

SCRATCH 101

USER INTERFACE



SCRATCH - USER INTERFACE

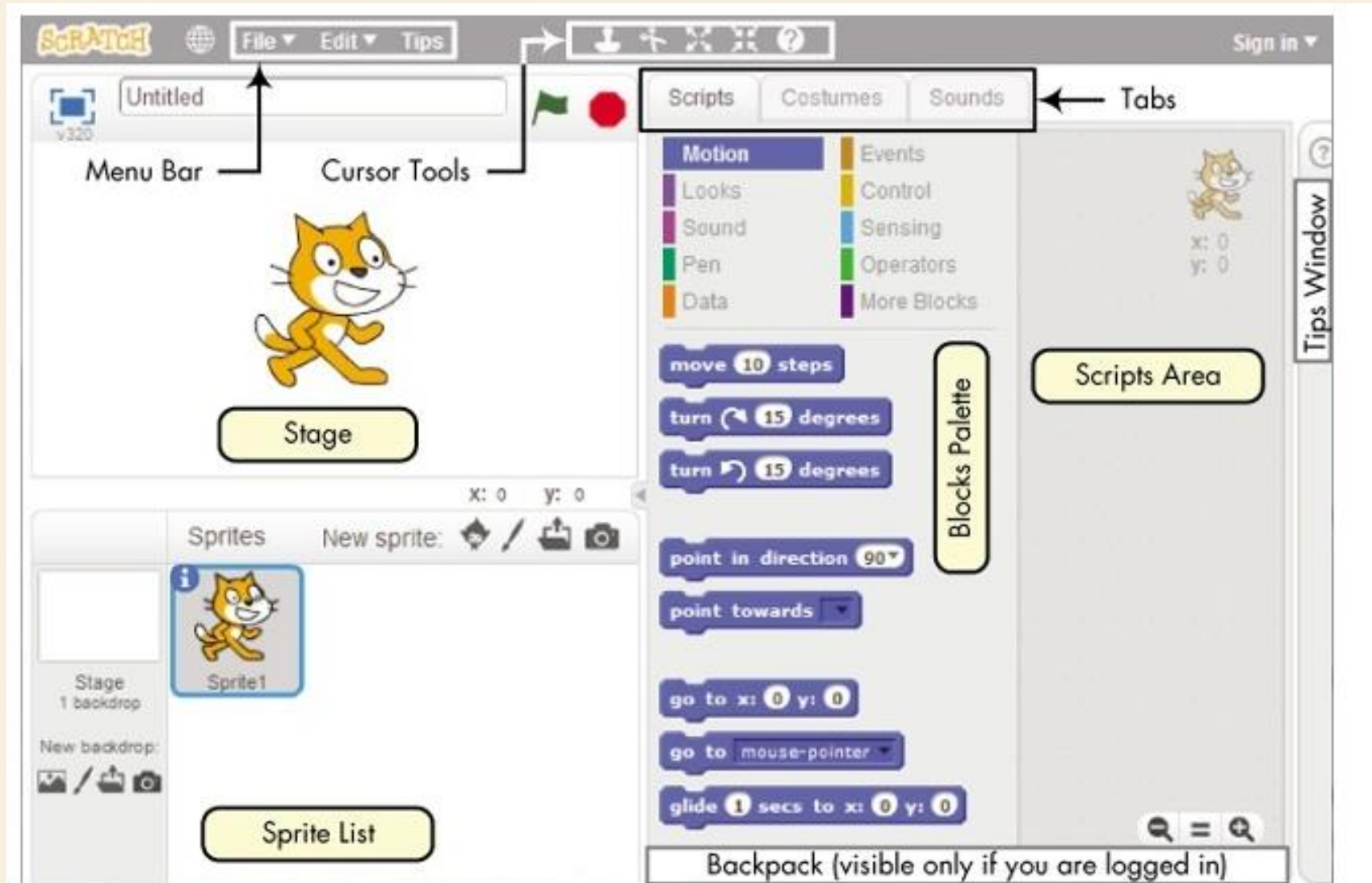
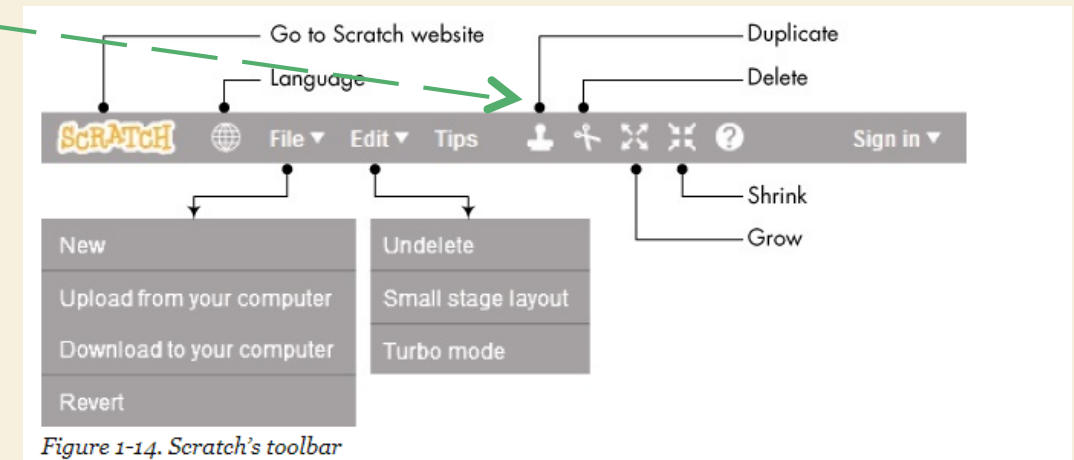
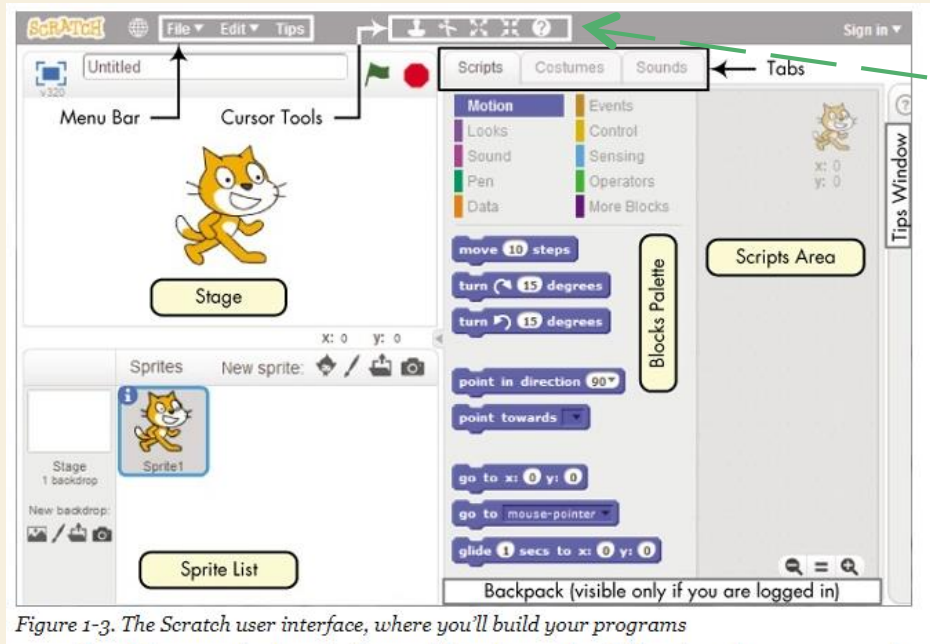


Figure 1-3. The Scratch user interface, where you'll build your programs

SCRATCH - TOOLBAR



SCRATCH USER INTERFACE - STAGE

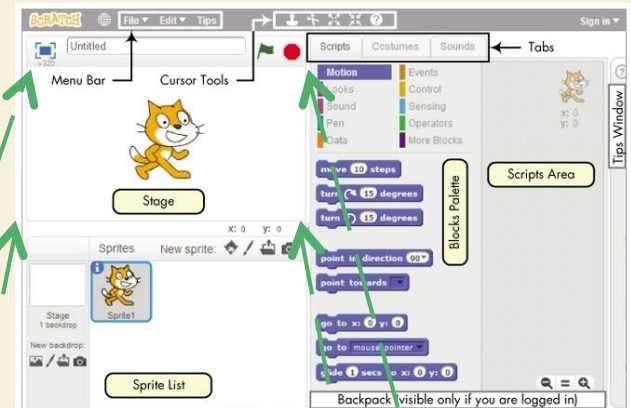


Figure 1-3. The Scratch user interface, where you'll build your programs

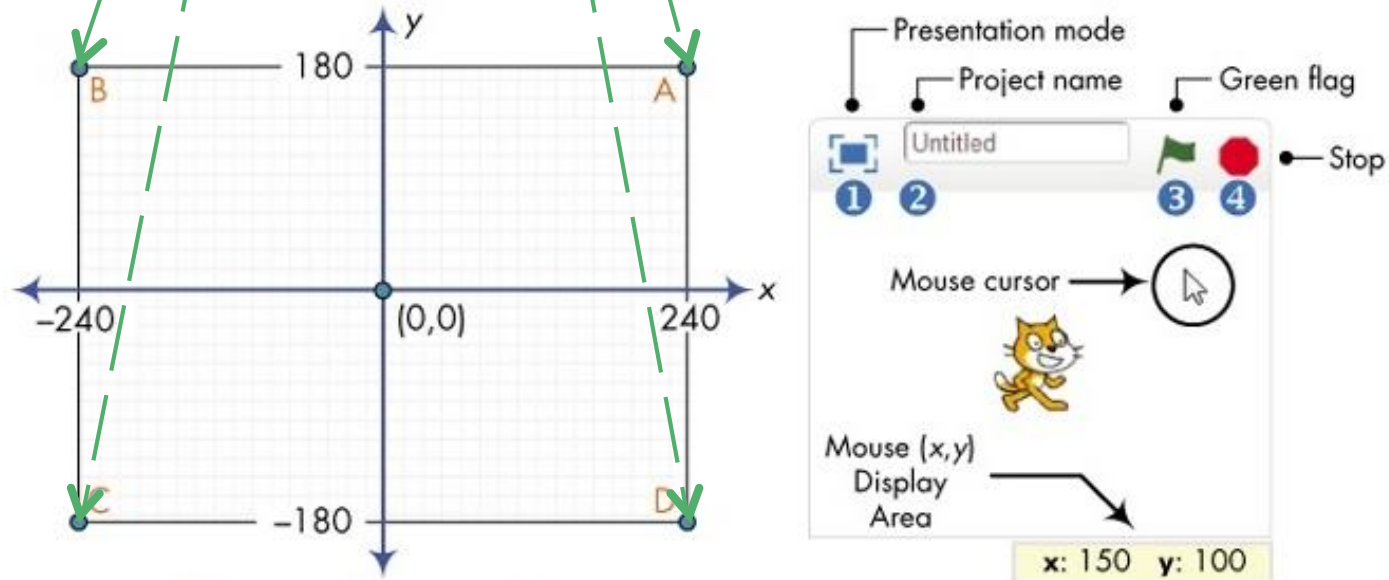


Figure 1-4. The Stage is like a coordinate plane with point (0,0) in the center.

SCRATCH USER INTERFACE - BACKDROP

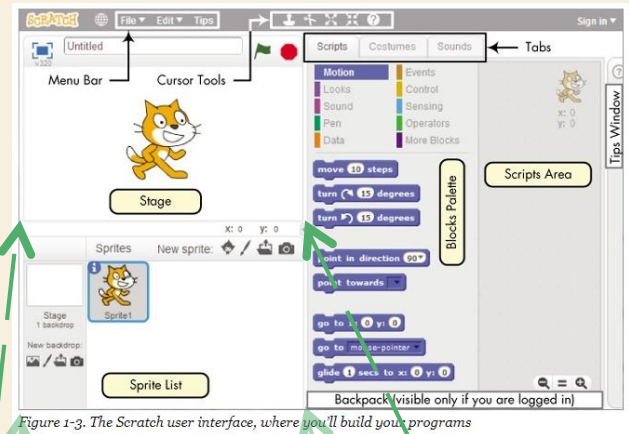


Figure 1-3. The Scratch user interface, where you'll build your programs

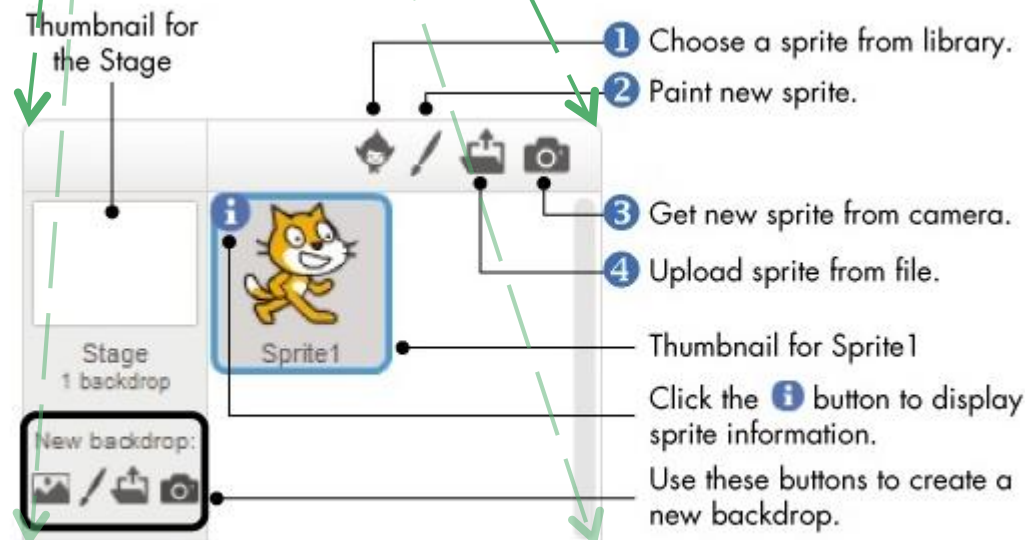


Figure 1-5. The Sprite List for a new project

SCRATCH USER INTERFACE – BLOCKS TAB

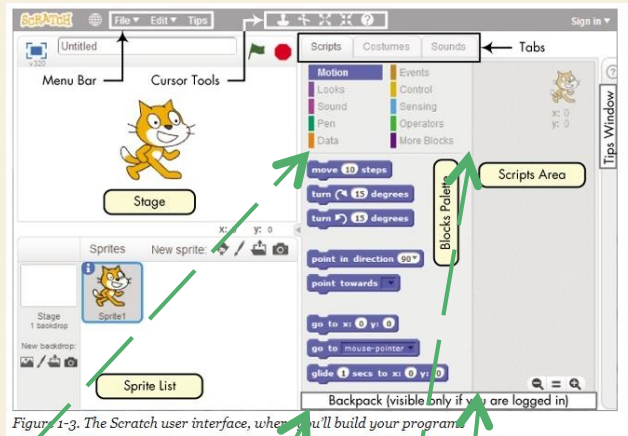
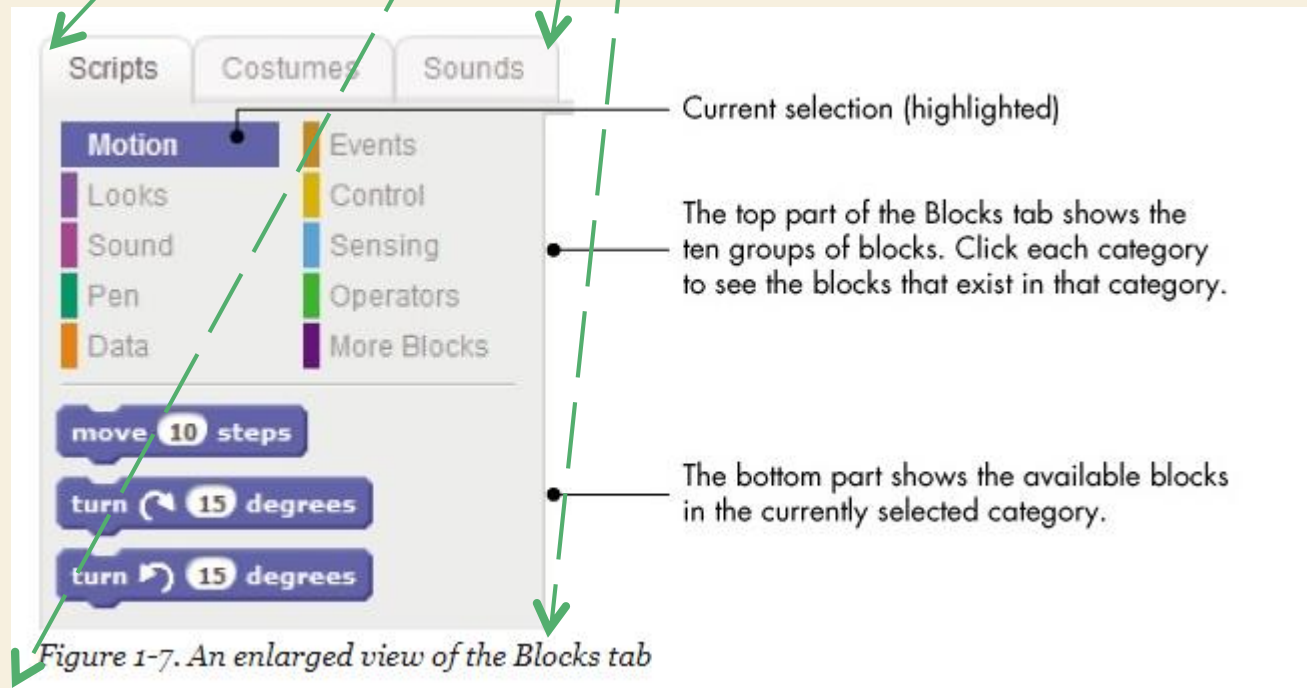
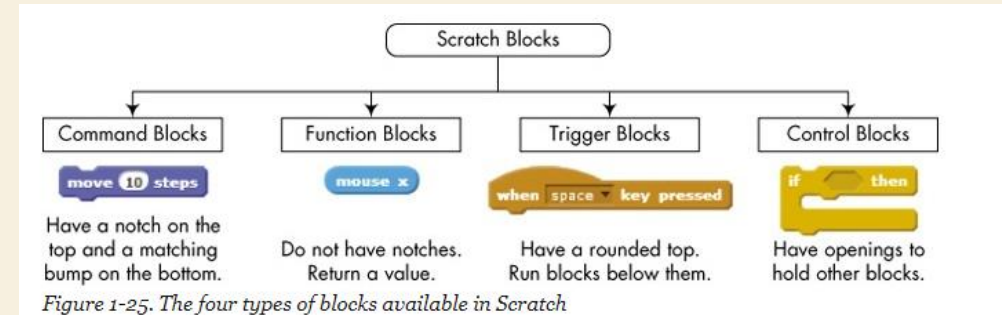


Figure 1-3. The Scratch user interface, when you'll build your program



SCRATCH USER INTERFACE - SPRITES

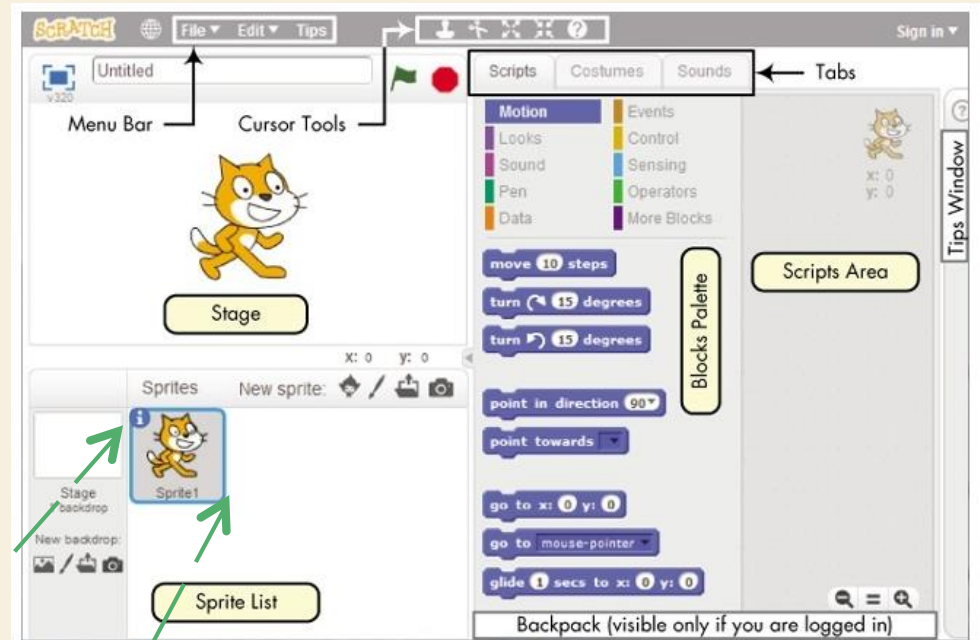


Figure 1-3. The Scratch user interface, where you'll build your programs



Figure 1-12. Sprite info area

SCRATCH USER INTERFACE - WRITING CODE

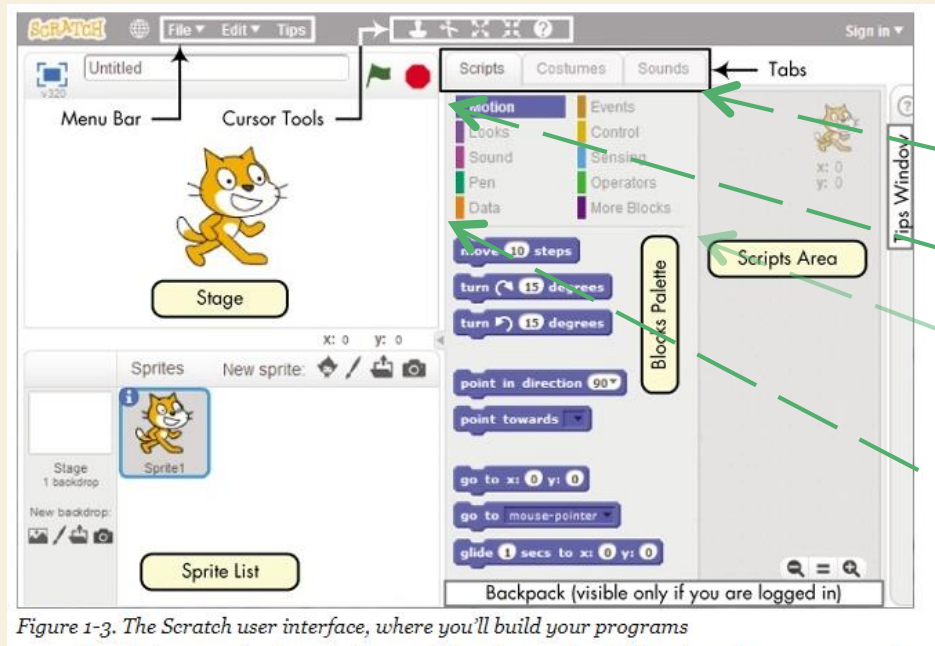


Figure 1-3. The Scratch user interface, where you'll build your programs

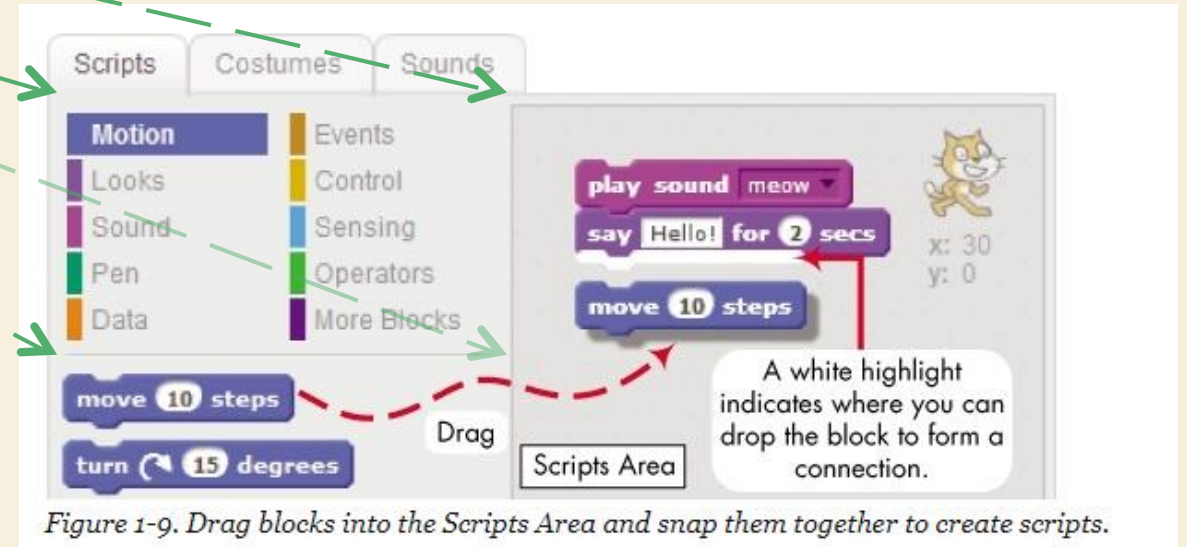


Figure 1-9. Drag blocks into the Scripts Area and snap them together to create scripts.

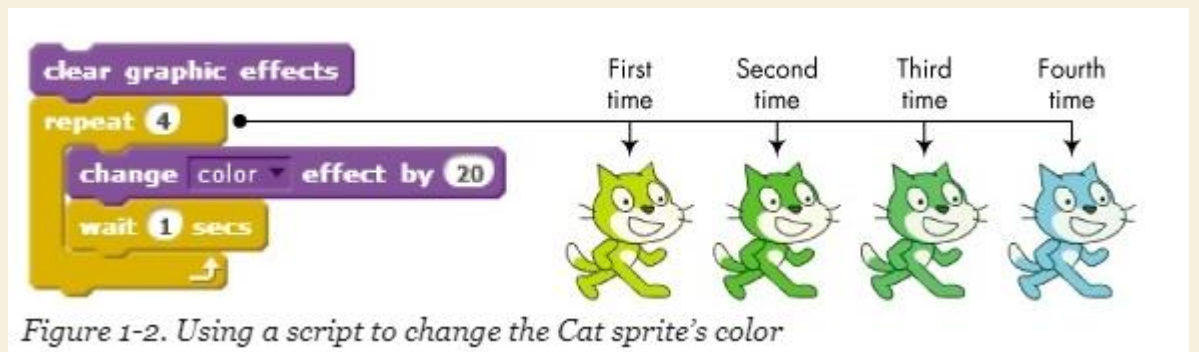
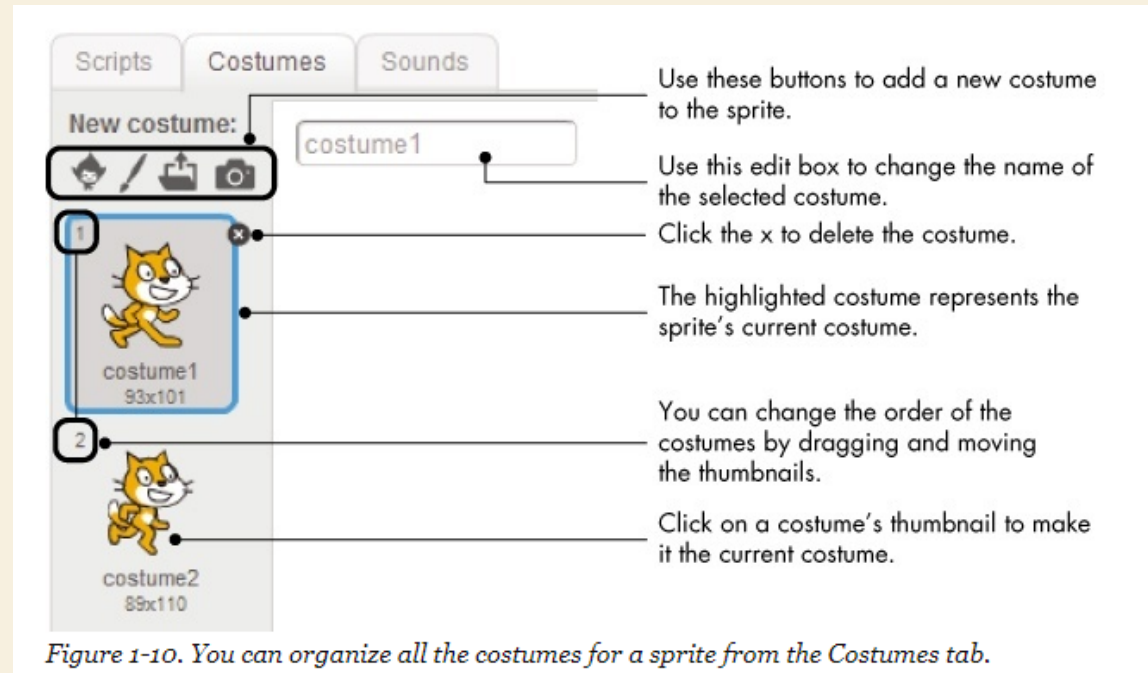


Figure 1-2. Using a script to change the Cat sprite's color

SCRATCH USER INTERFACE – GRAPHIC EFFECTS



SCRATCH USER INTERFACE – CHANGING COSTUME

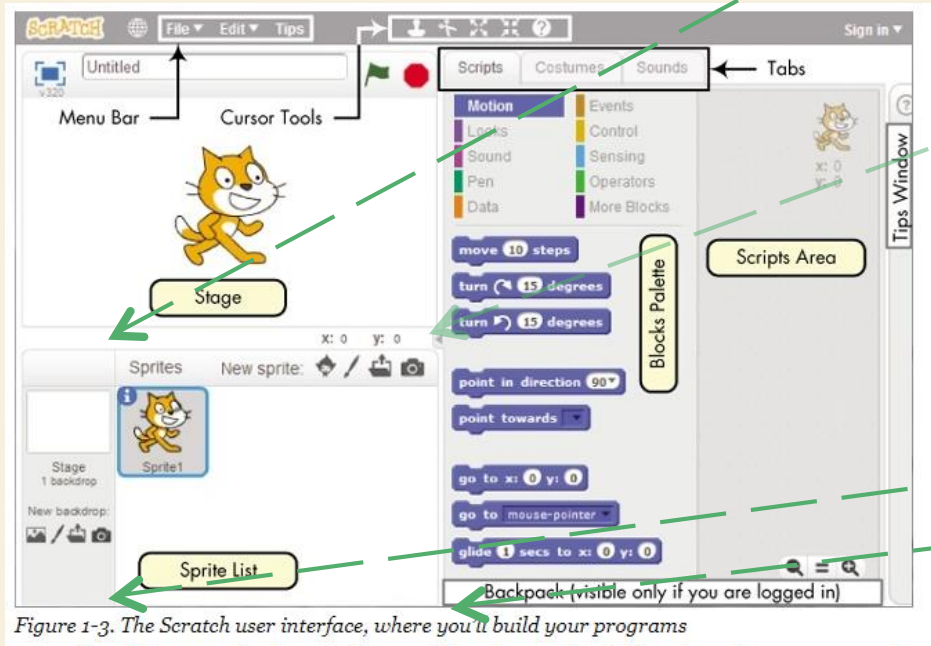


Figure 1-3. The Scratch user interface, where you'll build your programs

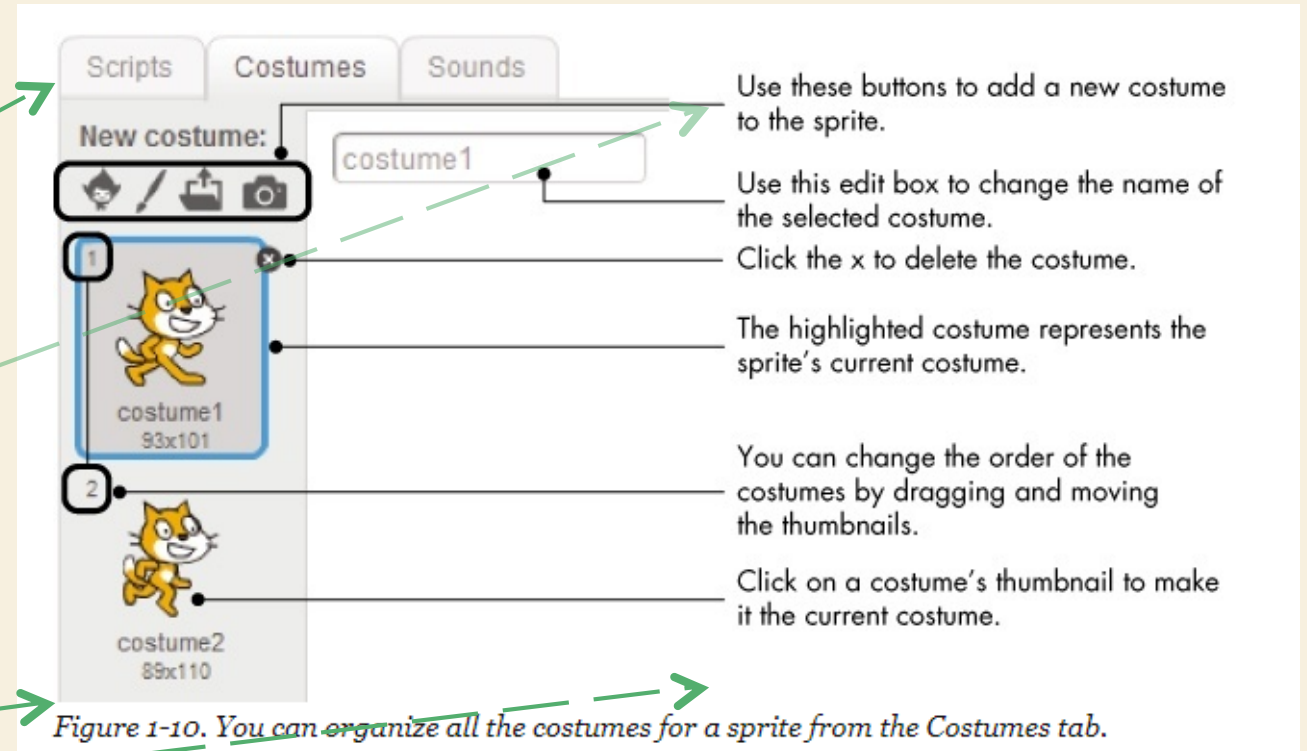
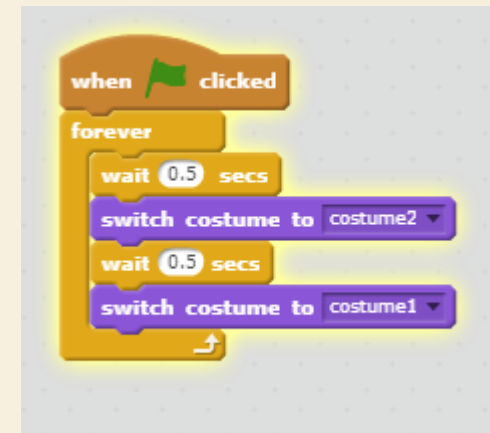


Figure 1-10. You can organize all the costumes for a sprite from the Costumes tab.



SCRATCH USER INTERFACE – SOUND EFFECTS

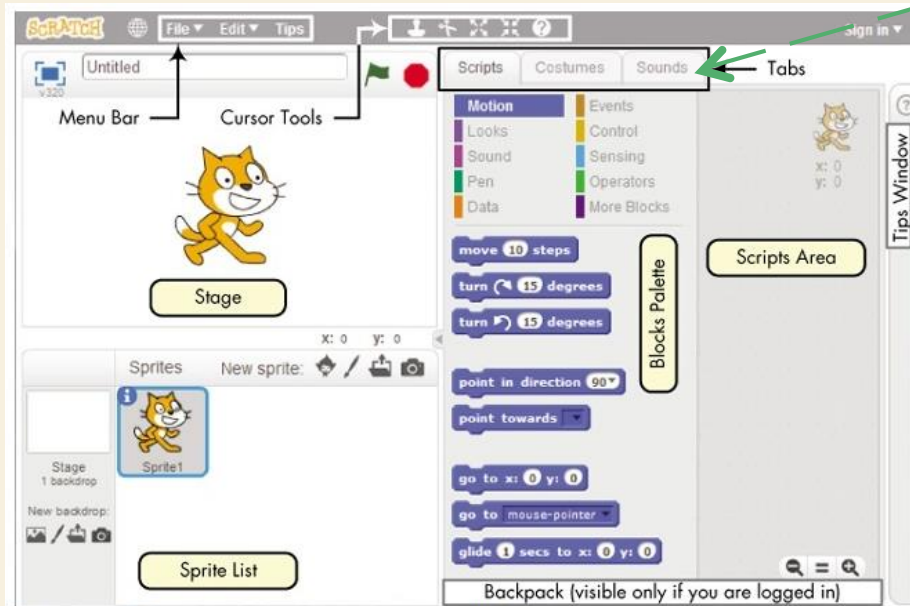


Figure 1-3. The Scratch user interface, where you'll build your programs

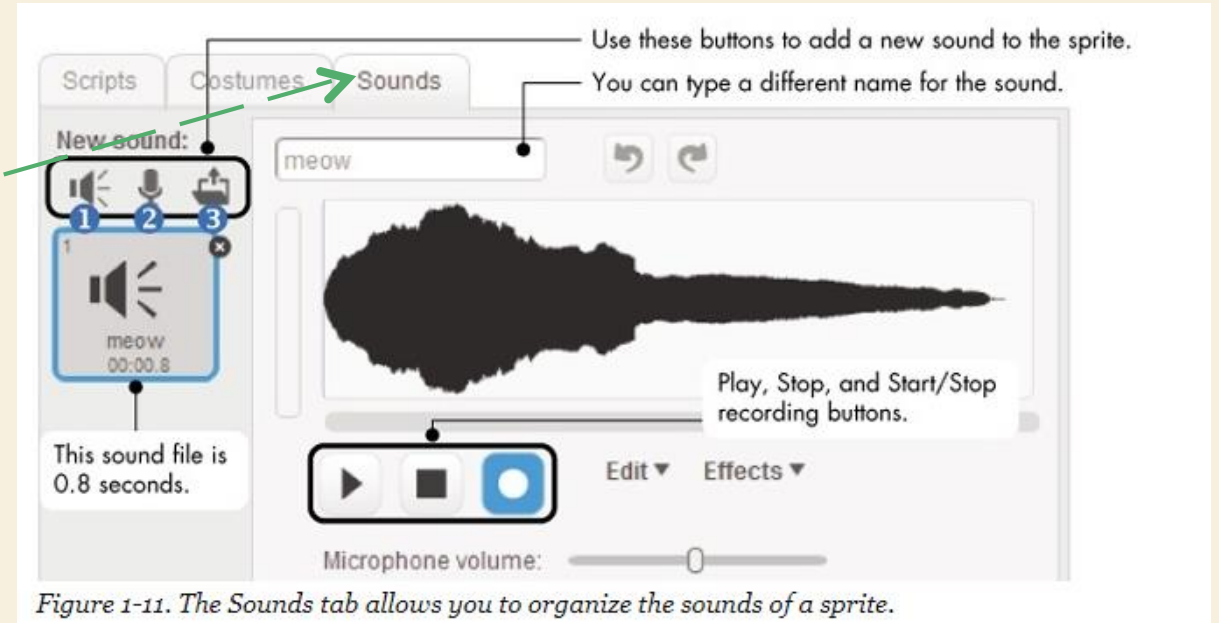


Figure 1-11. The Sounds tab allows you to organize the sounds of a sprite.

SCRATCH USER INTERFACE - SPRITE PAINT EDITOR

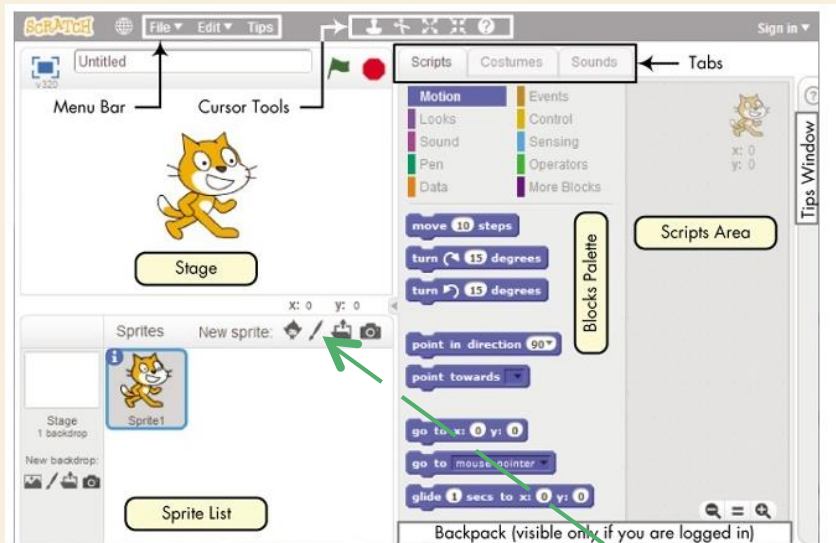


Figure 1-3. The Scratch user interface, where you'll build your programs

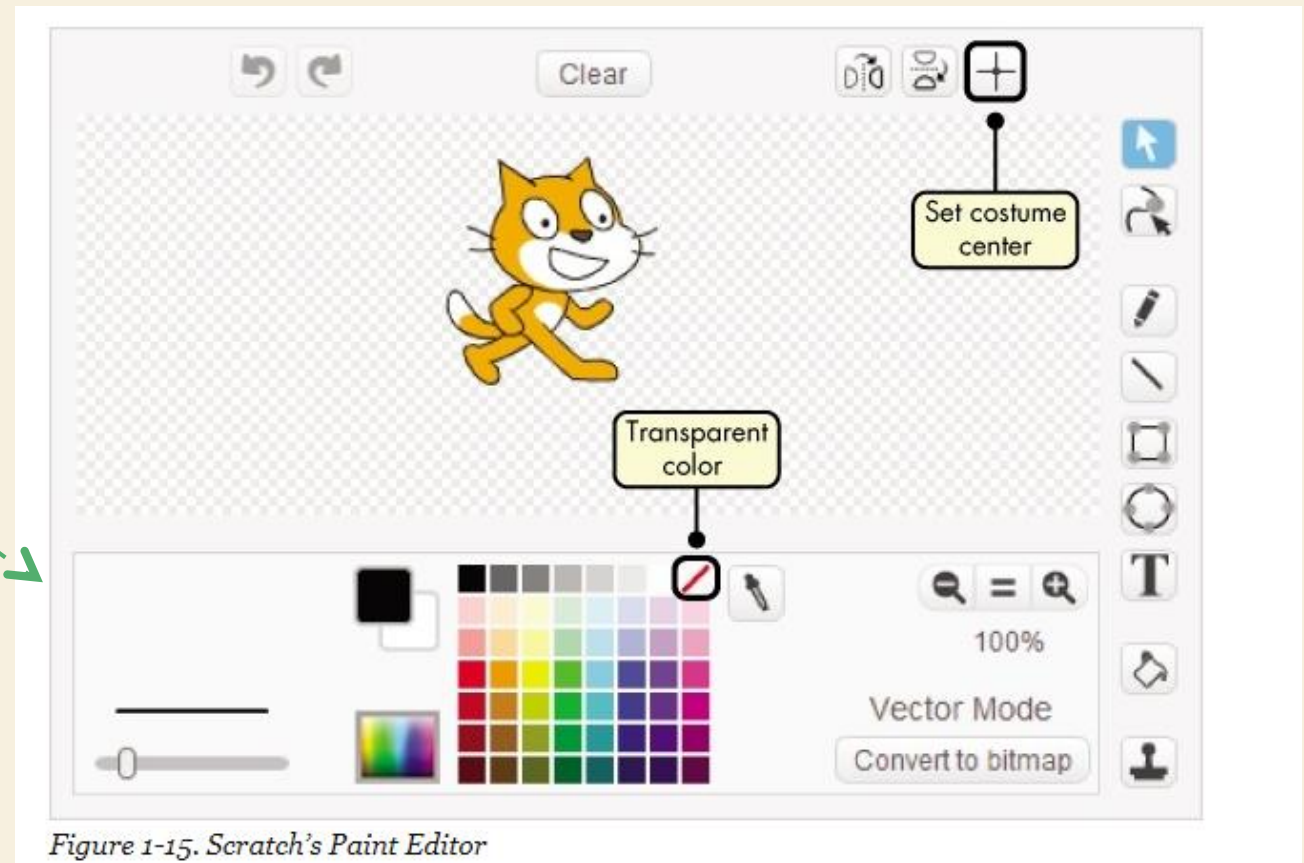


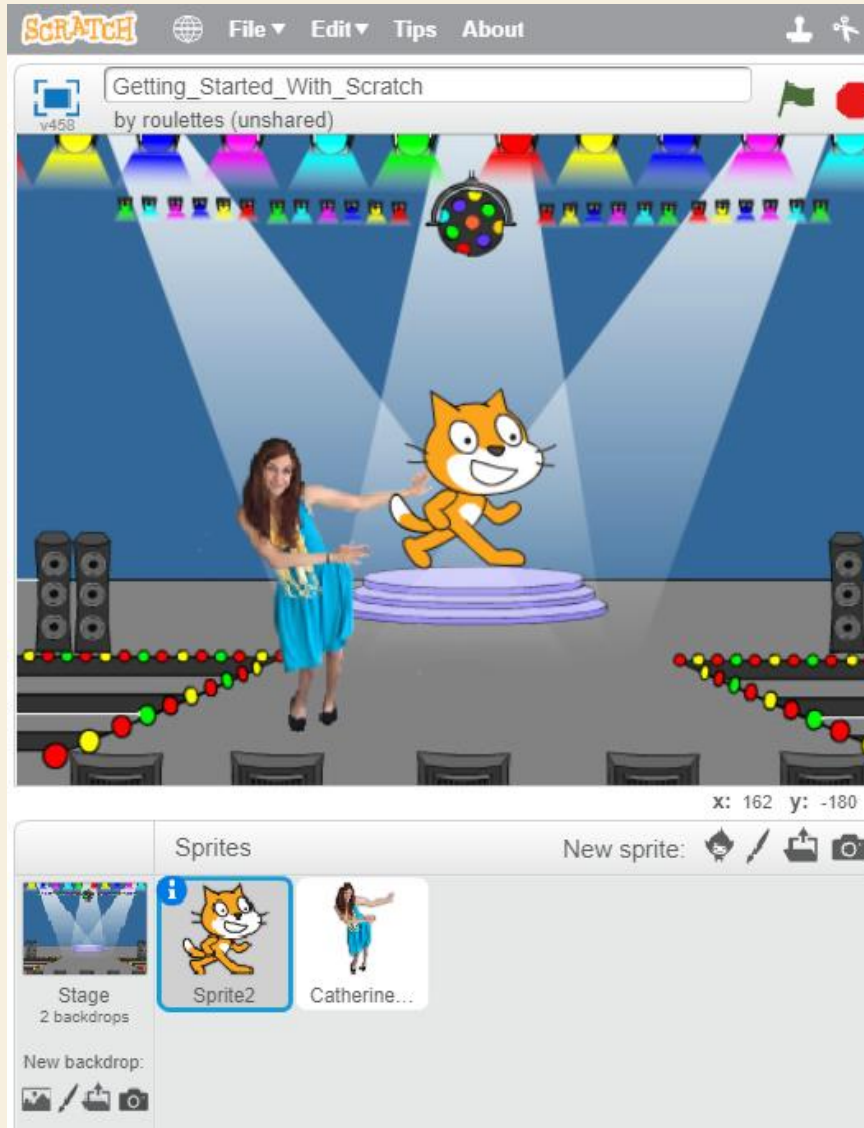
Figure 1-15. Scratch's Paint Editor

TUTORIAL

GETTING STARTED



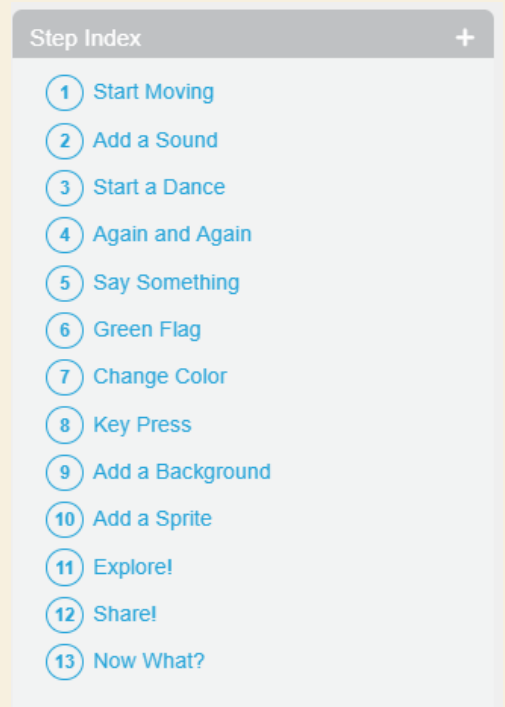
TUTORIAL – GETTING STARTED



Cat Sprite



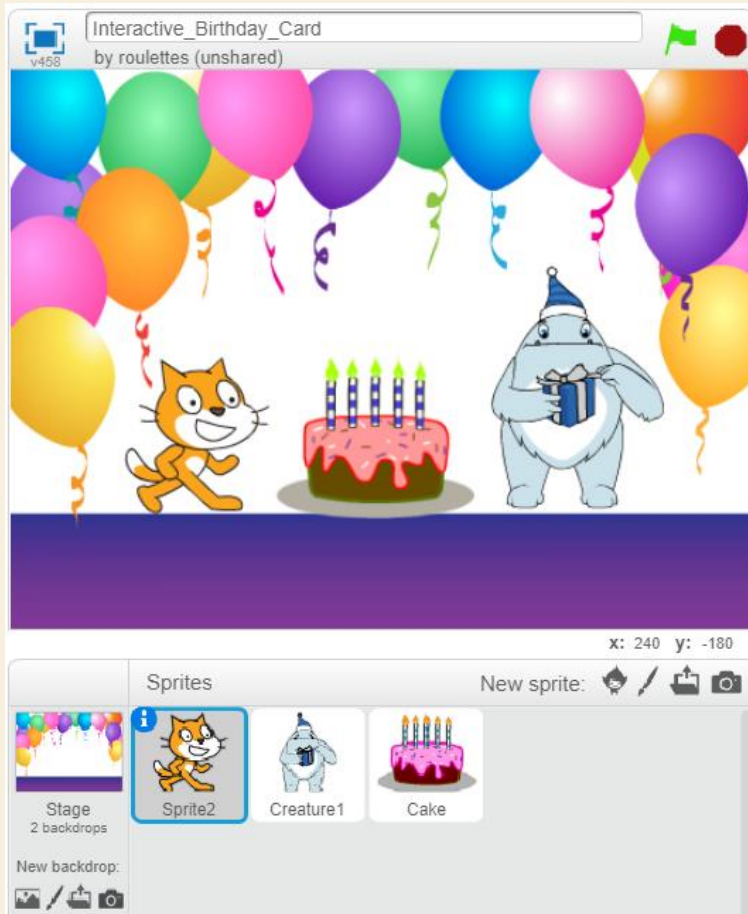
Catherine Dance Sprite



INTERACTIVE BIRTHDAY CARD



TUTORIAL – INTERACTIVE BIRTHDAY CARD



List of Steps

- 1 Add a Backdrop
- 2 Change Colors
- 3 Choose a Character
- 4 Say a Greeting
- 5 Play Music
- 6 Add an Animation
- 7 Again and Again
- 8 Spin Around
- 9 Customize Your Card
- 10 Share Your Project

```
when Stage clicked
clear graphic effects
forever
  change color effect by 25
```

Backdrop Sprite

```
when clicked
clear graphic effects
say Happy Birthday !!!! for 2 secs
point in direction 90
forever
  turn 15 degrees
```

Cat Sprite

```
when this sprite clicked
play sound birthday song
set size to 100 %
forever
  change color effect by 25
  wait 1 secs
  change size by 10
  wait 1 secs
  change size by -10
```

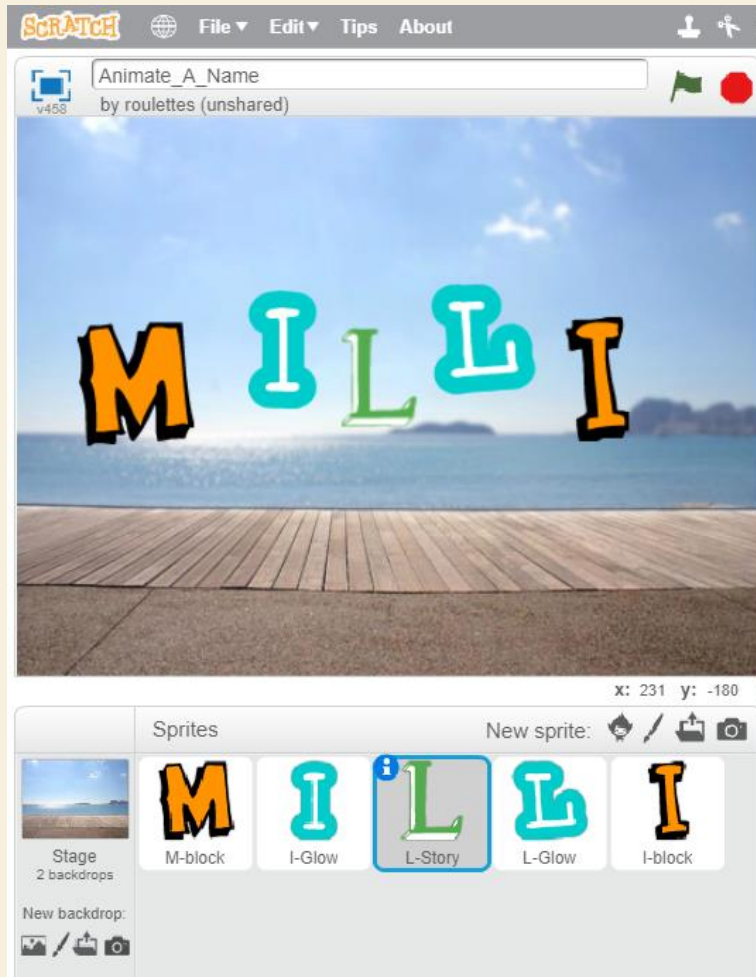
Cake Sprite

TUTORIAL

ANIMATE A NAME

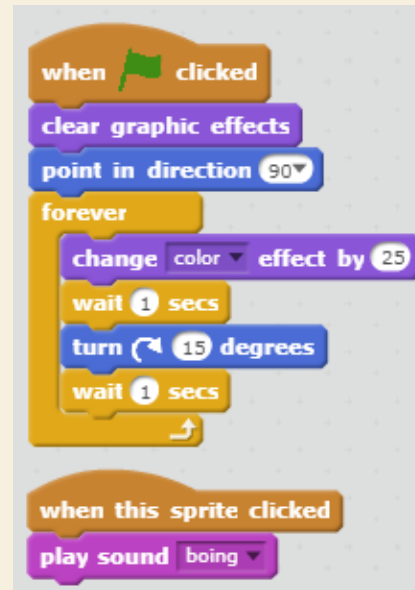


TUTORIAL - ANIMATE A NAME

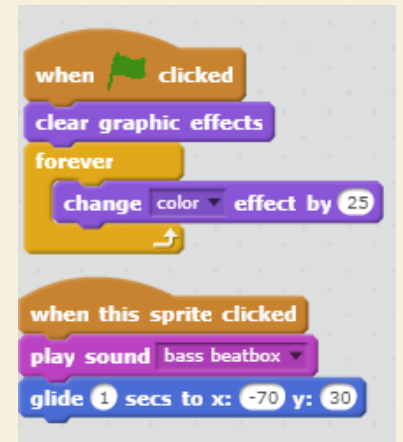


List of Steps

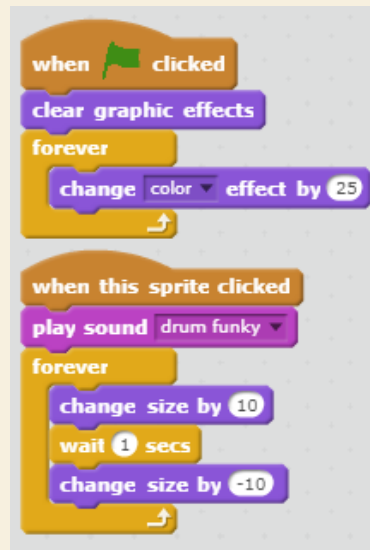
- 1 Choose the First Letter
- 2 Add Color Effects
- 3 Add a Sound
- 4 Add a Backdrop
- 5 Add Your Next Letter
- 6 Make It Spin
- 7 Finish Your Name
- 8 Share Your Project



M Sprite



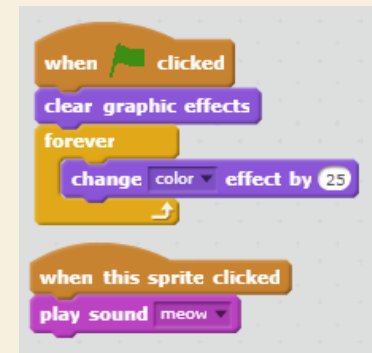
I Sprite



L Sprite



L Sprite



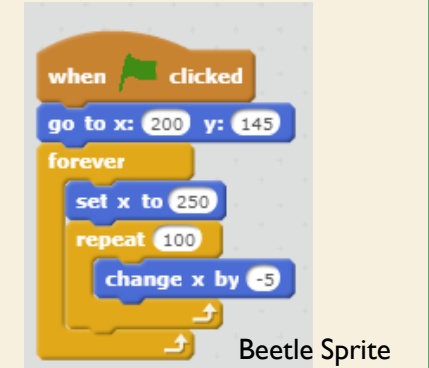
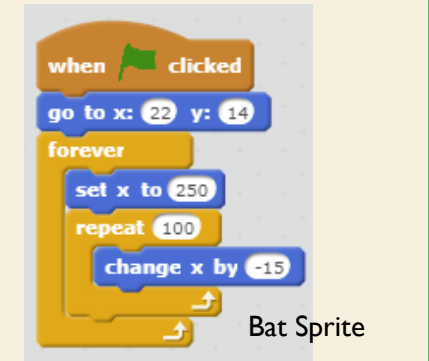
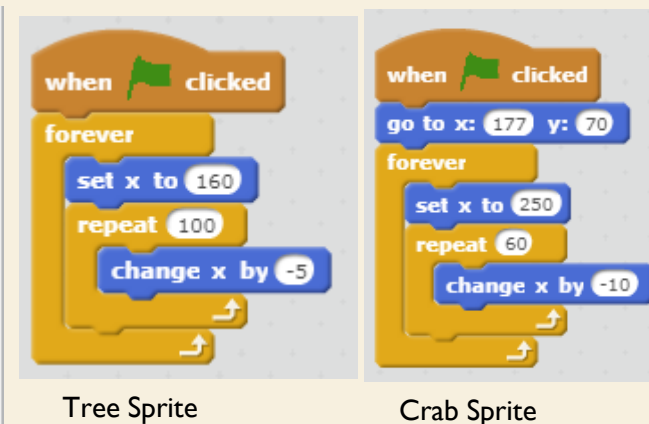
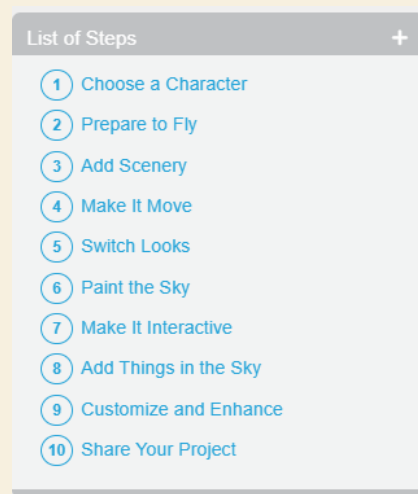
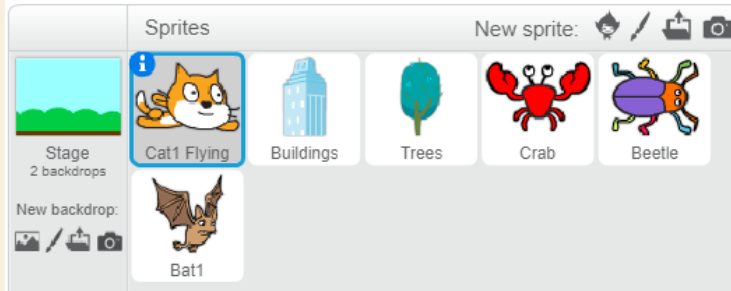
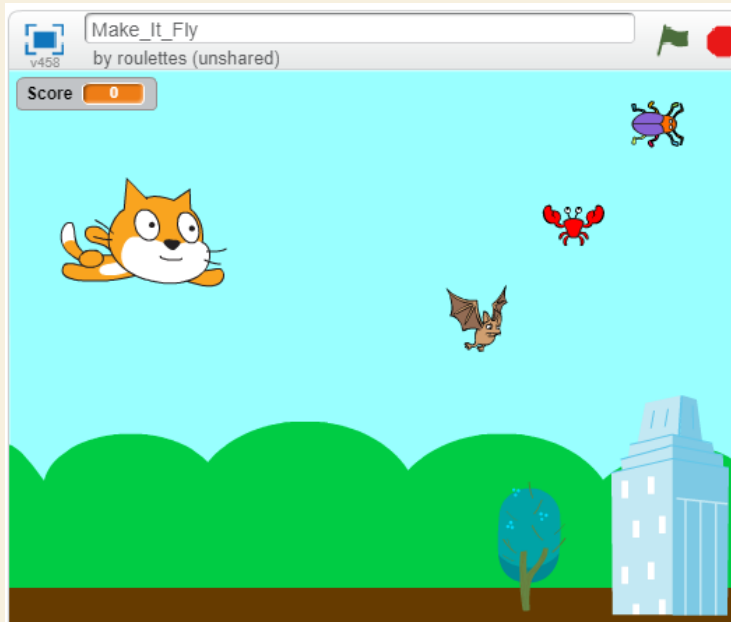
I Sprite

TUTORIAL

MAKE IT FLY



TUTORIAL – MAKE IT FLY

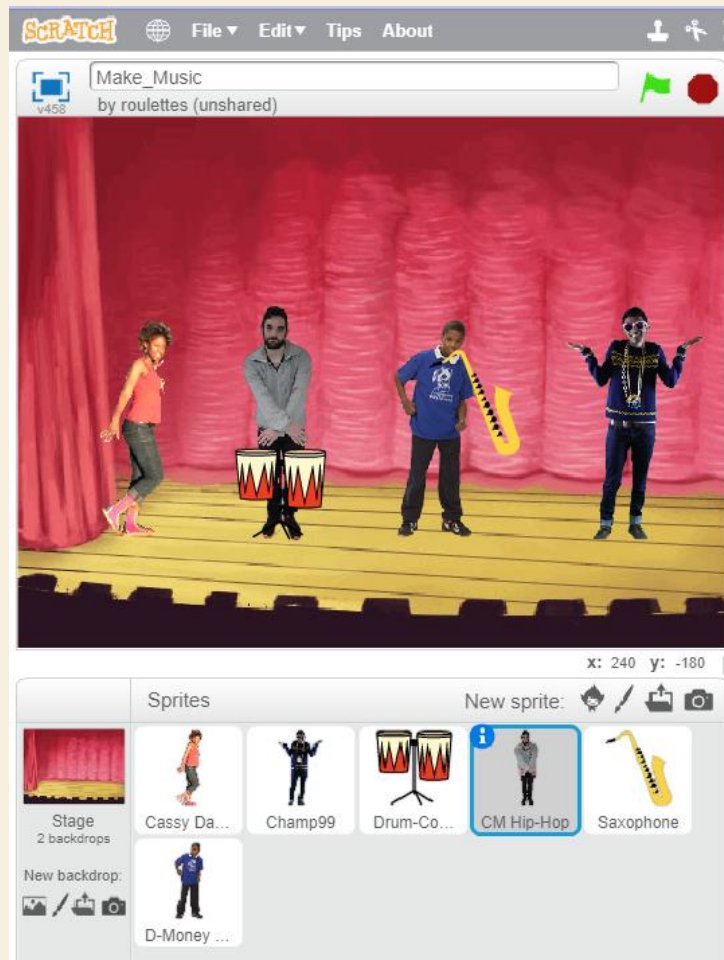


TUTORIAL

MAKE MUSIC



TUTORIAL – MAKE MUSIC



List of Steps

- 1 Pick a Drum
- 2 Play the Drum
- 3 Make a Rhythm
- 4 Make It Repeat
- 5 Animate the Drum
- 6 Play an Instrument
- 7 Make a Melody
- 8 Add a Chord
- 9 Add Vocals
- 10 Play Random Notes
- 11 Record Sounds
- 12 Keep Playing
- 13 Share Your Project

```
when green flag clicked
switch costume to cassy dance-d
forever loop
  next costume
  wait 1 secs
```

```
when this sprite clicked
repeat 10
  play sound pick random 1 to 7
  wait 0.25 secs
  play sound pick random 1 to 7
  wait 0.25 secs
```

Cassy Sprite

```
when this sprite clicked
go to front
repeat 5
  play sound C2 sax
  wait 0.125 secs
  play sound D sax
  wait 0.125 secs
  play sound E sax
  wait 0.125 secs
  play sound F sax
```

Saxophone Sprite

```
when green flag clicked
switch costume to champ99-g
forever loop
  next costume
  wait 1 secs
```

Champ99 Sprite

```
when this sprite clicked
go to front
repeat 5
  play sound high conga
  wait 0.125 secs
  next costume
  play sound low conga
  wait 0.125 secs
  next costume
  play sound tap conga
  wait 0.125 secs
```

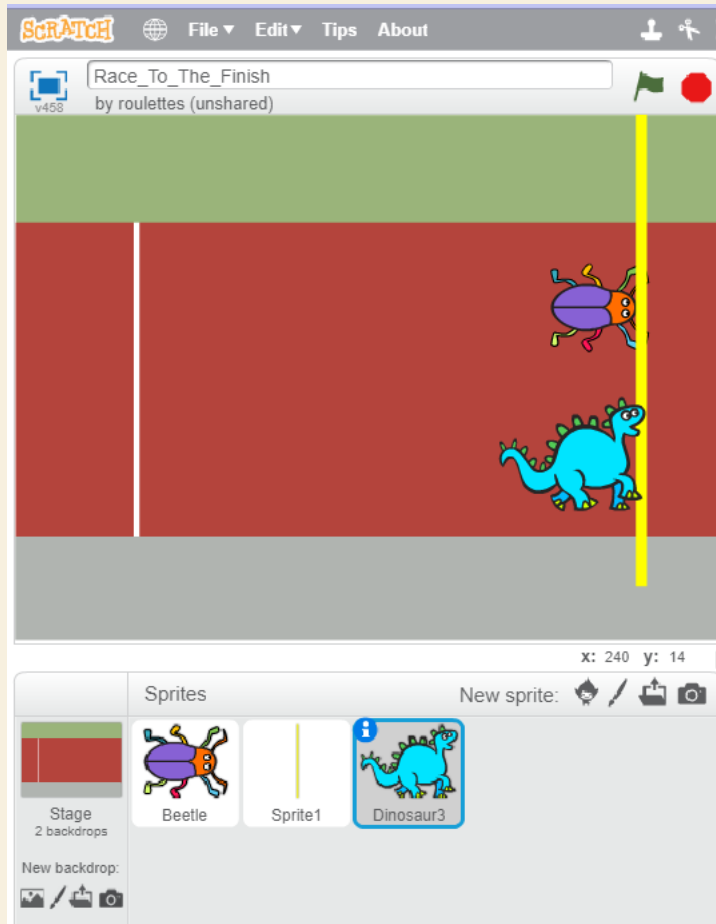
Drum Sprite

TUTORIAL

RACE TO THE FINISH

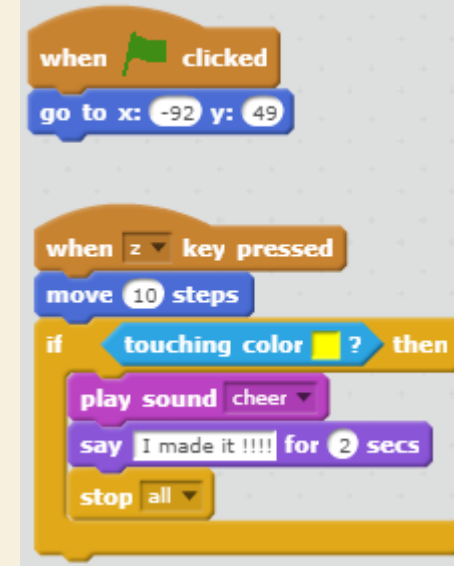


TUTORIAL – RACE TO THE FINISH



List of Steps

- 1 Choose a Backdrop
- 2 Start Moving
- 3 Move When You Press a Key
- 4 Draw a Finish Line
- 5 If You Reach the Finish Line
- 6 Go to the Starting Point
- 7 Add Another Sprite to Race
- 8 Personalize Your Game
- 9 Save and Share Your Project



Beetle Sprite



Dinosaur Sprite



Finish Line Sprite

TUTORIAL

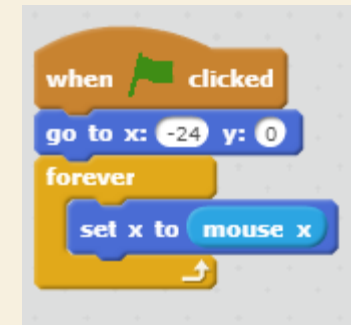
PONG



TUTORIAL - PONG



Ball Sprite



Paddle Sprite