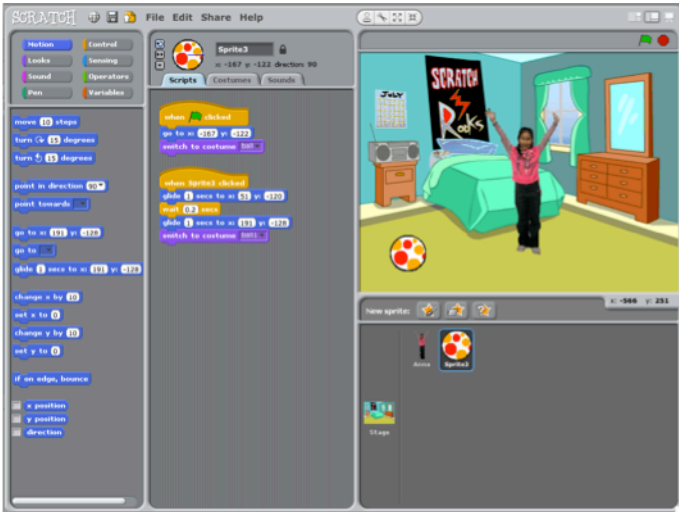


## Appendix: Handouts

This appendix includes the following handouts:

Session #	Handout
2	About me
4	Dance party
5	Useful blocks for arts-themed projects
	Square, circle
	Build-a-band
	Automatic drawing
8	Useful blocks for stories-themed projects
	Conversation
	Scenes
	Slideshow
9	Debug it!
10	Maze
12	Useful blocks for games-themed projects
	Collide
	Catlibs
	Scrolling
13	Plans for my final project
	Sketches of my final project
16	Project feedback
18	My project reflections

# ABOUT ME



How can you combine interesting images and sounds to make an interactive collage about yourself?

## STEP BY STEP...

### 1. Add a sprite



paint your own sprite

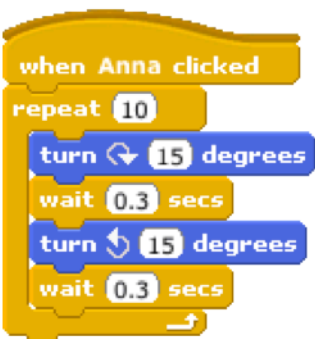
choose a downloaded or library sprite

get a surprise sprite

### 2. Make it interactive



make your sprite interactive by adding scripts that have the sprite respond to clicks, key presses, and more



### 3. Repeat!

## BLOCKS TO PLAY WITH...



# DANCE PARTY



Create your own interactive dance party where sprites get down with cool costumes and funky beats.

## STEP BY STEP...

### 1. Add a sprite



paint your own sprite

choose a downloaded or library sprite

get a surprise sprite

### 2. Make it interactive

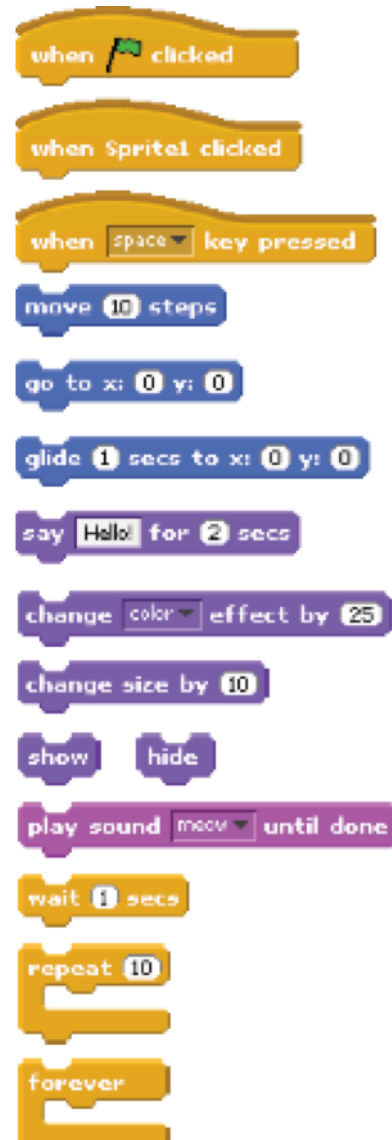


snap blocks together to make your sprite dance

make your sprite interactive by adding scripts that have the sprite respond to clicks, key presses, and more

### 3. Repeat!

## BLOCKS TO PLAY WITH...



# ARTS

Here are some blocks that can be useful in arts-themed projects.

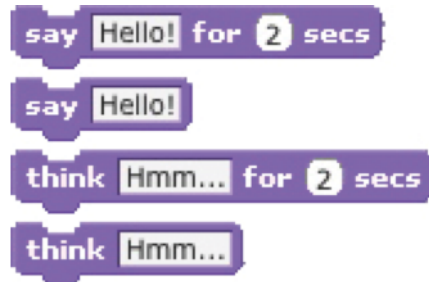
## WAIT

Insert a pause



## SAY/THINK

Have a speech or thought bubble appear over a sprite



## SOUNDS

Play recorded and synthesized audio



## VISIBILITY

Make a sprite appear or disappear



## LOOP

Repeat stacks of blocks



## RANDOM

Get a computer-generated number from a specified range



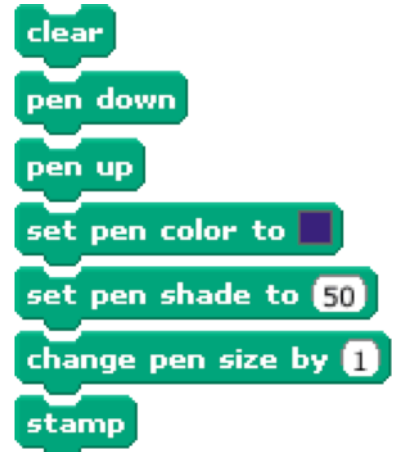
## KEY PRESS

Make a sprite respond when different keys are pressed



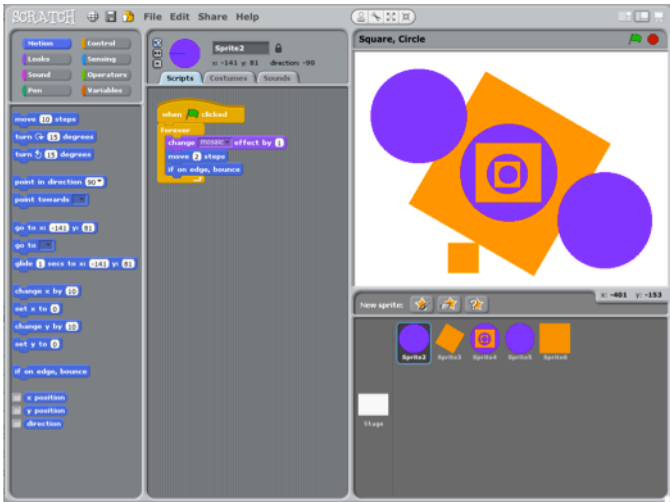
## PEN

Leave visual lines and sprite stamps on the stage



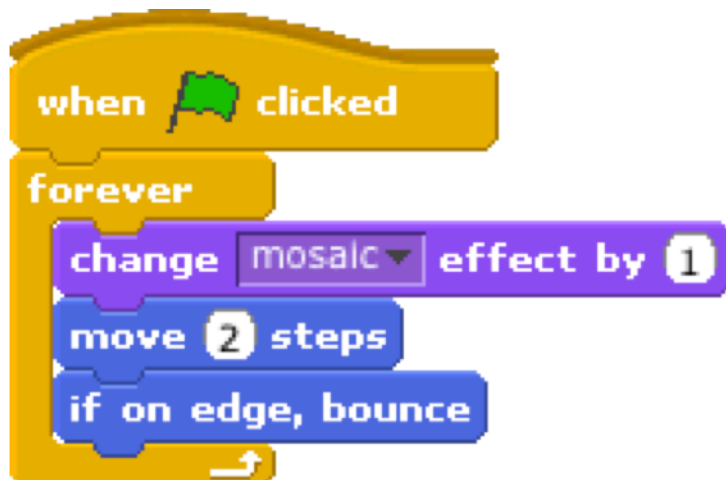
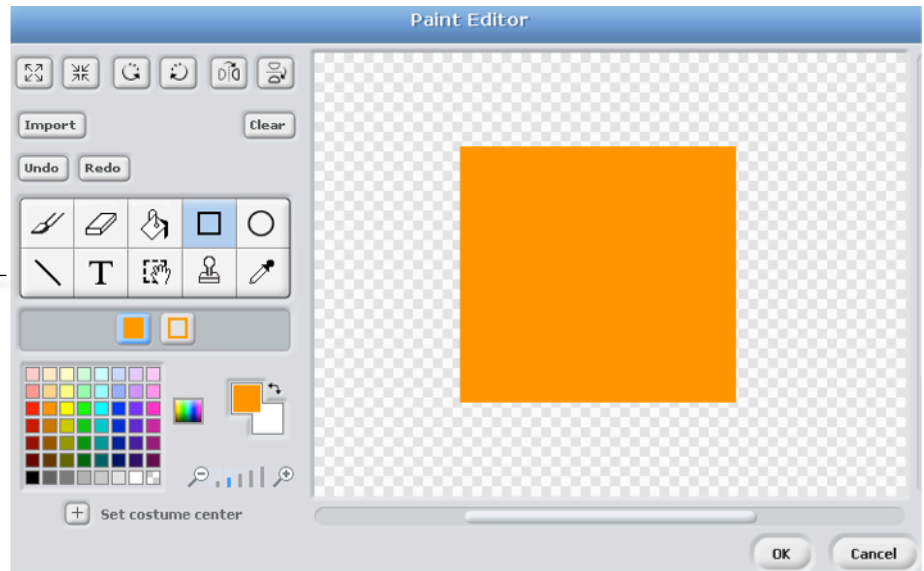


# SQUARE, CIRCLE



What project can you create that includes an orange square and a purple circle?

use the paint editor to design sprites that incorporate an orange square and a purple circle

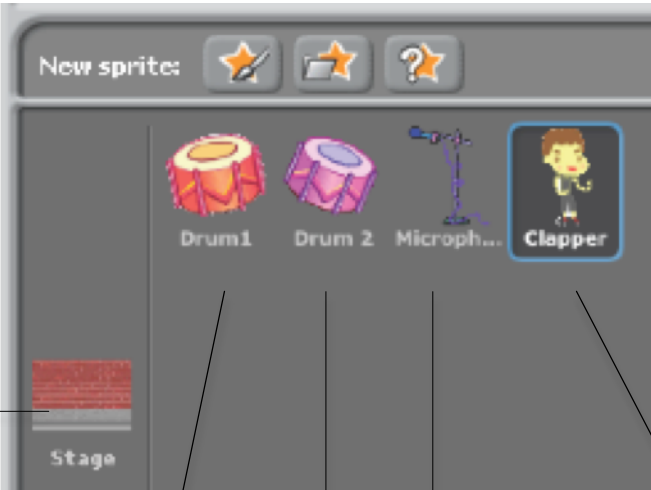


experiment with different motion and looks blocks to bring your sprites to life

# BUILD-A-BAND



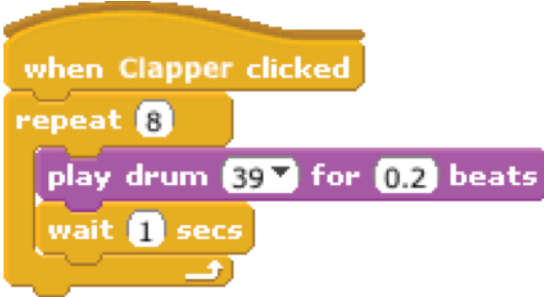
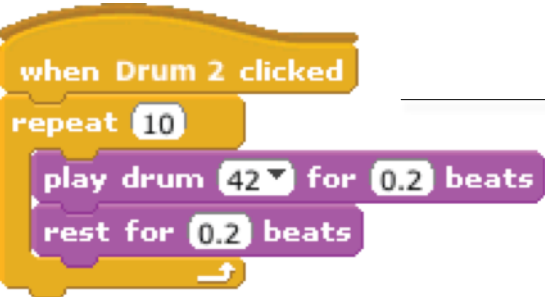
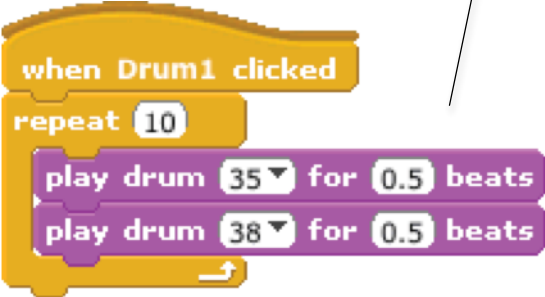
Create your own musical group by pairing sprites with sounds to make interactive instruments.



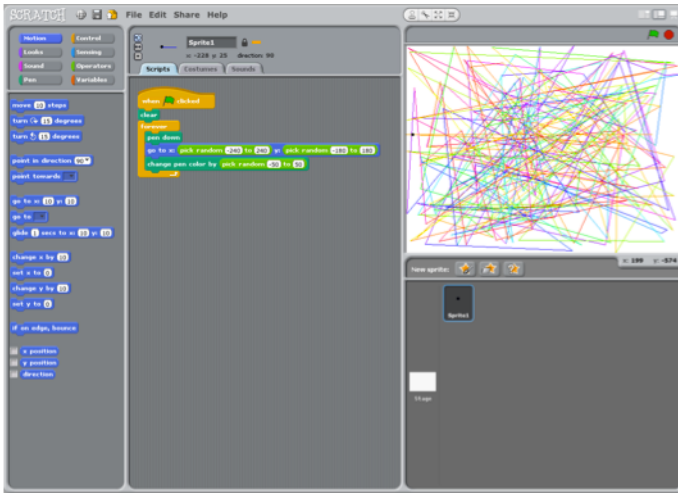
no scripts

use the repeat block to make a sound play more than once

experiment with different music and beats, or import your own sounds

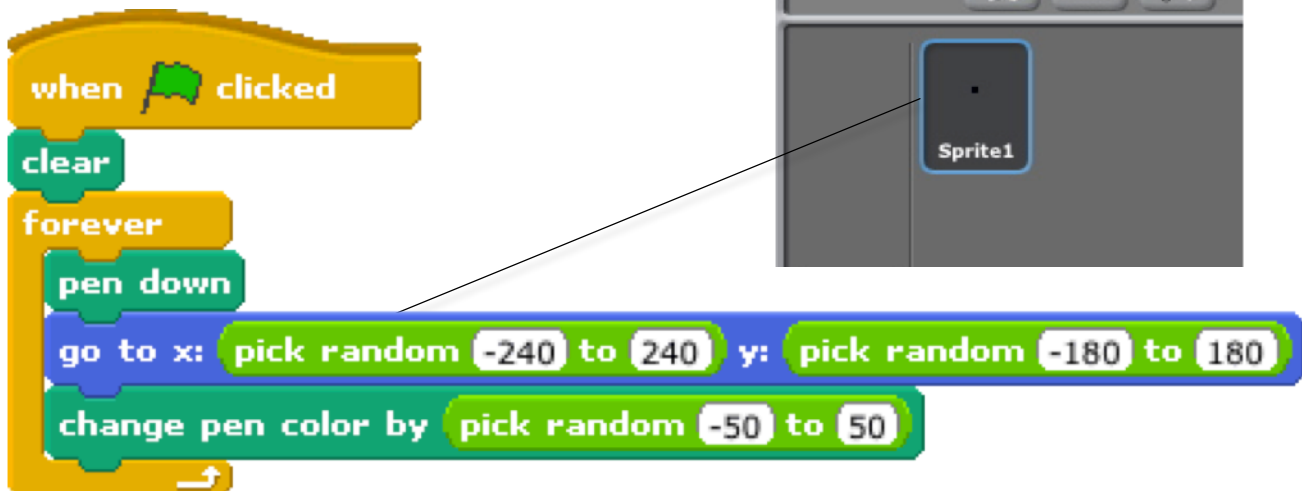
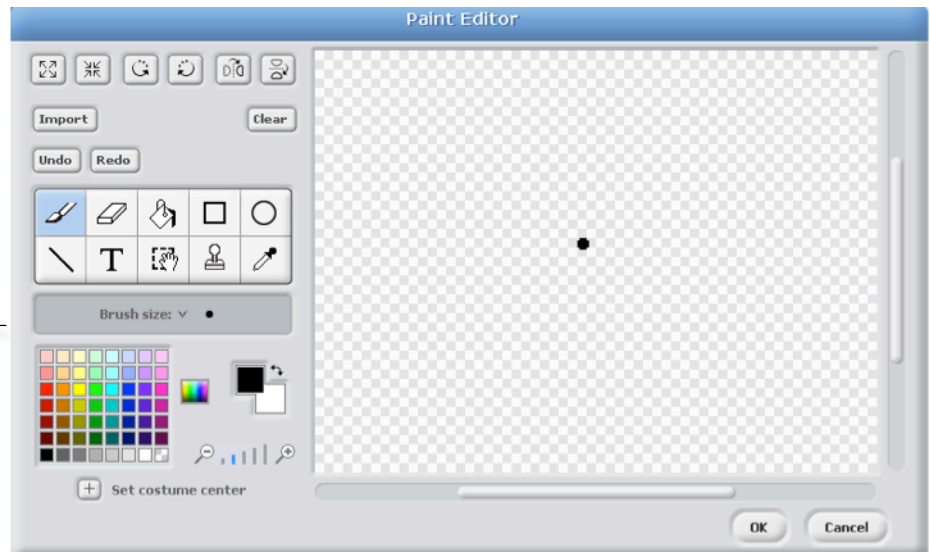


# AUTOMATIC DRAWING



Make a project that draws something on its own.

create a sprite that  
is just a small dot



# STORIES

Here are some blocks that can be useful in story-themed projects.

## WAIT

Insert a pause



## SAY/THINK

Have a speech or thought bubble appear over a sprite



## SOUNDS

Play recorded audio



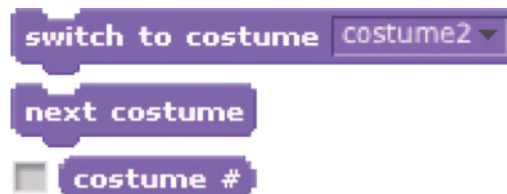
## VISIBILITY

Make a sprite appear or disappear



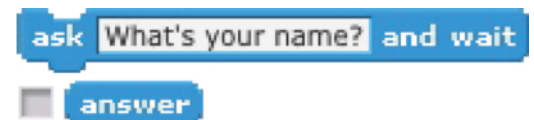
## COSTUMES

Change the appearance of your sprite



## ASK

Get input to use in a project



## STRINGS

Test, access, and change words and sentences



## COORDINATE

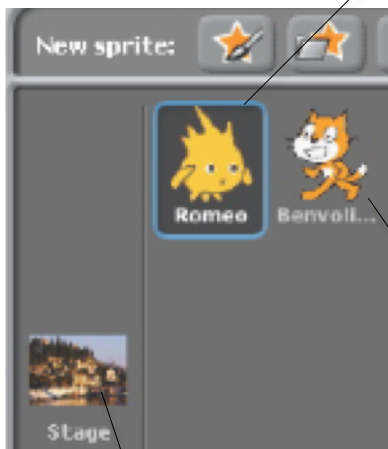
Synchronize actions between and within sprites



# CONVERSATION



Get two characters talking to each other.  
Use the **say** and **wait** blocks to coordinate the conversation.



1 script

1 script

no scripts  
add a background

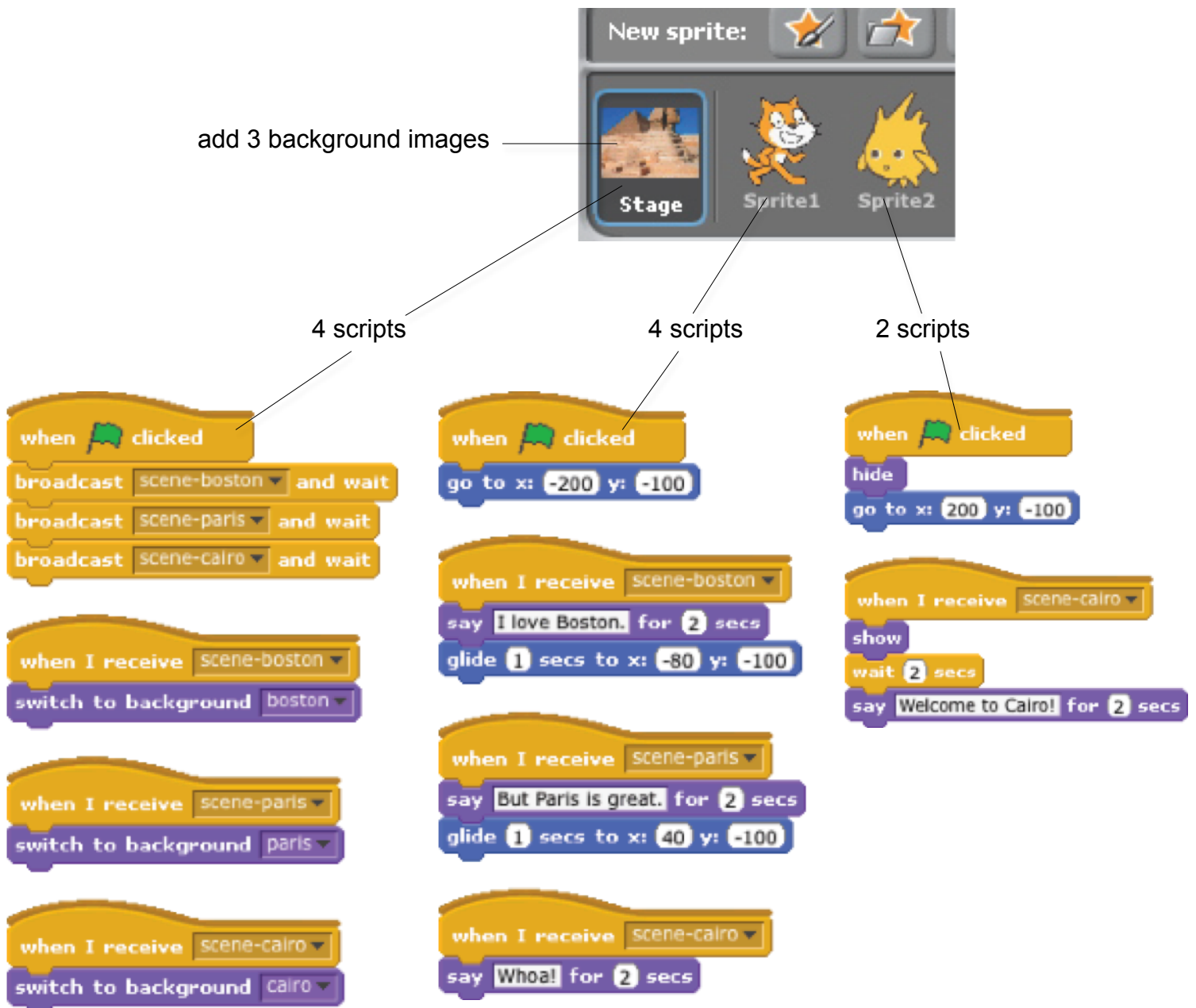
```
when green flag clicked
say Ay me! Sad hours seem long. for 2 secs
wait 2 secs
say Not having that, which, having, makes them short. for 2 secs
wait 2 secs
say Out-- for 2 secs
wait 2 secs
say Out of her favour, where I am in love. for 2 secs
```

```
when green flag clicked
wait 2 secs
say What sadness lengthens Romeo's hours? for 2 secs
wait 2 secs
say In love? for 2 secs
wait 2 secs
say Of love? for 2 secs
wait 2 secs
say Alas, that love, so gentle in his view, for 2 secs
say Should be so tyrannous and rough in proof! for 2 secs
```

# SCENES



Use the **broadcast** and **when I receive** blocks to create a multi-scene story.

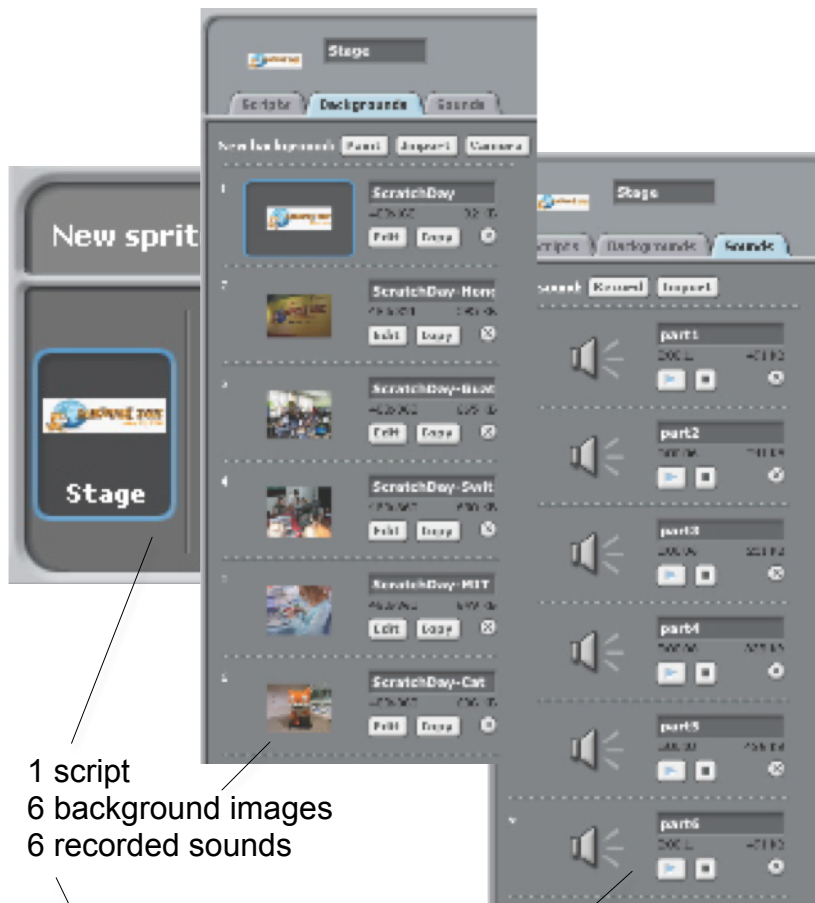




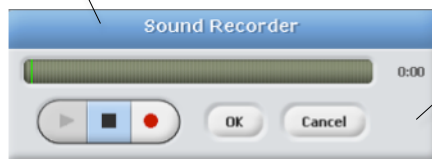
# SLIDESHOW



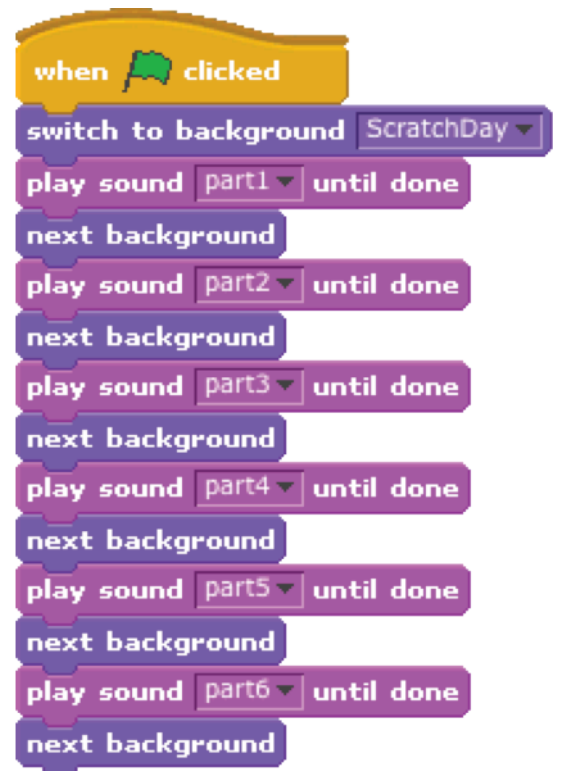
Create your own slideshow – a collection of background images accompanied by audio narration.



1 script  
6 background images  
6 recorded sounds

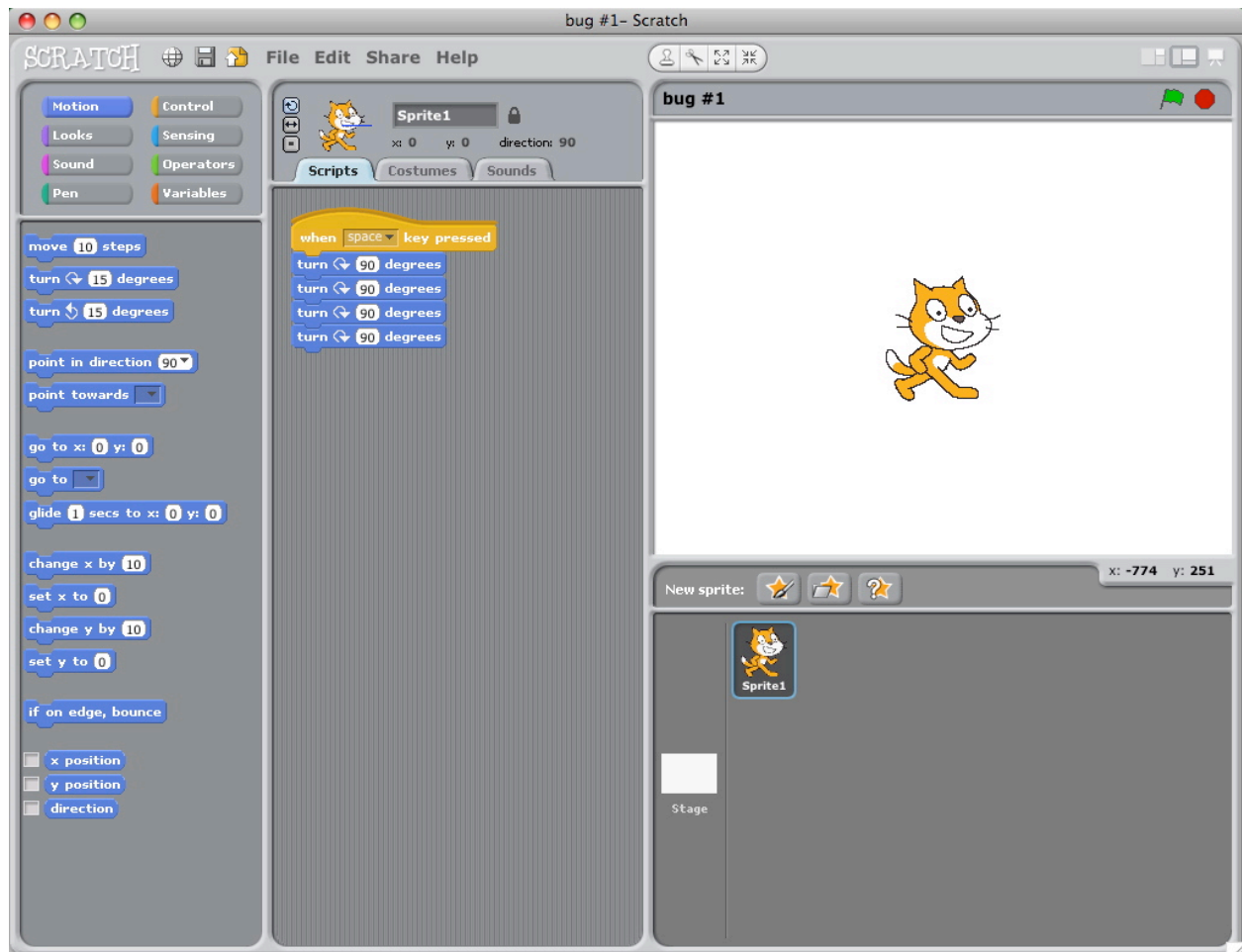


record your narration right in Scratch with the sound recorder



## BUG #1

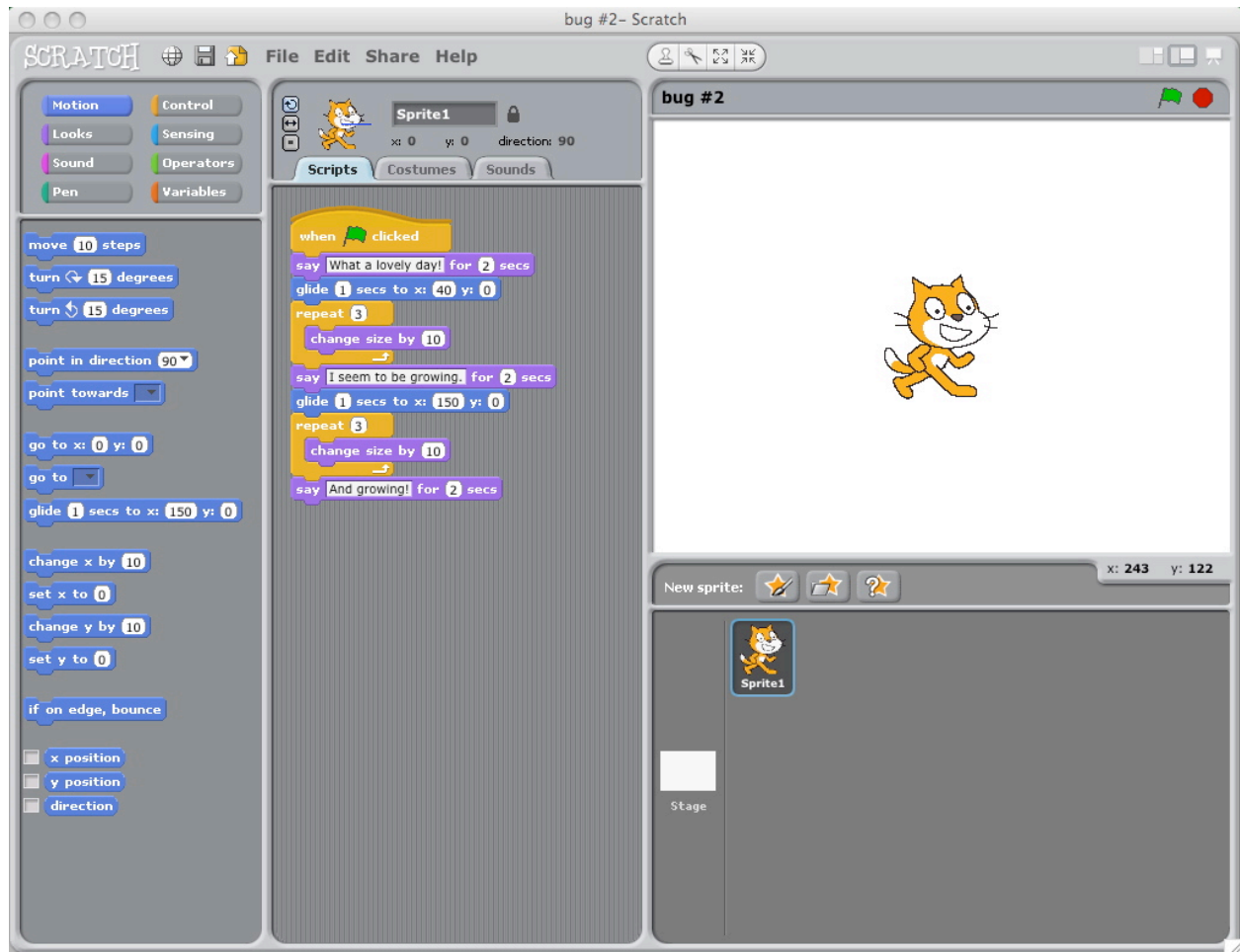
Farooq wants his cat to rotate when he presses the space bar. But the cat isn't moving! What's going on?





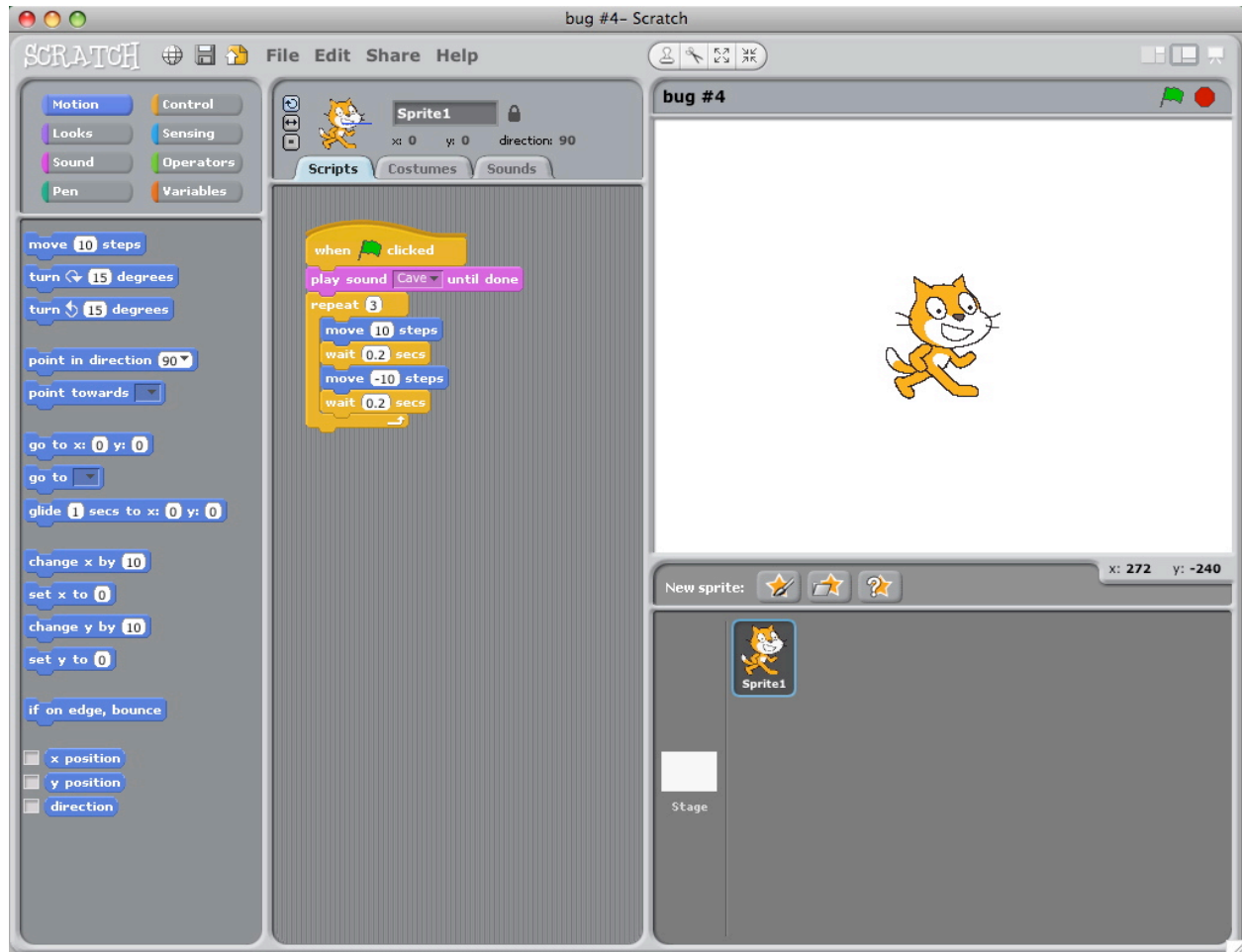
## BUG #2

Michelle wants the cat to start in the middle of the stage, then move across the stage and grow. It works the first time she clicks the green flag – but not when she clicks it again! What's going on?



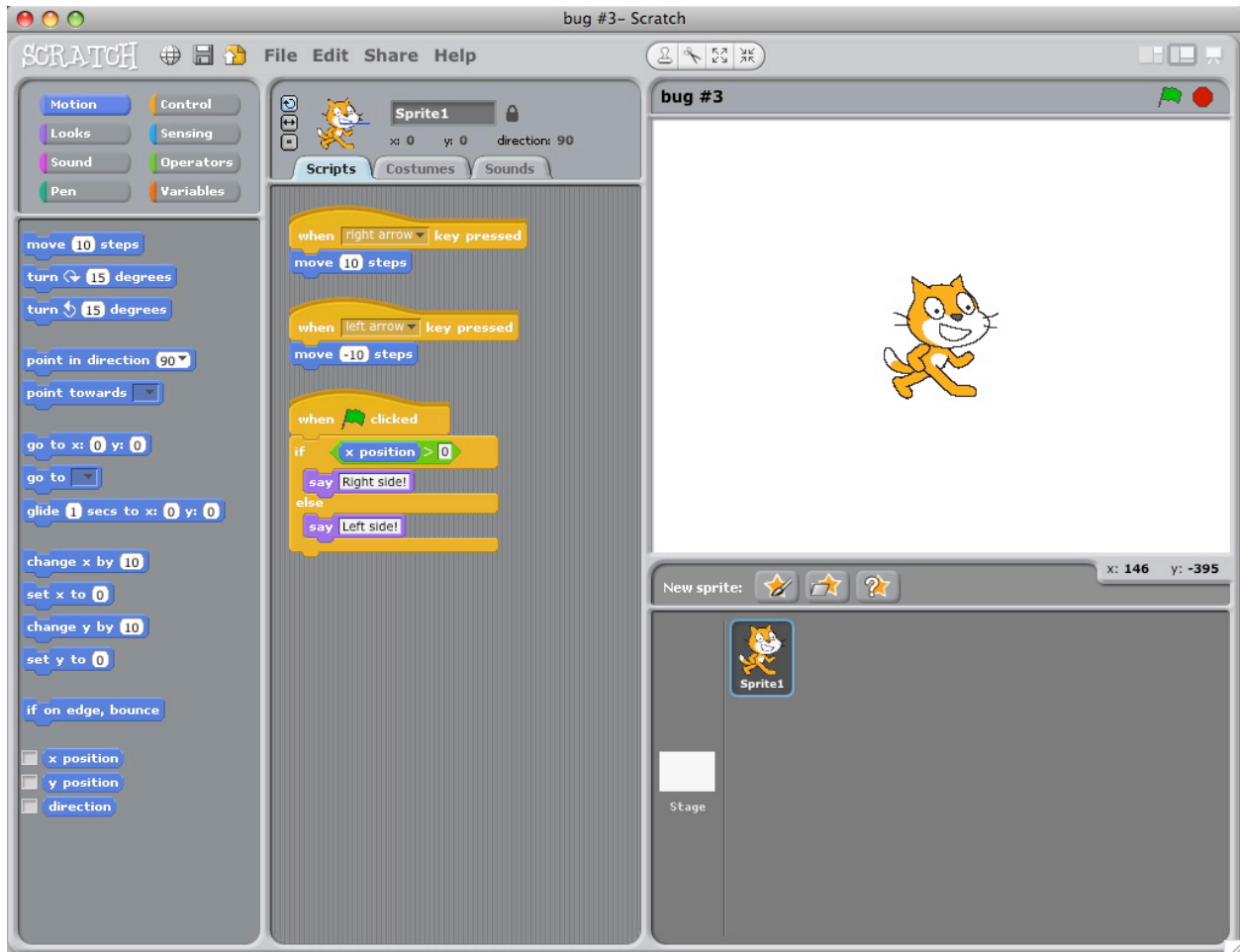
## BUG #3

Alex wants his cat to dance to some music. But the cat is dancing after the music is over! What's going on?



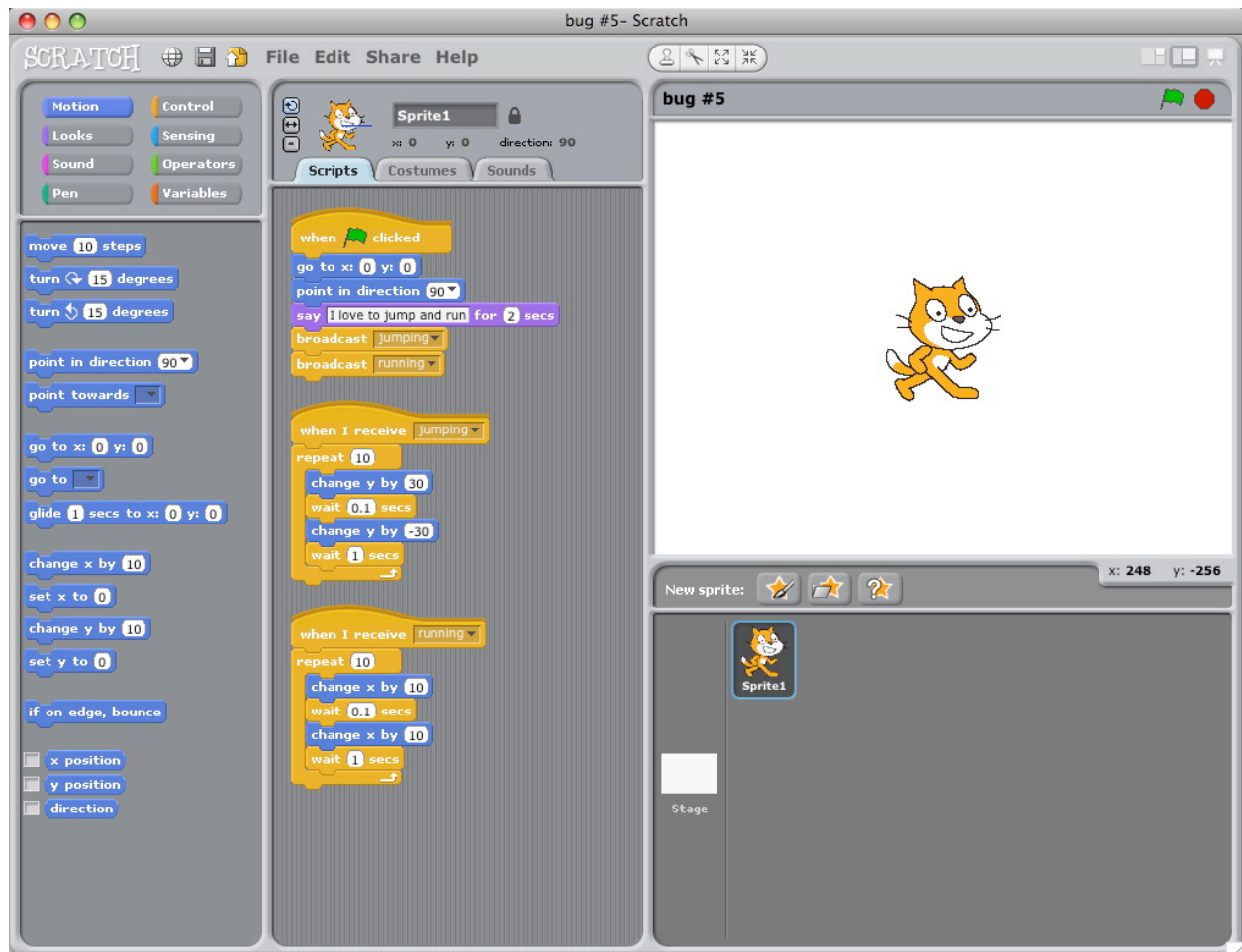
## BUG #4

Praneetha wants to control the cat's x-position with the keyboard: right arrow moves the cat right, left arrow moves the cat left. She also wants the cat to say if it's on the right side or the left side, depending on its x-position. The cat's moving, but not saying its position correctly! What's going on?



## BUG #5

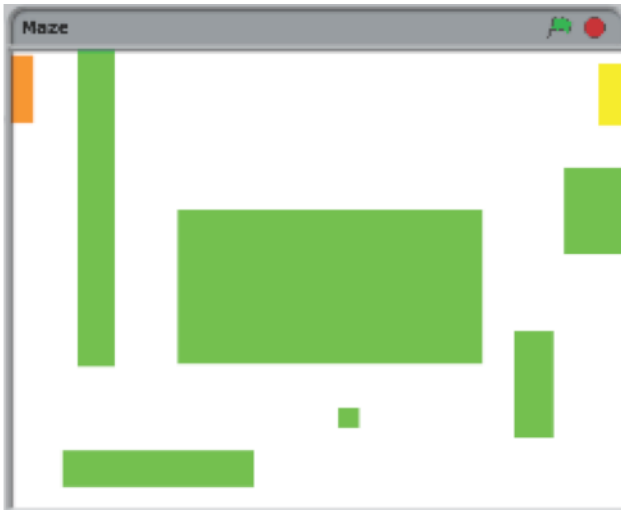
Nobuyuki wants his cat to jump up and down, and then move across the screen. But the cat's hopping across the screen! What's going on?



## **BUG #6**

*Design your very own puzzling Scratch program to debug.*

# MAZE



Create a game where you get a sprite from the start to the end of a maze without touching the walls.

7 scripts total



move the sprite around

have the sprite bounce off the green walls

no scripts, draw a maze-like background with colored walls and a differently colored end marker



players wins when sprite reaches the yellow end marker

# GAMES

Here are some blocks that can be useful in games.

## TOUCHING

See if two sprites are touching or if a sprite is touching a color



## VISIBILITY

Make a sprite appear or disappear



## RANDOM

Get a computer-generated number from within a specified range



## TIMING

Have the computer keep track of time for you



## STRINGS

Test, access, and change words and sentences



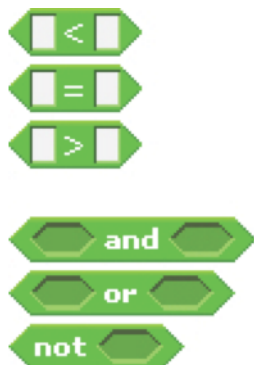
## VARIABLES

Store a number or string in a container to access later



## COMPARE

Compare values to help make decisions within your game

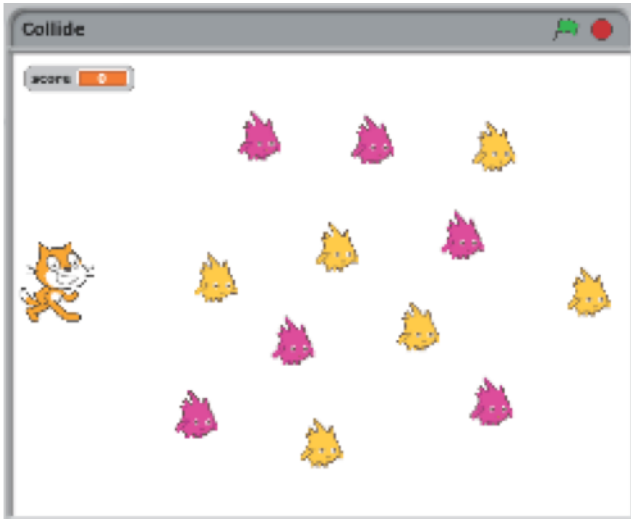


## KEY PRESS

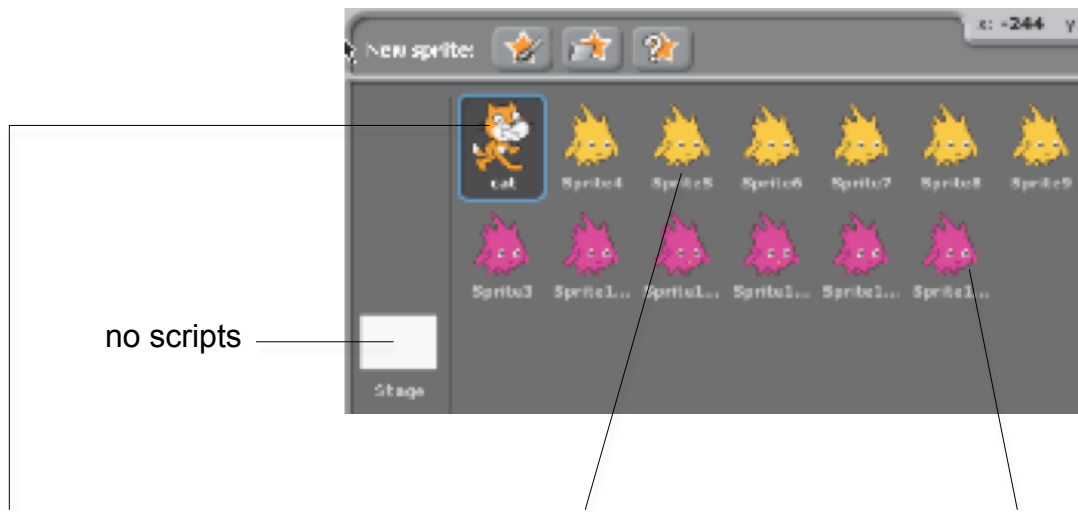
Make a sprite respond when different keys are pressed



# COLLIDE



Help the cat navigate a field of Gobos. Collect yellow gobos to earn points, avoid pink gobos to avoid losing points.

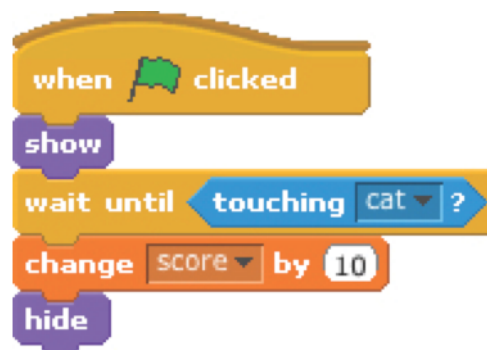


no scripts

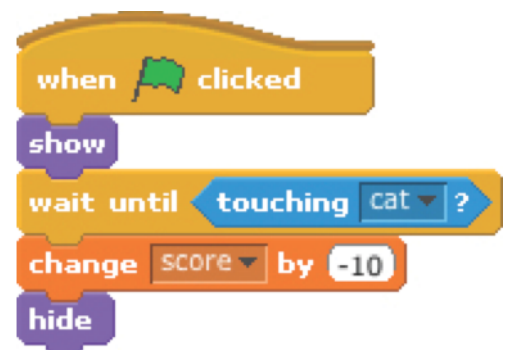
reset the cat's position and the score



when the cat collides with a yellow gobo, the gobo disappears and the score increases by 10



when the cat collides with a pink gobo, the gobo disappears and the score decreases by 10

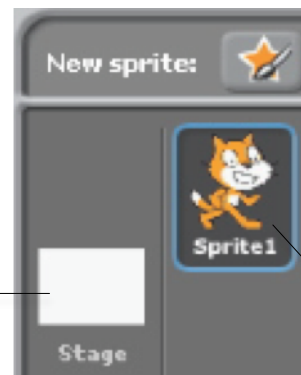




# CATLIBS

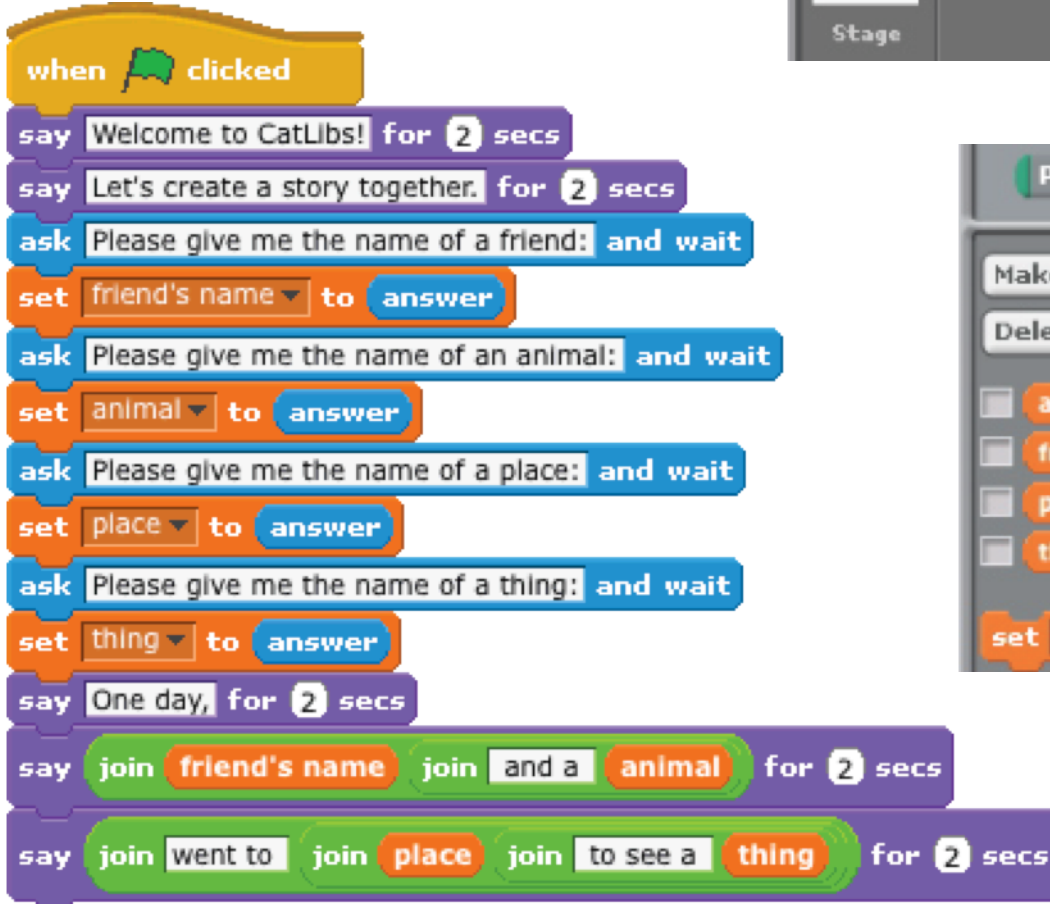


Create a unique Madlib story by collecting user input.



no scripts

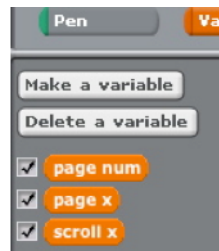
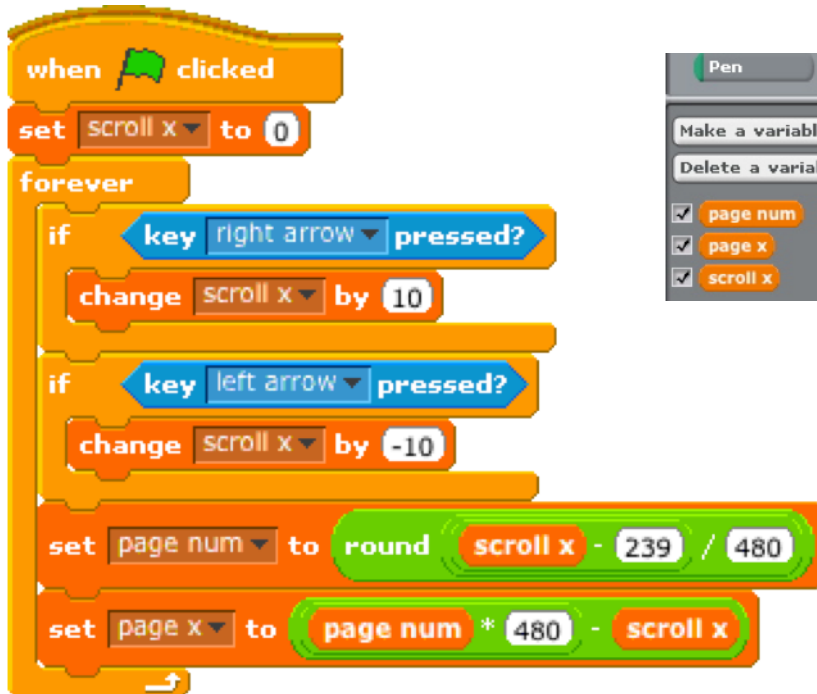
1 script  
4 variables



# SCROLLING

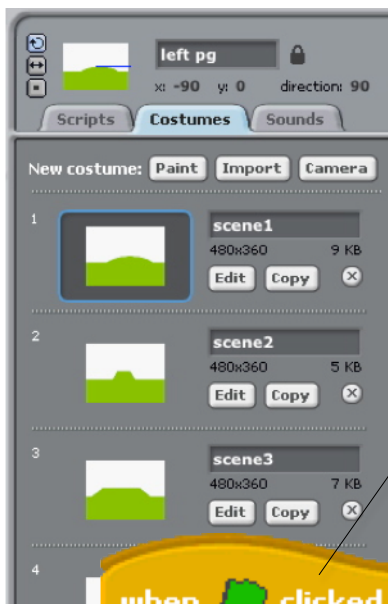
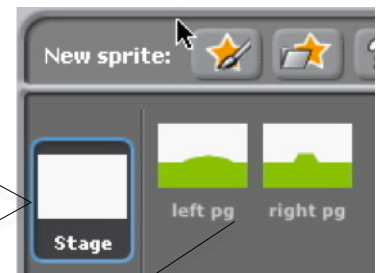


Create the foundation for a side scrolling game.



3 variables

1 script



create two sprites:  
one for the left background panel,  
one for the right background panel

add the same (2 or more)  
costumes to each sprite

add this script to the left sprite

add this script to the right sprite

