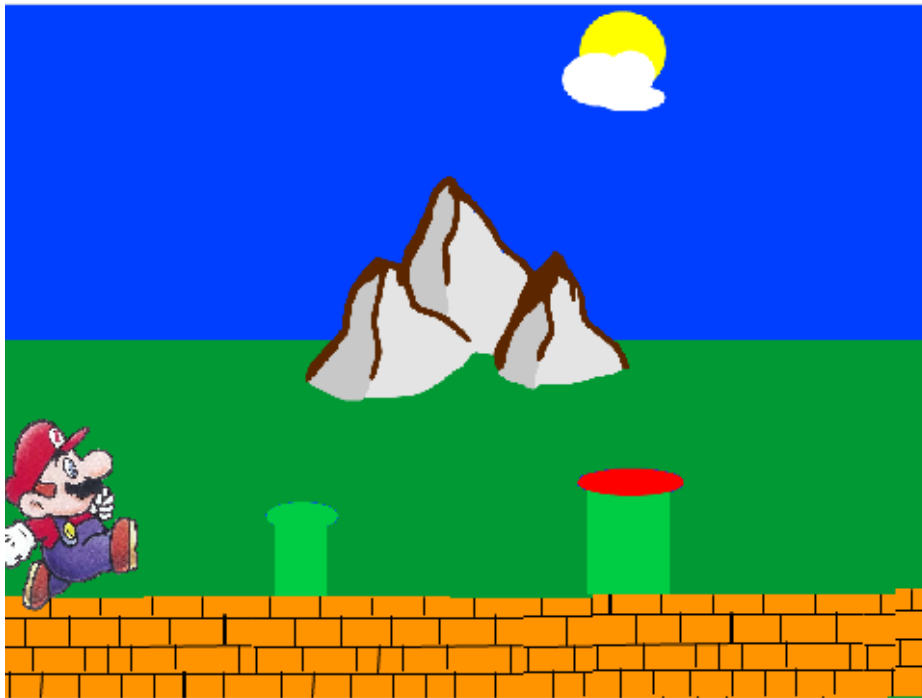
If above ground (not touching colour) move Mario down a bit.

```
when clicked
  forever
    if not touching color [red] ? then
      wait 0.2 secs
      change y by -10
```

Some more ideas...



Advanced Idea: Parallax Effect



```
when clicked
  go back 50 layers
  forever
    set x to Xpos / 4
```

x: 0
y: 33

Mountains appear to move more slowly, so change their XPos by a smaller amount.

Also need to consider layers: the ordering of the sprites.

```
when clicked
  go to front
```

At the End ...

Upload your project to the Scratch Website

user: [coderdojoathenry](#)

password: [xxxxxxx123](#)

Access it
from home



Improve it



Show your
friends!



Uploading to Scratch Website

