



Getting Started With

SCRATCH

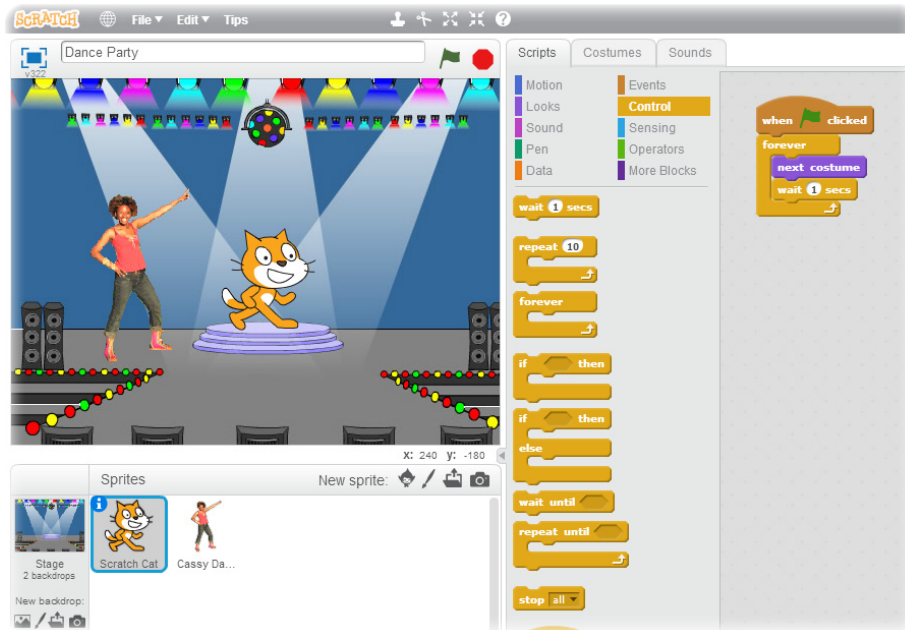
version 2.0



<http://scratch.mit.edu>

Getting Started

SCRATCH is a programming language that lets you create your own interactive stories, animations, games, music, and art.



This guide shows you how to make a project in **SCRATCH**.

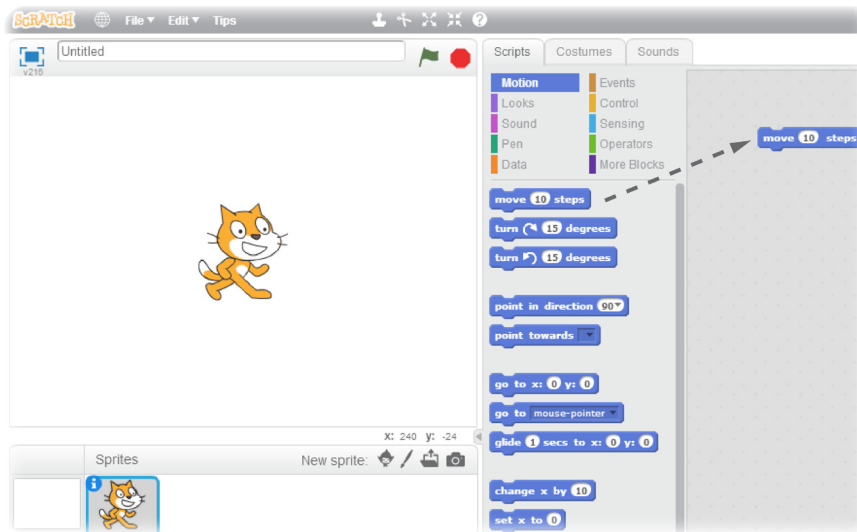


To start a new project, go to **SCRATCH** and click **Create**.

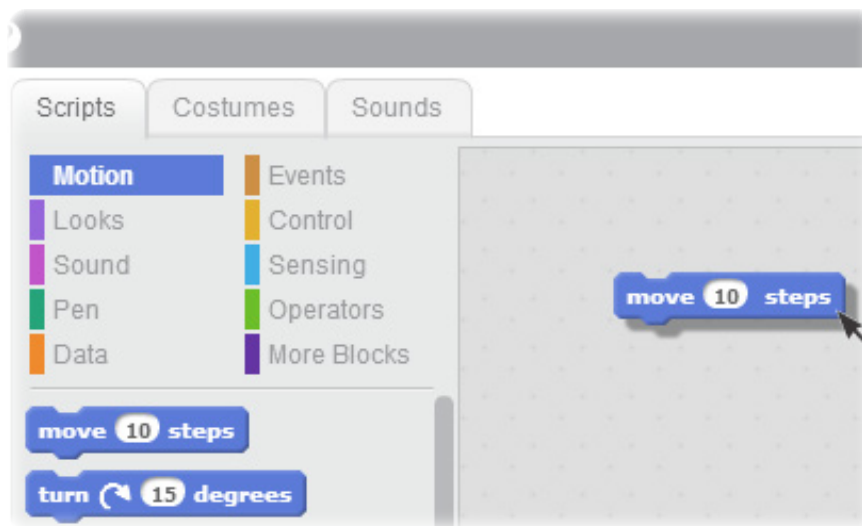


If you have a **SCRATCH** account, sign in so your project saves.

1 Start Moving

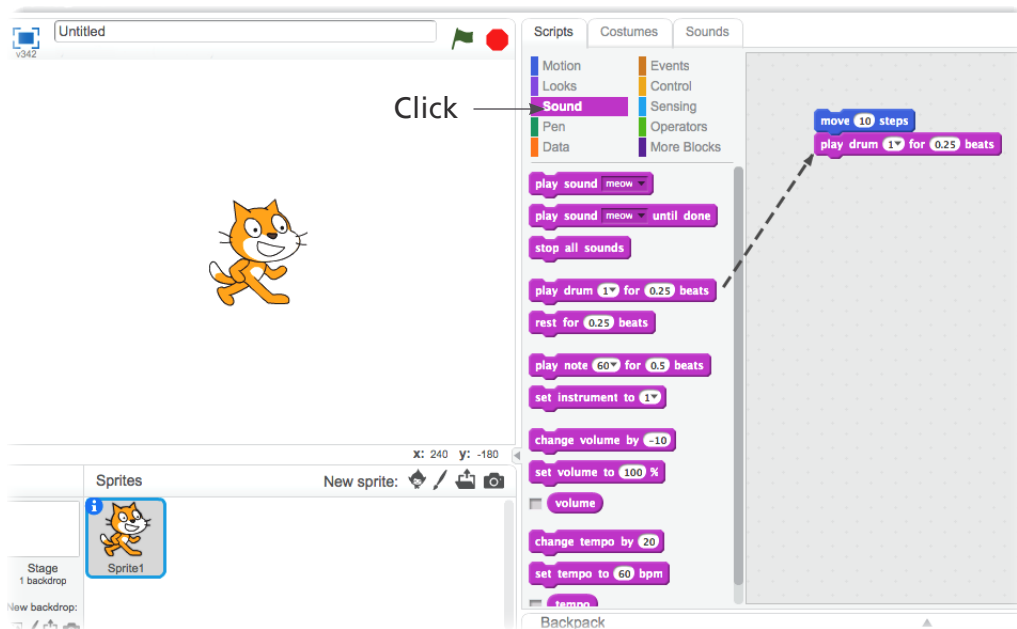


Drag a **MOVE** block into the Scripts area.



Click on the block to make the cat move.

2 Add a Sound



Drag out a **PLAY DRUM** and snap it onto the **MOVE** block.



Click and listen.

If you can't hear it, check that the sound on your computer is on.



You can choose different drums from the pull-down menu.

3

Start a Dance



```
move 10 steps
play drum 1 for 0.25 beats
move -10 steps
```

Add another **MOVE** block. Click inside the block and type in a minus sign.



```
move 10 steps
play drum 1 for 0.25 beats
move -10 steps
```

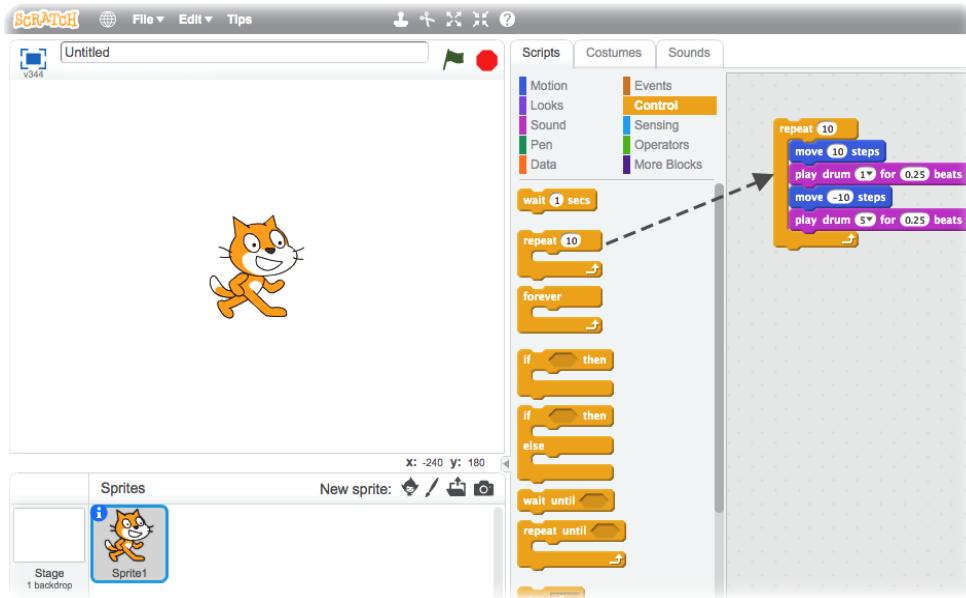
Click on any of the blocks to run the stack.



```
move 10 steps
play drum 1 for 0.25 beats
move -10 steps
play drum 5 for 0.25 beats
```

Add another **PLAY DRUM** block, then choose a drum from the menu. Click to run.

4 Again and Again



Drag out a **REPEAT** block and drop it on top of the stack.
You want the mouth of the **REPEAT** to wrap around the other blocks.

To drag a stack, pick it up from the top block.

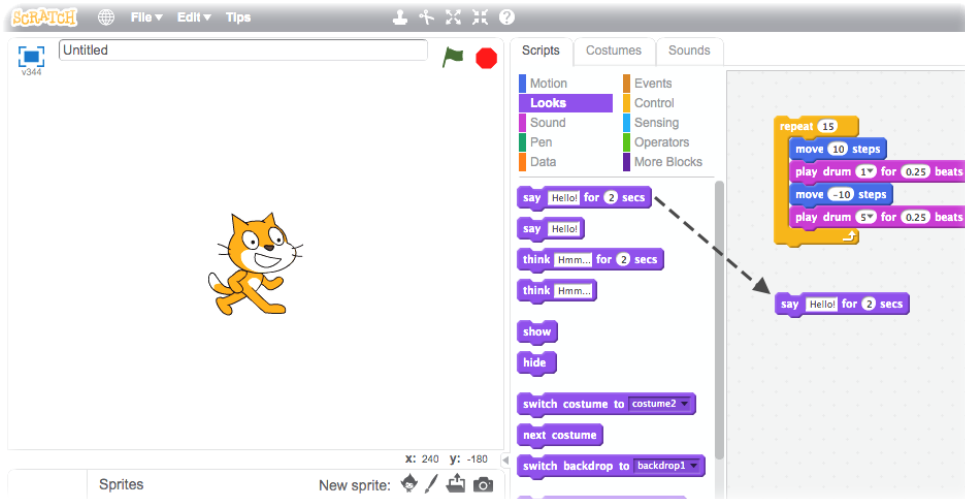


You can change how many times it repeats.

Click to run.

You can click on any block to run a stack.

S Say Something



Click the **LOOKS** category and drag out a **SAY** block.

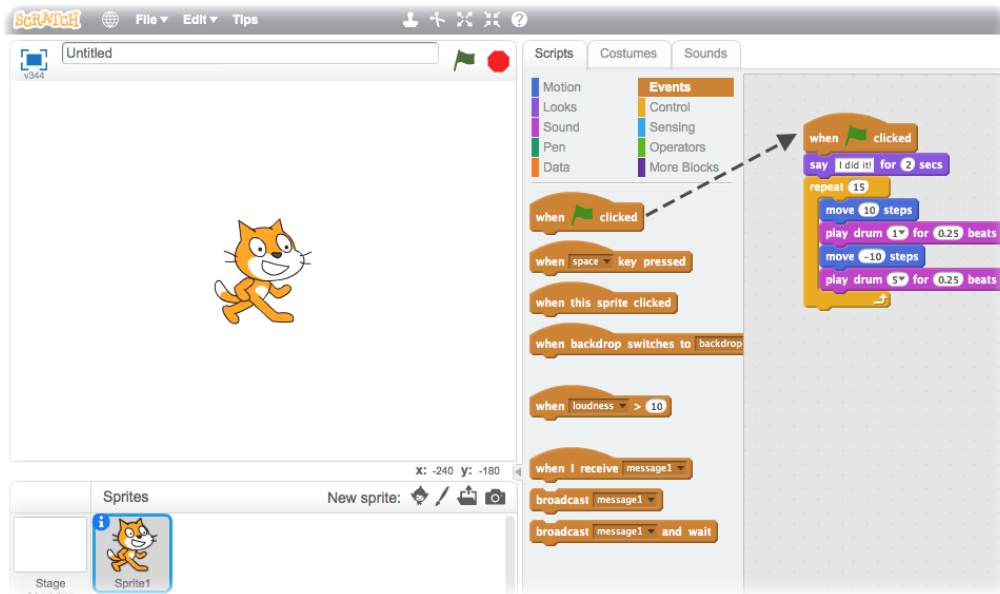


Click inside the **SAY** block and type to change the words. Click to try it.

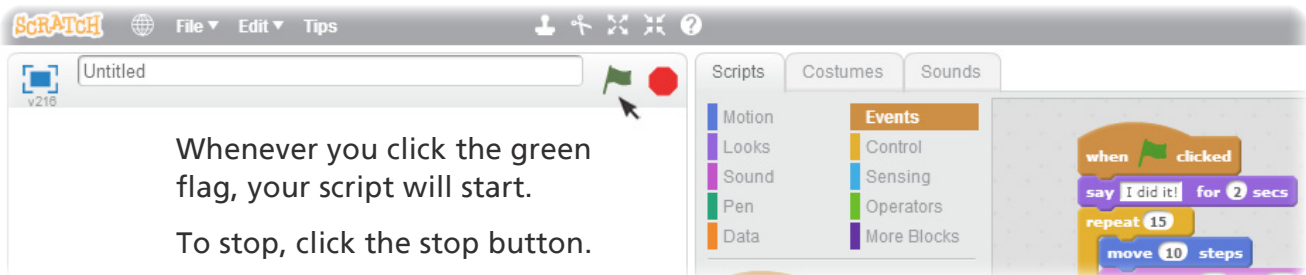


Then snap the **SAY** block on the top.

6 Green Flag

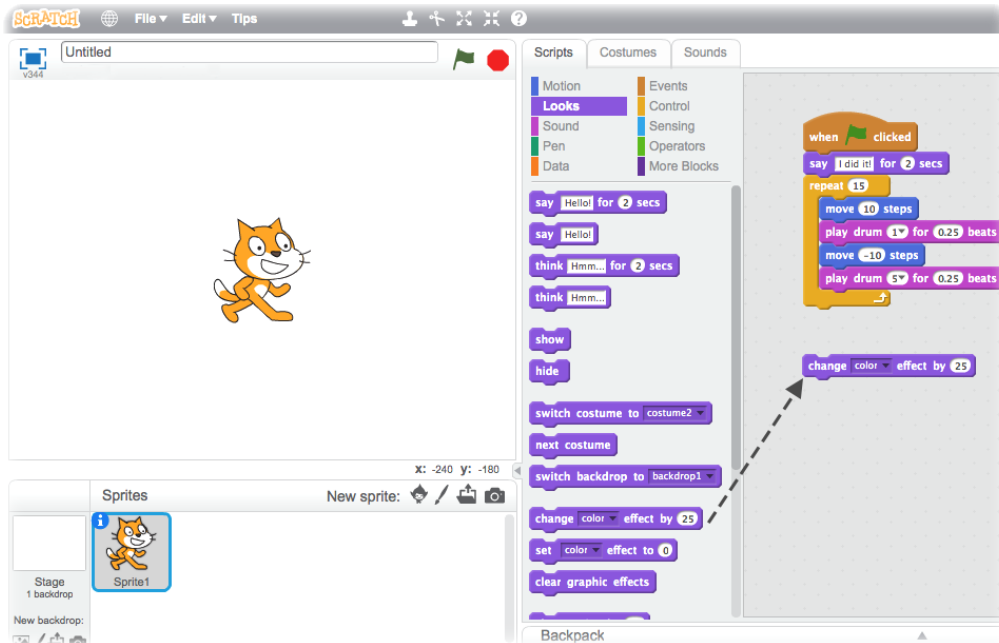


Drag out a  block and snap it on top.



7 Change Color

Now try something different...

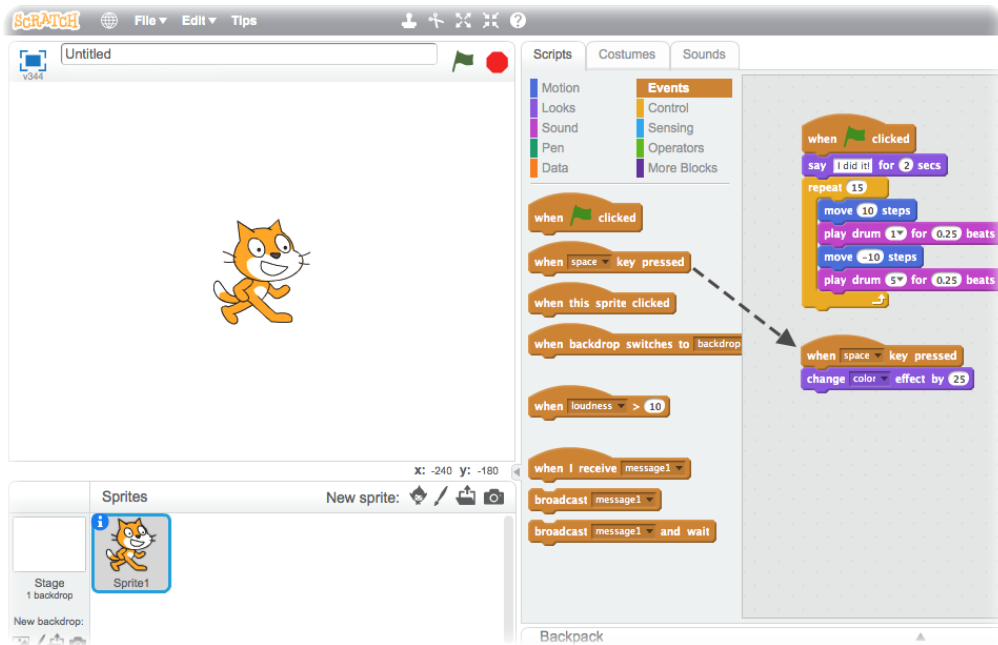


Drag out a **CHANGE EFFECT** block.



Click to see what it does.

8 Key Press



Snap on a **when space key pressed**




Now press the space bar on your keyboard.

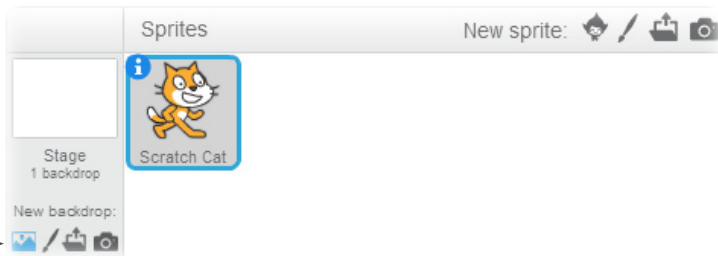


You can choose a different key from the pull-down menu.

9 Add a Backdrop

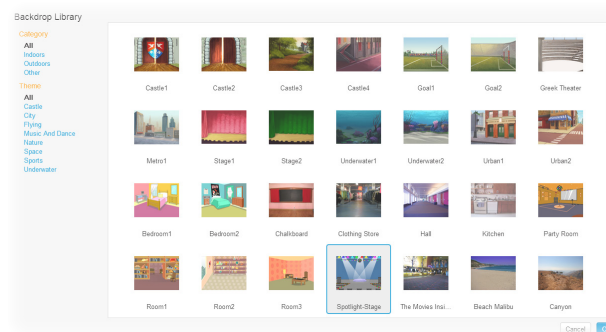
You can add a backdrop to the Stage.

Click  to choose a new backdrop.

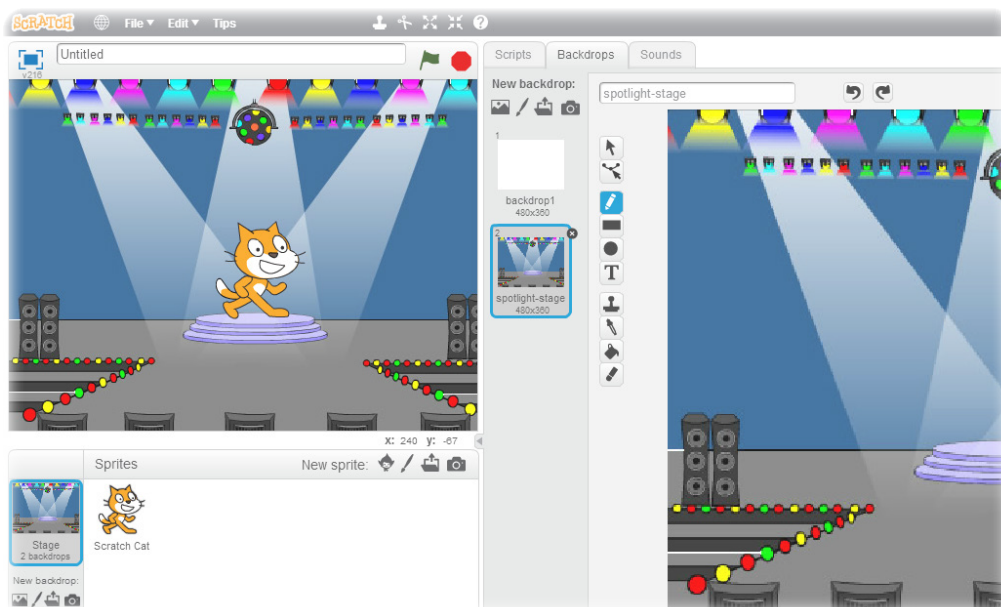


Choose a backdrop from the library (such as "Spotlight-Stage").

Click OK.



The new backdrop now appears on the Stage.



10 Add a Sprite

Each object in Scratch is called a sprite.



To add a new sprite, click one of these buttons.

NEW SPRITE BUTTONS:



Choose from the library



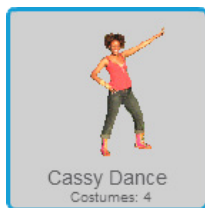
Paint your own sprite




Upload your own image or sprite



Take a picture (from a webcam)



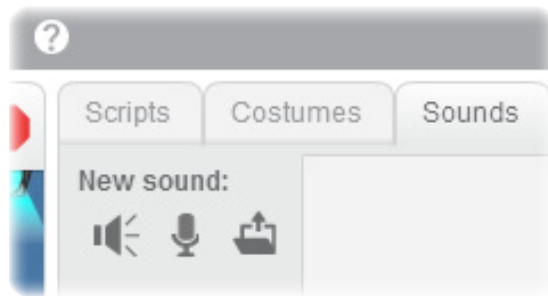
To add this sprite, click  then click **People** and select "Cassy Dance."

You can drag the characters to where you want them.



11 Explore!

Now you can tell the sprite what to do. Try the following, or explore on your own.



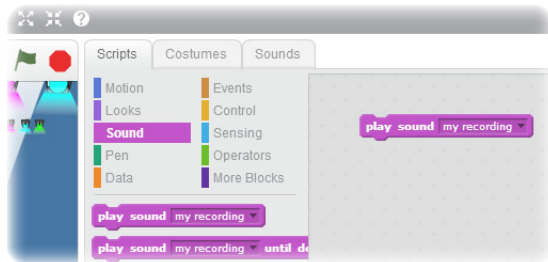
ADD SOUND

Click the **SOUNDS** tab.

You can **Choose**  a sound

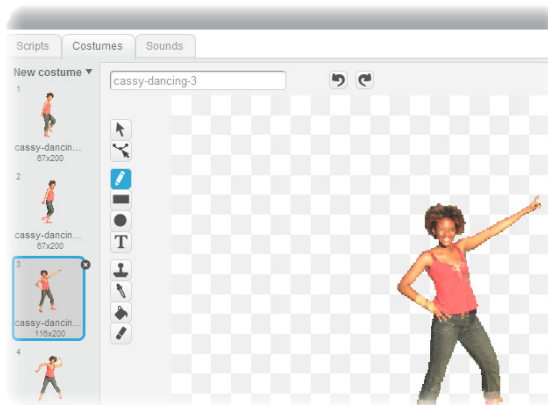
Record  your own sound

Or **Import**  a sound file.
(MP3, AIF, or WAV format)



Then, click the **SCRIPTS** tab, and drag in a **PLAY SOUND** block.

Choose your sound from the pull-down menu.

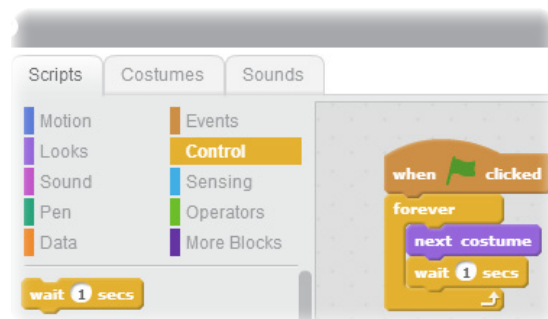


CHANGE COSTUMES

Each sprite can have more than one costume.

To change the current costume, click the **COSTUMES** tab.

Then click on a different costume for the sprite.



ANIMATE

You can animate a sprite by switching between costumes.

Click the **SCRIPTS** tab.

Create a script that switches between costumes.

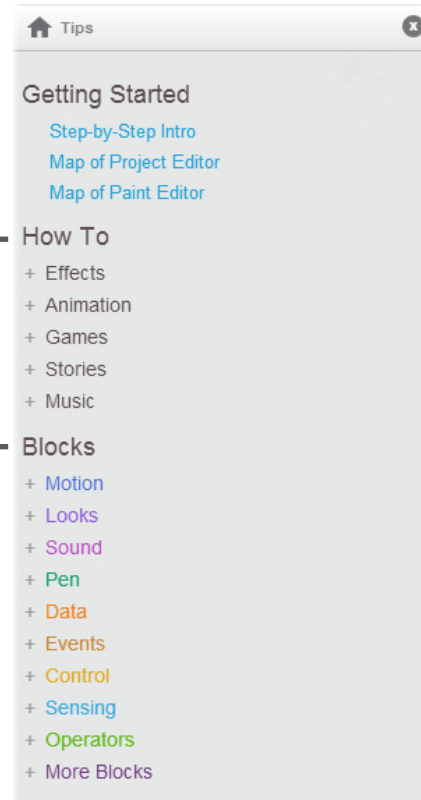
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TIPS!



Type a title for your project.

For more ideas, click **Tips**:



The **Tips Window** shows example scripts you can use in your project.

It also explains what each of the blocks in **SCRATCH** does.

Save and Share


To save your project online, make sure to sign in.

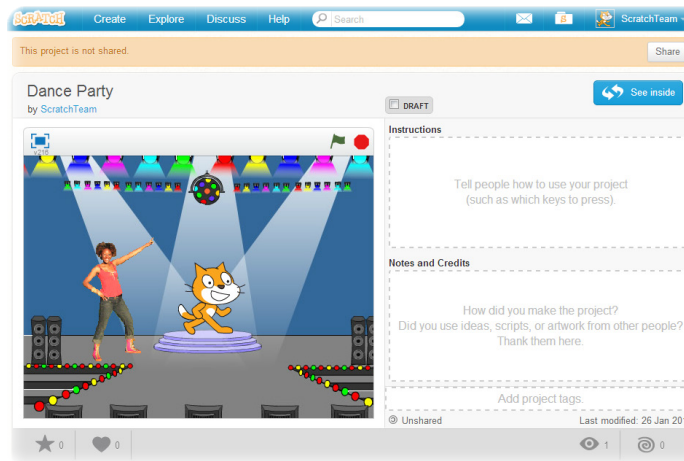
[Sign in](#)

(If you want to save the file to your computer drive, click the **File** menu and choose "Download to your computer.")

When you are ready, click [See project page](#)

Project Page

Click  for full screen viewing.



Click [Share](#) for others to see and play with your project.

Type in notes about your project.

When you share, others can visit and interact with your project.

Now what? You can [Create](#) a new project or [Explore](#) for ideas.

To find out more, click [Help](#) or go to <http://scratch.mit.edu/help>

Scratch is a programming language that makes it easy to create your own interactive stories, games, and animations – and share your creations with others on the web.

Scratch is developed by the Lifelong Kindergarten research group at the MIT Media Lab (<http://ilk.media.mit.edu>). Our group develops new technologies that, in the spirit of the blocks and fingerprint of kindergarten, expand the range of what people can design, create, and learn.

The Scratch project has been supported with funding from the National Science Foundation, Intel Foundation, Microsoft, MacArthur Foundation, LEGO Foundation, Google, Dell, Inversoft, and the MIT Media Lab research consortia.



Supported by NSF Grants 0325828 and 1002713. Any opinions, findings, and conclusions or recommendations expressed on this site are those of the authors and do not necessarily reflect the views of the National Science Foundation.

