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Scratch Jr.

http://cs.oregonstate.edu/~mjb/scratch

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scratch.junior.pptx

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What Is Scratch Jr.?

From the Scratch Jr. web page: https://www.scratchjr.org/

"Coding (or computer programming) is a new type of literacy. Just as writing helps you organize your thinking and express your ideas, the same is true for coding. In the past, coding was seen as too difficult for most people. But we think coding should be for everyone, just like writing.

As young children code with ScratchJr, they learn how to create and express themselves with the computer, not just to interact with it. In the process, children learn to solve problems and design projects, and they develop sequencing skills that are foundational for later academic success. They also use math and language in a meaningful and motivating context, supporting the development of early-childhood numeracy and literacy. With ScratchJr, children aren't just learning to code, they are coding to learn."

Scratch Jr. can be downloaded from the Apple Store, from the Android Store, or as a standalone Mac or Windows application. See the Scratch Jr. Downloads page.

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What Kind of People Need to Tell the Computer How to Move Things Around?

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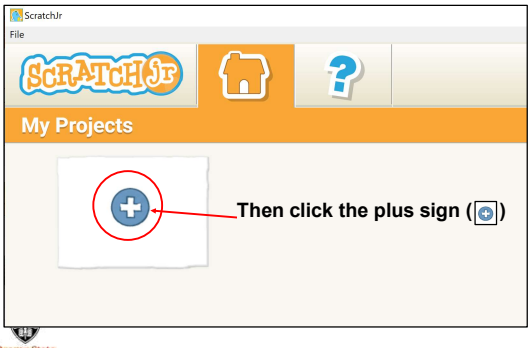

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Clicking on the Settings Gear Will Let You Change the Language
7
Select language
Català
Deutsch
English
Español
Français
Italiano
Nederlands
日本語
Português
Svenska
ไทย
简体中文
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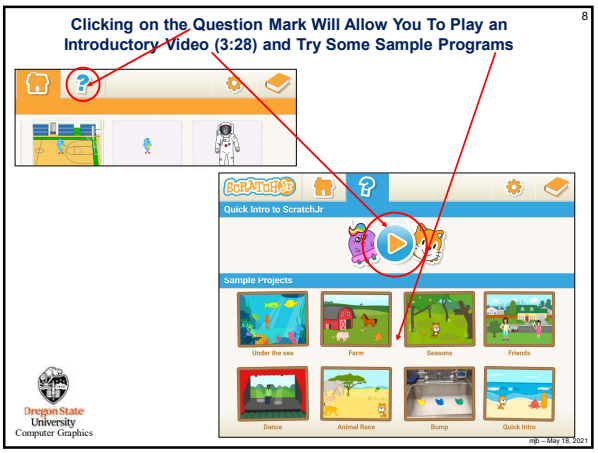
Clicking on the Question Mark Will Allow You To Play an Introductory Video (3:28) and Try Some Sample Programs
8
Quick Intro to ScratchJr
Sample Projects
Under the sea
Farm
Seasons
Friends
Dance
Animal Race
Bump
Quick Intro
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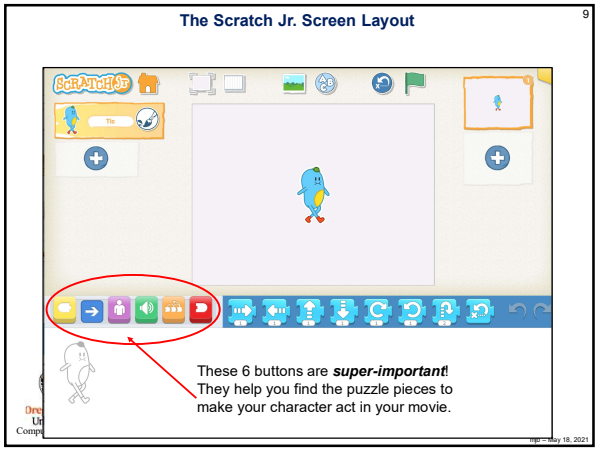
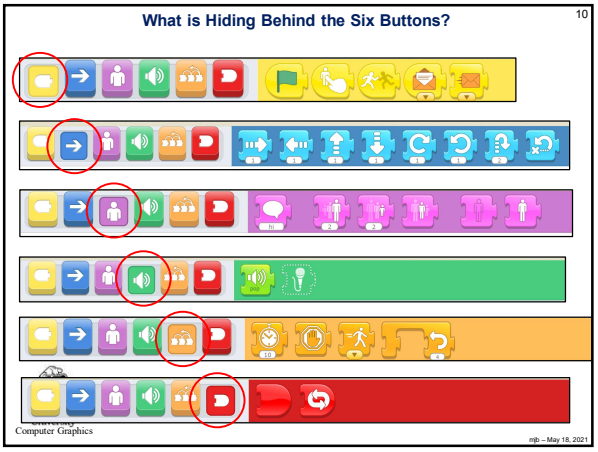

The Scratch Jr. Screen Layout
9
These 6 buttons are super-important! They help you find the puzzle pieces to make your character act in your movie.

9


What is Hiding Behind the Six Buttons?
10
Computer Graphics

10

Drag Puzzle Pieces Out and Click the Green Flag
11
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11

When the Green Flag Gets Waved at a Car Race, What Happens?
12
http://www.skirtsandscuffs.com/2011_03_01_archive.html
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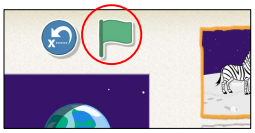
12

So, When the Scratch Jr. Green Flag Gets Clicked (Waved), Your Programs Start

13



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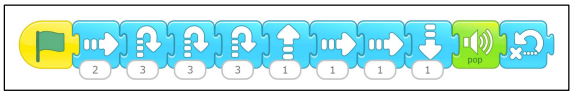
13

Whatever Your Puzzle Pieces Say, That's What Your Character Will Do

14



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The Yellow Button – When to Start This Program

15

Start all programs that have a Green Flag Puzzle Piece

Start this program when I touch this character with my mouse or finger

Start this program when another character touches this character

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The Blue Button – Making Your Character Move

16

Move the character to the right, left, up, and down

Rotate the character

Make the character hop

Make the character go back to where it started from

Clicking on the number will bring up a calculator to get your character to take longer steps, more rotations, or higher hops

Hint #1: the biggest number you can enter is **99**

Hint #2: entering a number of **12** for a rotation gives a full turn

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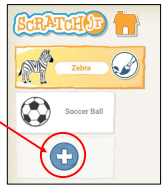
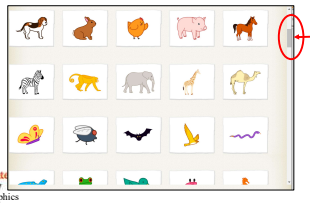
16

Adding More Characters

17

Click on this plus sign ( ) to select a new character from the big list





Keep scrolling – there are lots more!

Hint: to make this new character move, they need to have a program written for them too.

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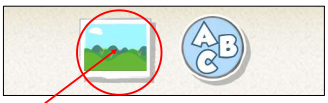
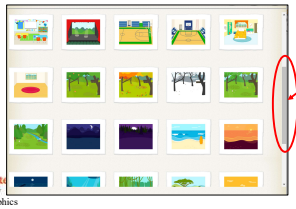
17

Adding a Background

18



Click this photograph to select a background from the big list



Keep scrolling – there are lots more!

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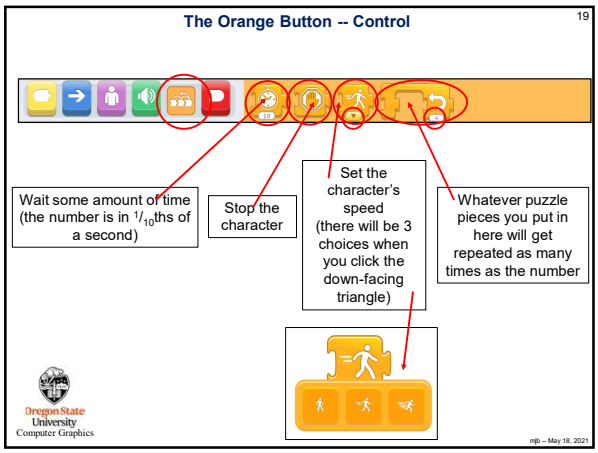
18



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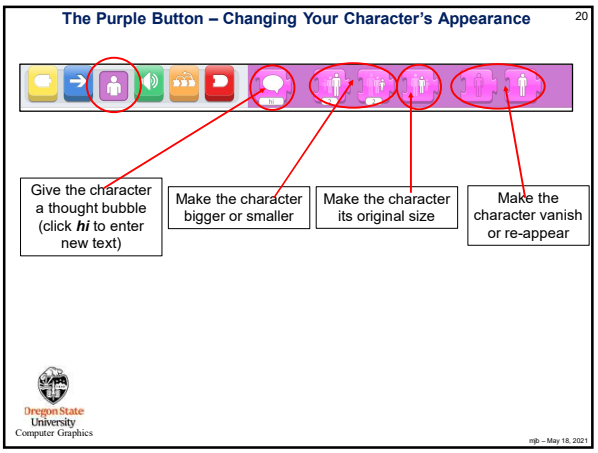
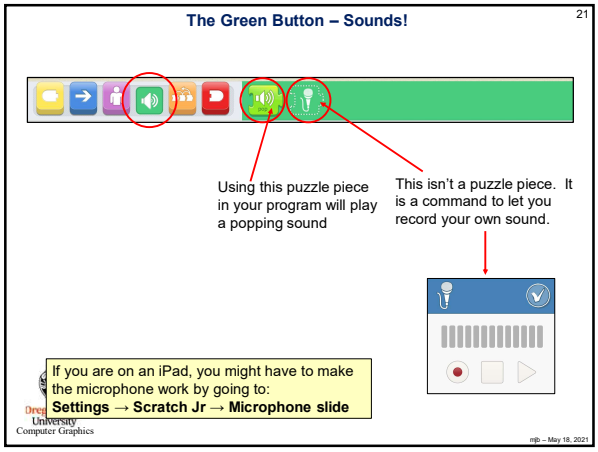


20



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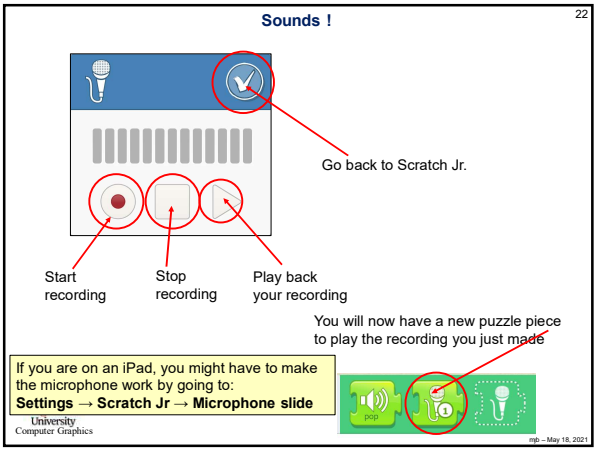

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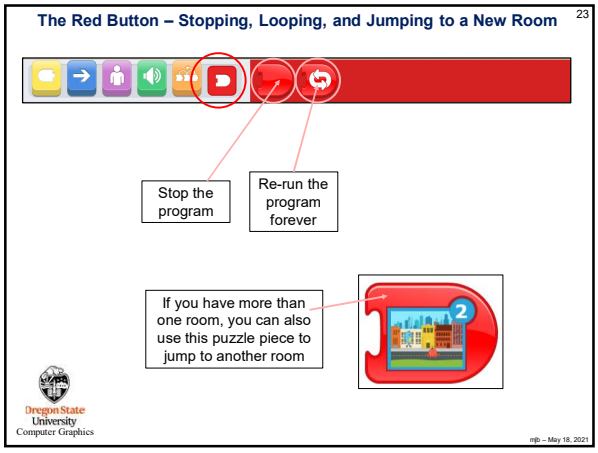
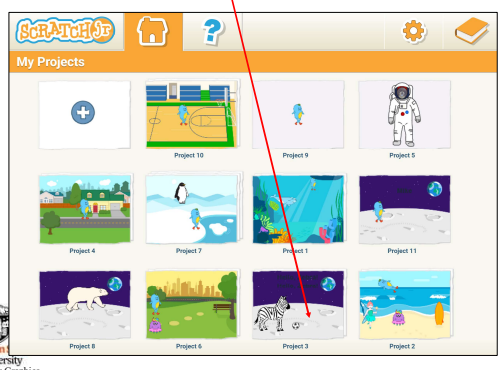


23

24

And, When You Do Hit the Home on Your Screen, Scratch Jr. Will Show You *All* Your Movies – Just Click on One to Get Back Into It

25



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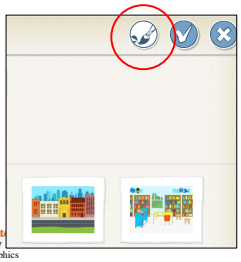
Painting !

26

There are times when Scratch Jr. will let you paint! Look for this icon:

When selecting a character.



When selecting a background.

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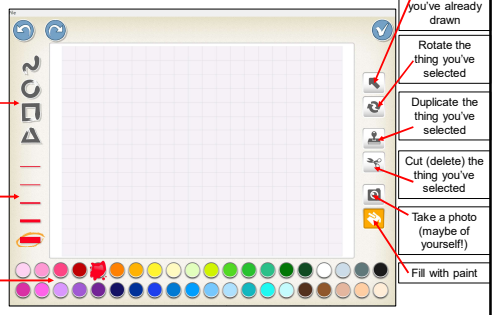
Painting !

27

Clicking on takes you here to the Scratch Jr. paint screen:



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Using the Camera

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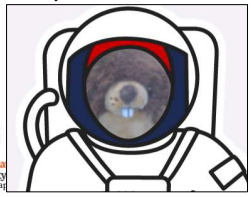
You can use the camera to add photos to the background or a character. You might have already noticed that some of the characters have empty faces:

If you click the paintbrush that is with one of these characters, then click on the camera, then click on the face area of the character, then click on the snapshot icon, whatever your camera sees will be on the character's face.



Go, Space Beavs!

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Adding a Title

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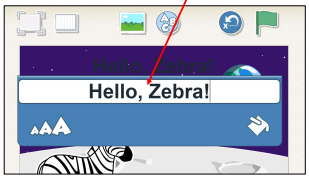
Click on the **ABC** then type your title



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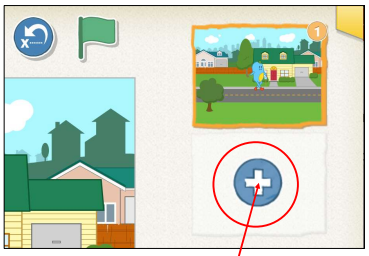
29

Adding another Room

30



Click on this plus sign ( ) to add another room. A room is a whole separate scene where you can add new characters, add a new background, and write new programs for your characters to act out.

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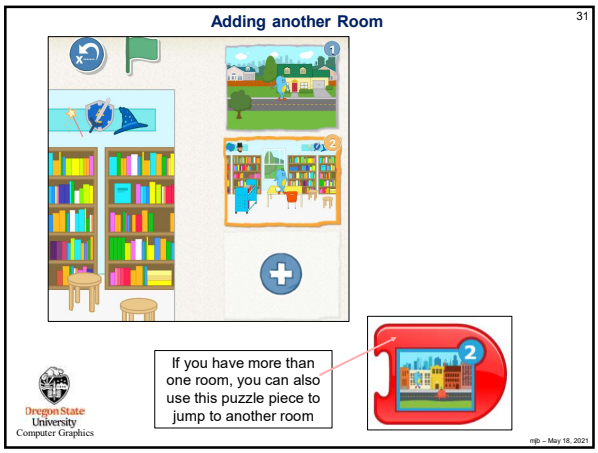
Adding another Room
31
If you have more than one room, you can also use this puzzle piece to jump to another room
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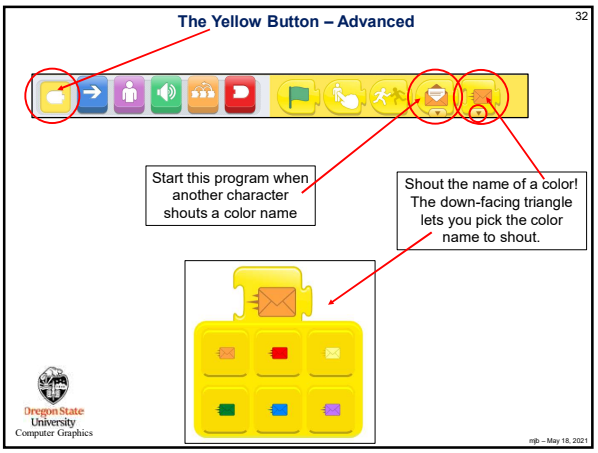
31


The Yellow Button – Advanced
32
Start this program when another character shouts a color name
Shout the name of a color! The down-facing triangle lets you pick the color name to shout.
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32

Clicking on This Little Yellow Tab in the Upper-Right Corner Will Allow You to Give Your Program a Title
33
Soccer Zebras in Space
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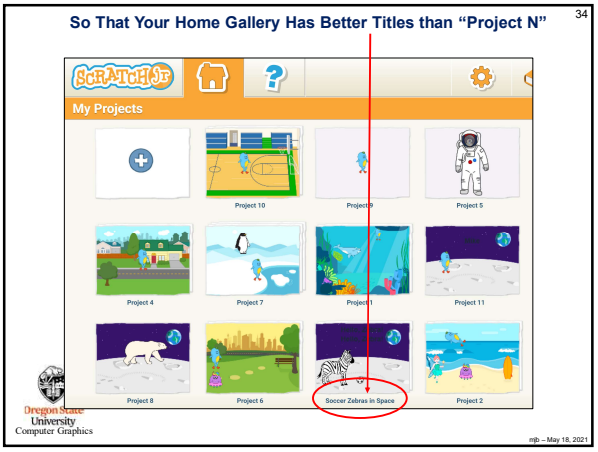
So That Your Home Gallery Has Better Titles than "Project N"
34
My Projects
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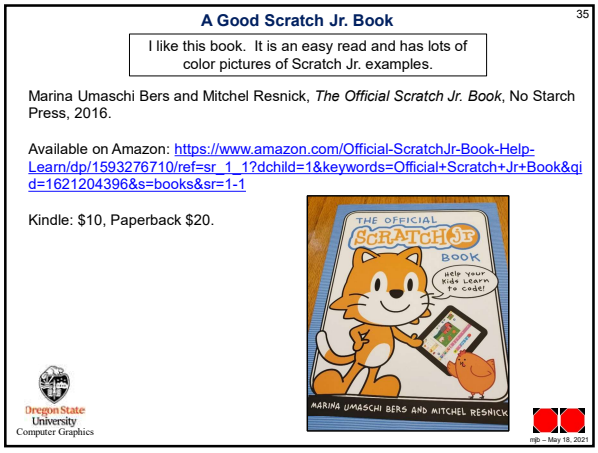
A Good Scratch Jr. Book
35
I like this book. It is an easy read and has lots of color pictures of Scratch Jr. examples.
Marina Umaschi Bers and Mitchel Resnick, The Official Scratch Jr. Book, No Starch Press, 2016.
Available on Amazon: https://www.amazon.com/Official-ScratchJr-Book-Help-Learn/dp/1593276710/ref=sr_1_1?dchild=1&keywords=Official+Scratch+Jr+Book&qid=1621204396&s=books&sr=1-1
Kindle: $10, Paperback $20.
THE OFFICIAL SCRATCH JR BOOK
MARINA UMASCHI BERS AND MITCHEL RESNICK
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