

## Scratch Programming Part 2

In Part 1, we created a new Scratch project and created three sprites: Mr. Meow, Donut Man, and Donut. You can drag them around on the Stage, but other than that, they just stare at you with his unblinking eyes (Donut too, with his one eye).

It's not that because they don't like you; it's because they have not been given their *scripts*. *Scripts*, like movie scripts, dictate how sprites act. These sprites, unlike Hollywood stars, will only do what their scripts say, nothing more and nothing less. Let's give them some scripts now.

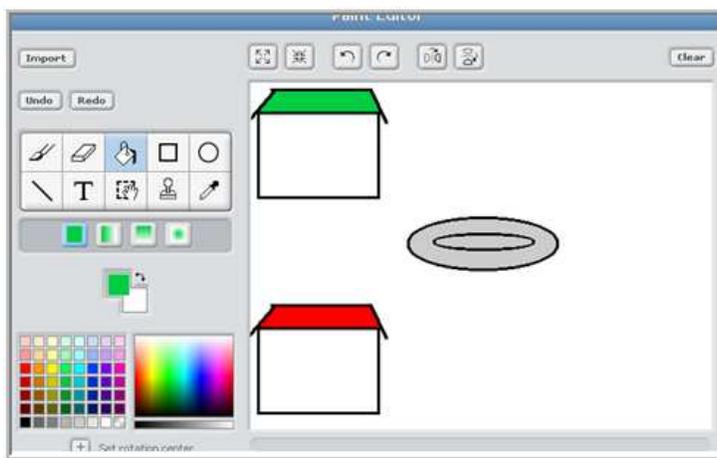
To make our stage more interesting, we also need to create a scene. A scene, like a movie scene, sets the tone of the story and provides a platform for the characters in the story.

### **Step 1: Create a Simple Scene**

To create a scene, we change the costume of "Stage". We will add two houses and a plate to the "Stage". To do so, double click the Stage icon to select. Then click "Costumes" and select the only costume, "background1" and hit "Edit" button.



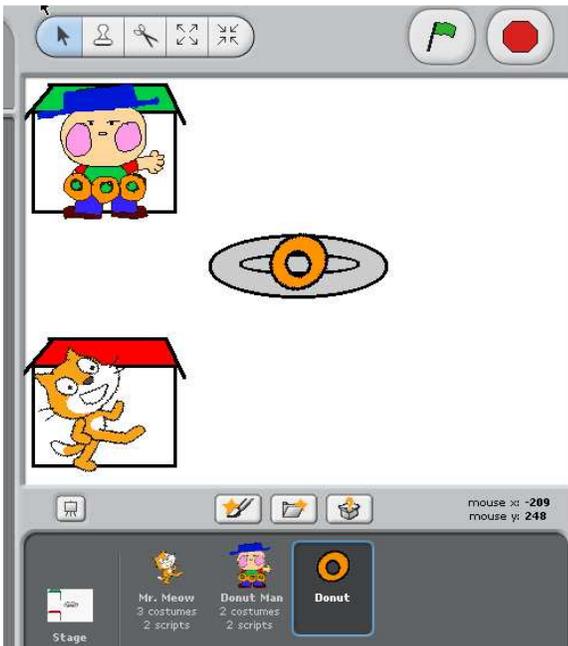
Change the costume by adding two houses and a plate. When done, hit "OK" button.



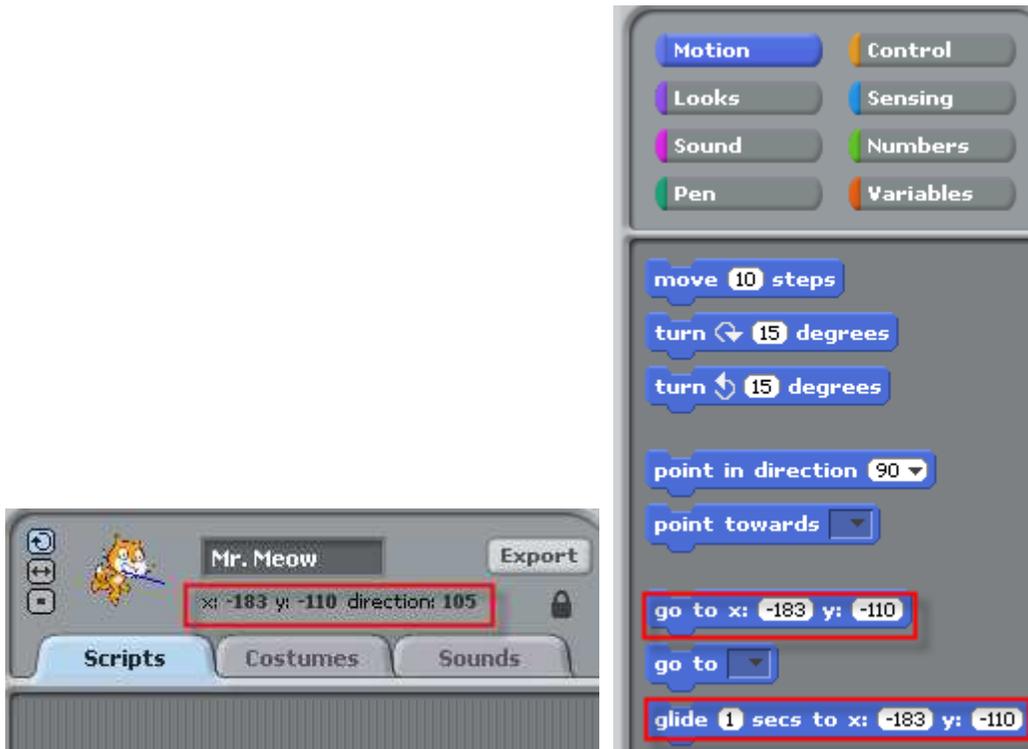
## **Step 2: Adding Simple Movement Scripts to Sprites**

Now let's add scripts so that all sprites will show up in the right places when the animation starts (when the Start Flag is clicked).

Move three sprites as shown below.



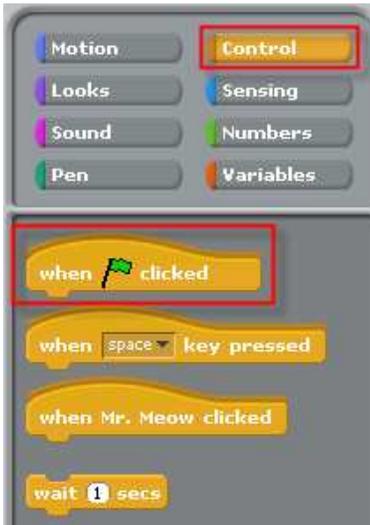
The x-axis and y-axis values are updated accordingly when moved. A cool feature is that when sprites are moved, the Motion blocks in the Tool Box are updated as well.



To build Mr. Meow's scripts, select Mr. Meow from the Sprites Area, then click "Scripts" tab.



From the Tool Box, click the "Control" button and drag "when Start Flag clicked" block to drop it in Scripts work area.



Then click "Motion" button in Tool Box Selection and drag "glide 1 secs to x:-183 y:-110" to the Stage. Then attach it under the "when Start Flag clicked" block.



Then click "Looks" button in Tool Box Selection, and drag "switch to costume1" to the Stage. Then attach it under the "glide 1 secs to x:-183 y:-110".



### **Step3: Do the same for Donut Man and Donut**

In the same way, create the following script for the Donut Man and the Donut.

Below is what result scripts should look like. Note that your x-axis and y-axis values will very likely be different than mine, and it's OK.



### **Step 4: Test**



Now you can test this very simple animation. First move these sprites around in the Stage and clicking the Start Flag button and you should see all of the sprites gliding back to their positions.

