

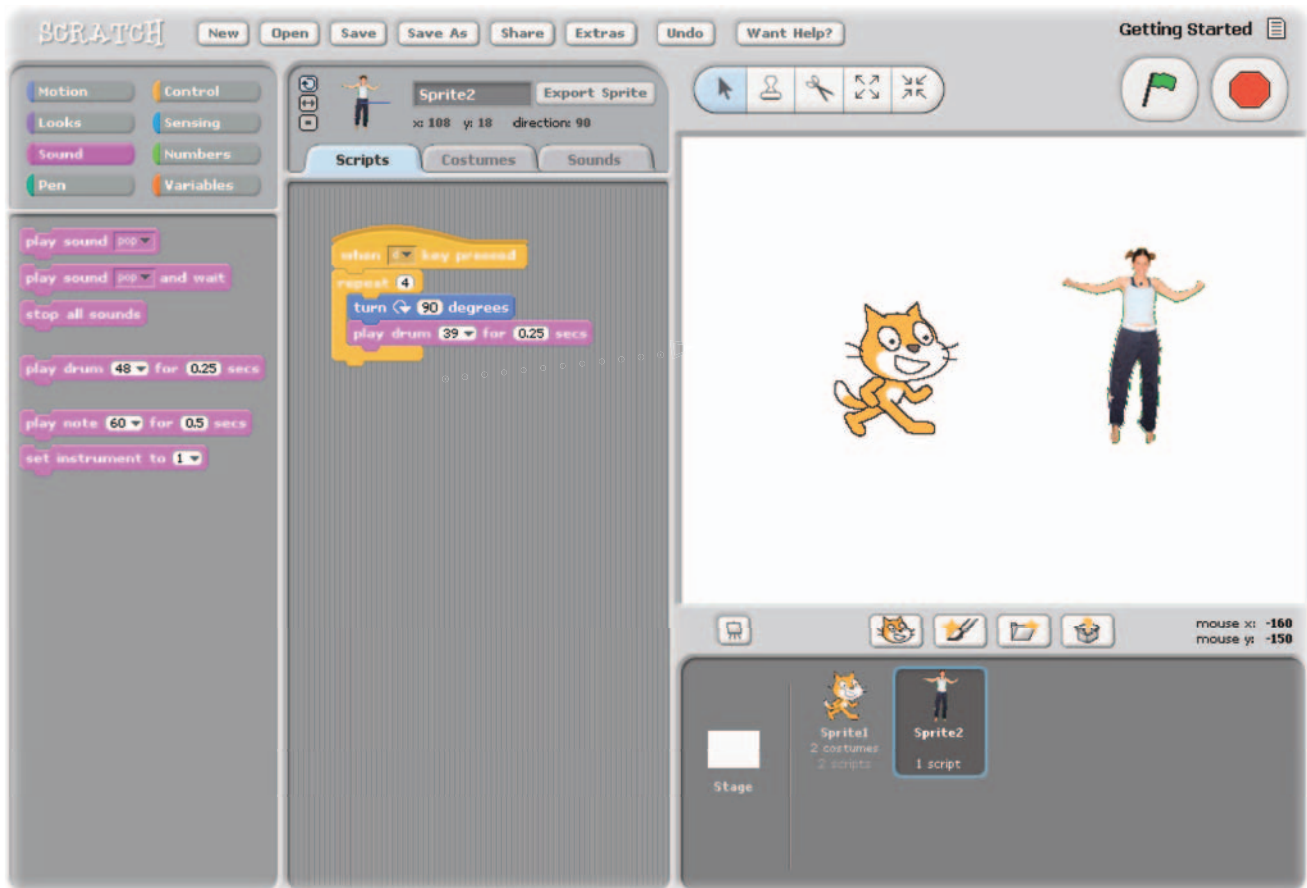


Getting Started with
SCRATCH



<http://scratch.mit.edu>

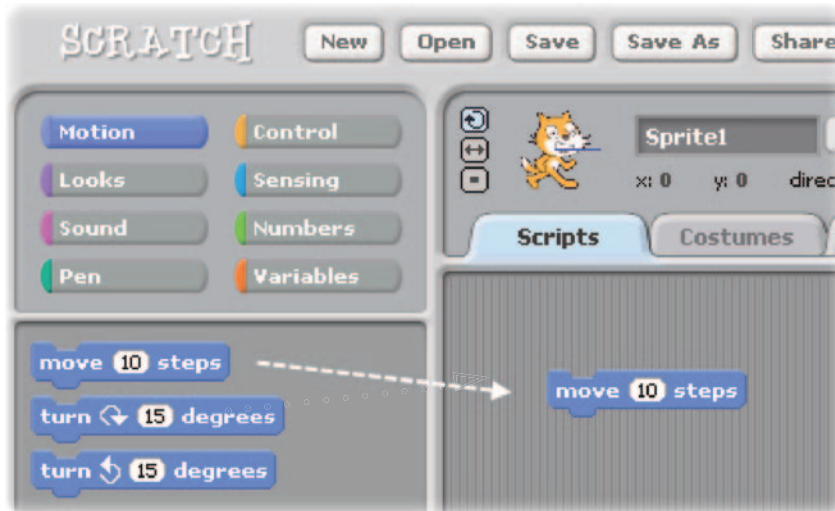
Getting Started



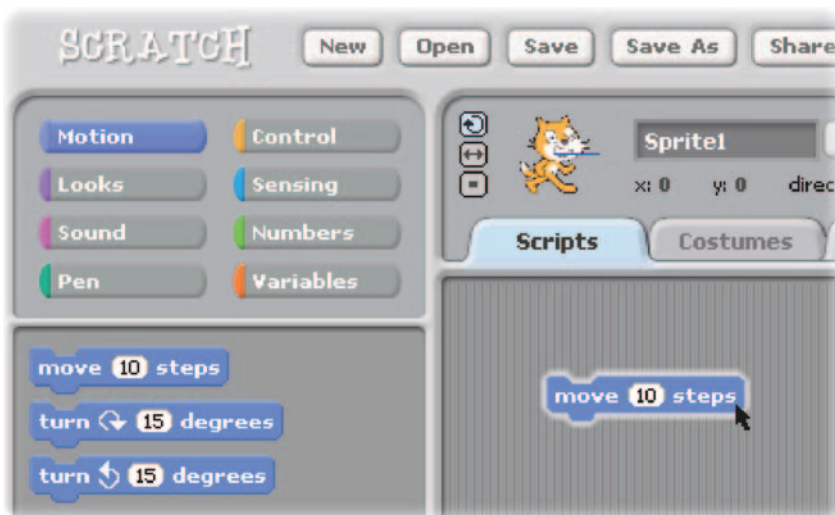
SCRATCH is a new programming language that lets you create your own interactive stories, animations, games, music, and art.

1

Start Moving



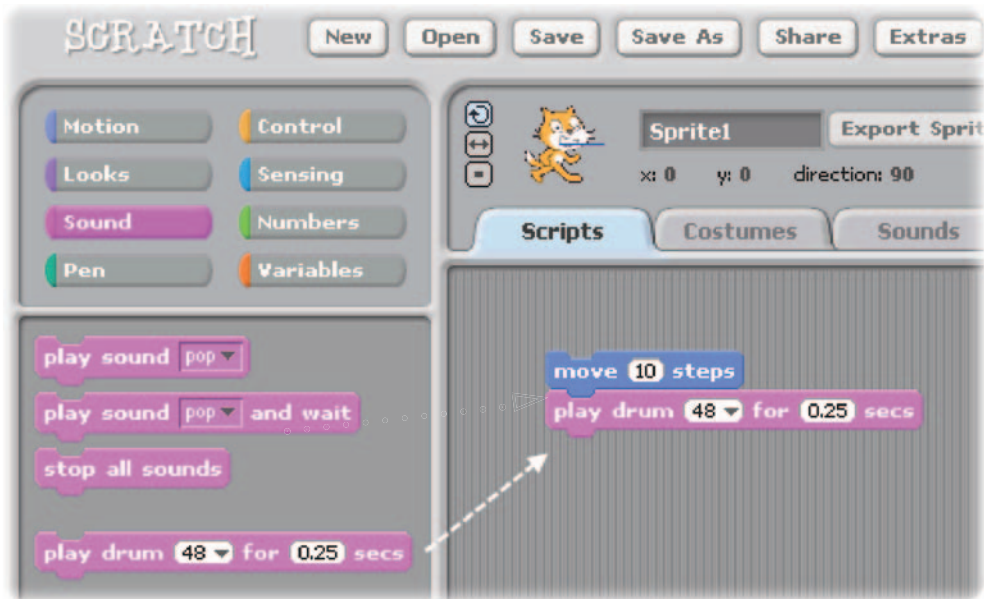
Drag a **MOVE** block into the Scripts area.



Double-click the block to make the cat move.

2

Add a Sound

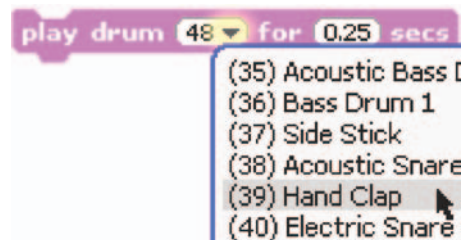


Drag out a **PLAY DRUM** and snap it onto the **MOVE** block.



Double-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 48 for 0.25 secs
move -10 steps
```

The image shows a Scratch code stack with three blocks. The top block is a blue 'move 10 steps' block. The middle block is a pink 'play drum 48 for 0.25 secs' block. The bottom block is a blue 'move -10 steps' block. The number '-10' in the bottom block is circled in yellow.

Add another **MOVE** block, then type in a minus sign.



```
move 10 steps
play drum 48 for 0.25 secs
move -10 steps
```

The image shows the same Scratch code stack as above. A mouse cursor is pointing at the right side of the 'play drum 48 for 0.25 secs' block.

Double-click anywhere on the stack.

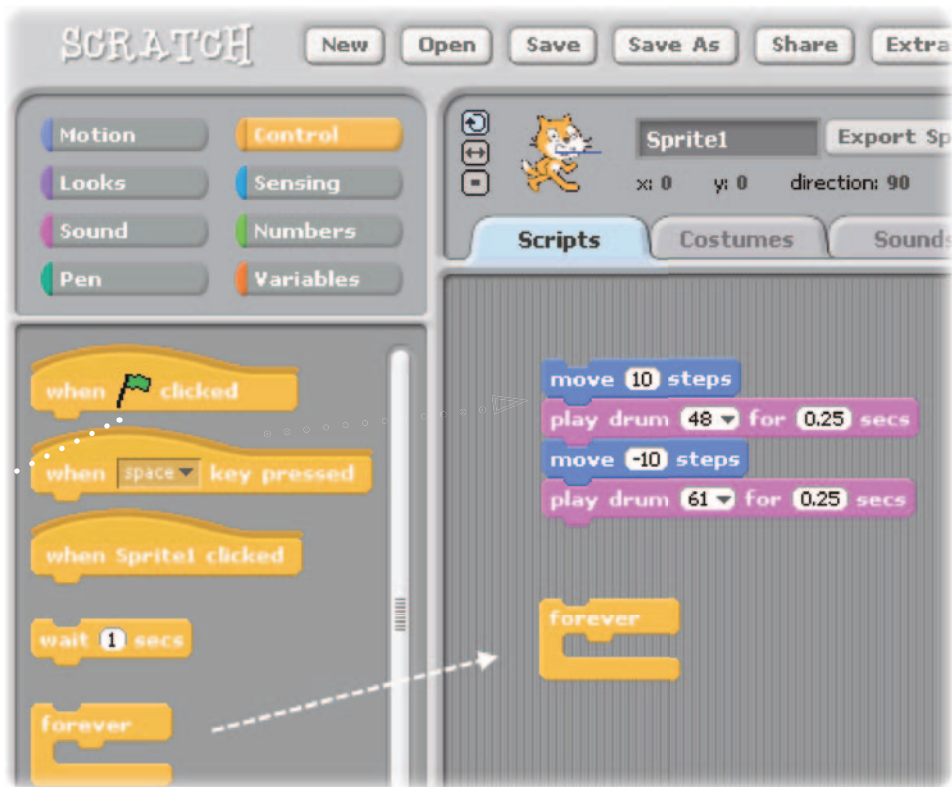


```
move 10 steps
play drum 48 for 0.25 secs
move -10 steps
play drum 61 for 0.25 secs
```

The image shows the Scratch code stack after a double-click. A new pink 'play drum 61 for 0.25 secs' block has been added to the bottom of the stack. A mouse cursor is pointing at the right side of this new block.

Add another **PLAY DRUM** block, then choose a drum from the menu. Double-click again.

4 Again and Again



Drag out a **FOREVER** block.



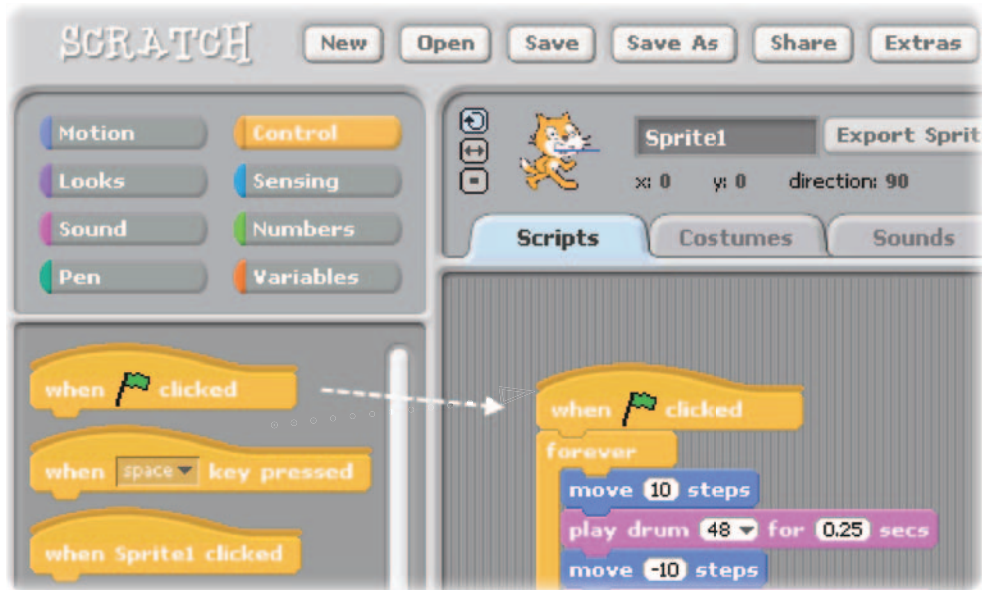
Drag the stack of blocks into the mouth of the **FOREVER**.
To drag a stack, pick it up from the top block.


Double-click and watch it keep going.



To stop, click the stop button at the top of the screen.

S Green Flag



Drag out a  block and snap it on top.

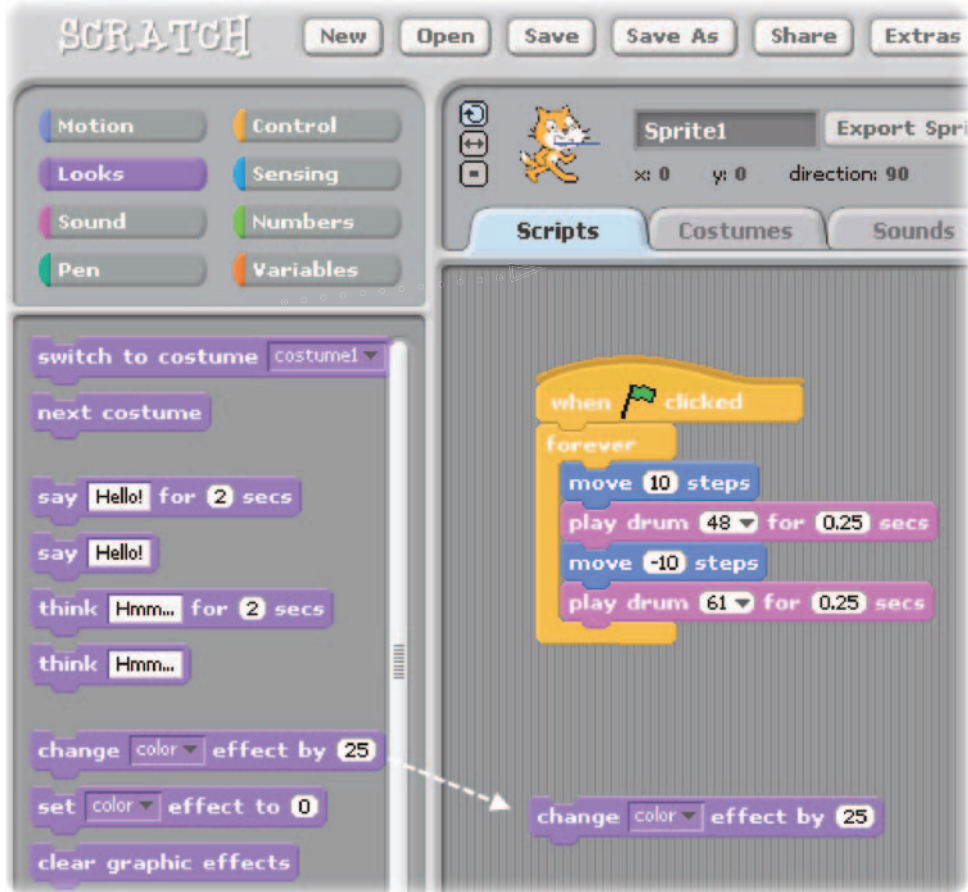


Whenever you click the green flag, your script will start. To stop, click the stop button.

6

Change Color

Now try something different...

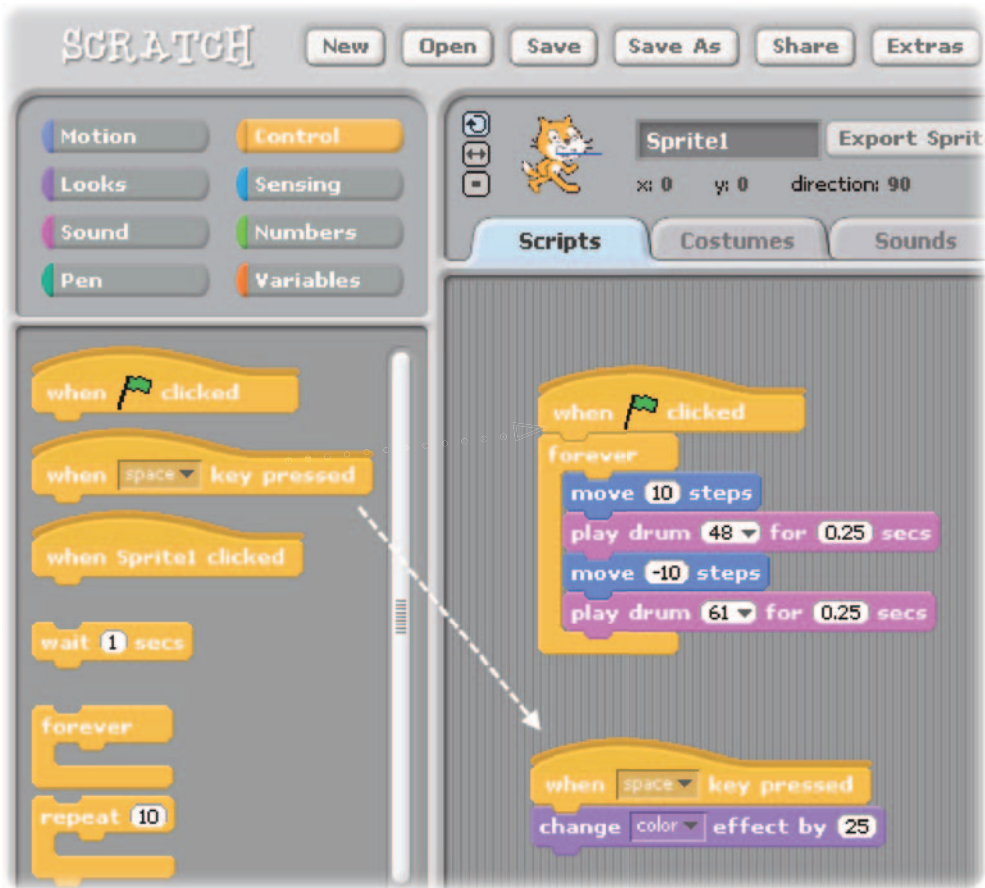


Drag out a **CHANGE EFFECT** block.



Double-click to see what it does.

7 KEY PRESS

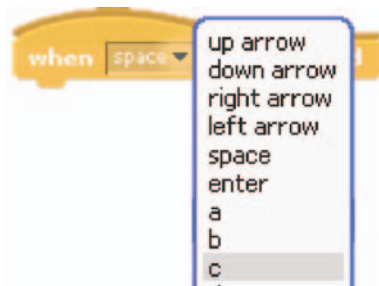


Snap on a

when space key pressed



Now press the space bar on your keyboard.



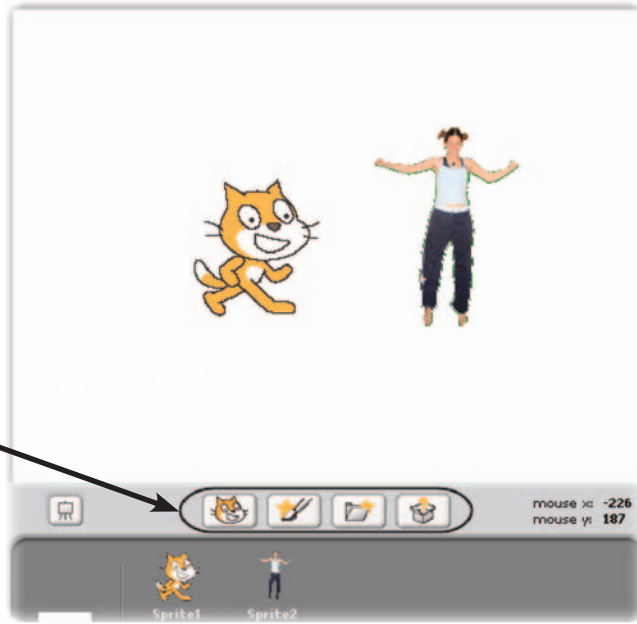
You can choose a different key from the pull-down menu.

8

Add a Sprite

Each object in Scratch is called a sprite.

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



NEW SPRITE BUTTONS:



Get a new cat sprite



Paint your own sprite




Choose an image for a new sprite



Get a surprise sprite



To add this sprite, click  then go to the People folder and select "jodi1".

9

Explore!

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



SAY SOMETHING

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

Try the **THINK** block, too...

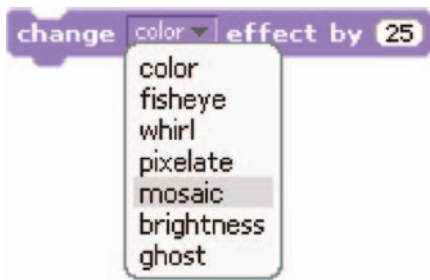


IMAGE EFFECTS

Use the pull-down menu to choose different effects.

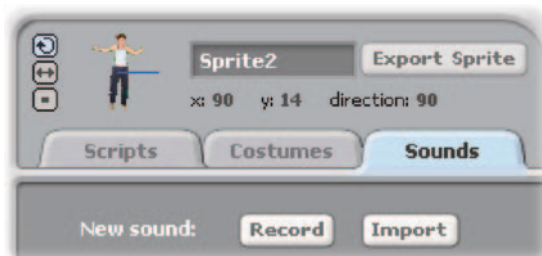
Then double-click the block.

To clear the effects, click the Stop button.



10

Explore More!



ADD SOUND

Click the **SOUNDS** tab.

Record your own sound.

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



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

Choose your sound from the pull-down menu.



ANIMATE

By switching between costumes, you can animate your own sprite.

To add a costume, click the **COSTUMES** tab.

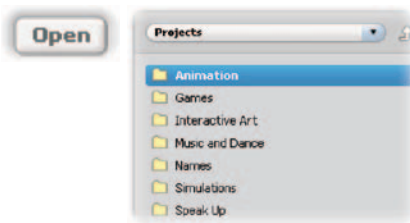
Then, click **IMPORT** to choose a second costume. (For example, try the image "jodi2" from the People folder.)



Now, click the **SCRIPTS** tab. Create a script that switches between costumes.

Now What?

You can create many different types of projects with Scratch.



To see example projects, click the **OPEN** button, and choose from the folders.



You may want to start with a photo of yourself. Or your favorite character. Or, start by animating the letters in your name.



If you have an idea for a project, click **NEW** and start creating.



VISIT THE SCRATCH WEBSITE!

Share Scratch projects and learn more at:

<http://scratch.mit.edu>

Scratch is a new programming language that makes it easy to create your own animated stories, games, and interactive art – 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 development of Scratch has been supported by funding from the National Science Foundation, the Intel Foundation, and the MIT Media Lab research consortia.

This guide and other Scratch print materials were created by Natalie Rusk and other members of the Scratch development team.

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