

SCRATCH STUDIO

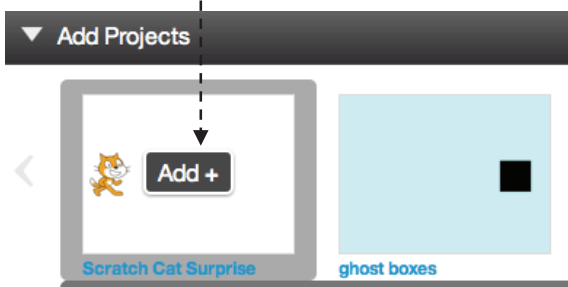
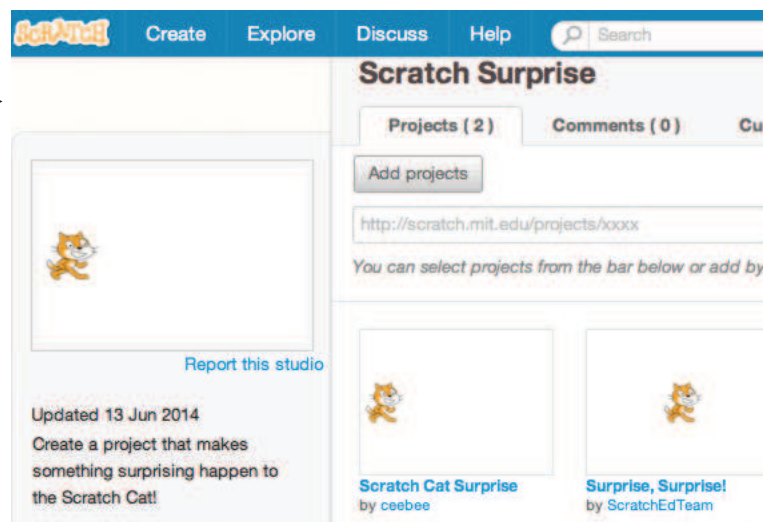
LEARN HOW TO ADD YOUR PROJECT TO AN ONLINE SCRATCH STUDIO!

Studios are collections of Scratch projects. Follow along with the steps below to add your Scratch Surprise program to the Scratch Surprise studio on the Scratch website. ----->



START HERE

- Go to the Scratch Surprise studio using this link:
<http://scratch.mit.edu/studios/460431> ----->
- Sign into your account.
- Click on "Add Projects" at the bottom of the page to show your projects, favorite projects, and recently viewed projects. ----->
- Use the arrows to find your Scratch Surprise project and then click "Add +" to add your project to the studio. ----->



DEBUG IT!

HELP! CAN YOU DEBUG THESE FIVE SCRATCH PROGRAMS?

In this activity, you will investigate what is going awry and find a solution for each of the five Debug It! challenges.

START HERE

- ❑ Go to the Unit 2 Debug It! Studio:
<http://scratch.mit.edu/studios/475539>
- ❑ Test and debug each of the five debugging challenges in the studio.
- ❑ Write down your solution or remix the buggy program with your solution.

FEELING
STUCK?

THAT'S OKAY! TRY THESE THINGS...

- ❑ Make a list of possible bugs in the program.
- ❑ Keep track of your work! This can be a useful reminder of what you have already tried and point you toward what to try next.
- ❑ Share and compare your problem finding and problem solving approaches with a neighbor until you find something that works for you!

❑ **DEBUG IT! 2.1** <http://scratch.mit.edu/projects/23266426>

In this project, Scratch Cat wants to show you a dance. When you click on him, he should do a dance while a drum beat plays along with him. However, as soon as he starts to dance he stops but the drumming continues without him! How do we fix this program?

❑ **DEBUG IT! 2.2** <http://scratch.mit.edu/projects/24268476>

In this project, when the green flag is clicked Pico should move towards Nano. When Pico reaches Nano, Pico should say "Tag, you're it!" and Nano says "My turn!" But something is wrong! Pico doesn't say anything to Nano. How do we fix the program?

❑ **DEBUG IT! 2.3** <http://scratch.mit.edu/projects/24268506>

This project is programmed to draw a happy face but something is not quite right! The pen continues to draw from one of the eyes to the smile when it should not be doing so. How do we fix the program?

❑ **DEBUG IT! 2.4** <http://scratch.mit.edu/projects/23267140>

In this project, when the green flag is clicked an animation of a flower growing begins and stops once it has fully bloomed. But something is not quite right! Instead of stopping when all the petals have bloomed, the animation starts all over. How do we fix this program?

❑ **DEBUG IT! 2.5** <http://scratch.mit.edu/projects/23267245>

In this project, the Happy Birthday song starts playing when the green flag is clicked. Once the song finishes, instructions should appear telling us to "click on me to blow out the candles!" But something is not working! The instructions to blow out the candles are shown while the birthday song is playing rather than after it finishes. How do we fix this program?

FINISHED?

- + Add code commentary by right clicking on blocks in your scripts. This can help others understand different parts of your program!
- + Discuss your testing and debugging practices with a partner - make notes of the similarities and differences in your strategies.
- + Help a neighbor!

CONVERSATIONS

WHAT ARE DIFFERENT WAYS TO COORDINATE INTERACTIONS BETWEEN SPRITES?

In this activity, you'll explore different ways to program sprites to have conversations! Experiment with timing and explore using broadcast by remixing a joke project.



START HERE

- ❑ Look inside the Penguin Jokes project:
<http://scratch.mit.edu/projects/10015800>
- ❑ Investigate the code to see how the wait and say blocks are used to coordinate the conversation.
- ❑ Remix the project to use the broadcast and when I receive blocks instead of wait blocks.

```
when clicked
say Hello! for 2 secs
wait 2 secs
say What do Penguins love to eat? for 3 secs
wait 2 secs
say Nope... for 2 secs
wait 2 secs
say Ice-burgers! for 2 secs
```

```
when I receive message1
broadcast message1
broadcast message1 and wait
```

FEELING STUCK?

THAT'S OKAY! TRY THESE THINGS...

- ❑ Brainstorm ideas with a neighbor! Generate a list of possible solutions and test them out together.
- ❑ Try using the broadcast and when I receive blocks in different parts of your project.
- ❑ Explore projects in the Conversations studio to get inspiration for different ways to coordinate conversations between sprites.

FINISHED?

- + Add your project to the Conversations studio:
<http://scratch.mit.edu/studios/475547>
- + Challenge yourself to do more! Add other characters and conversations.
- + Share your project with a neighbor and walk them through your process of exploration and design.
- + Help a neighbor!

SCENES

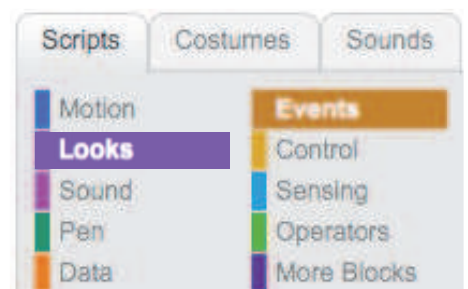
WHAT IS THE DIFFERENCE BETWEEN THE STAGE AND SPRITES?

In this activity, you will create a project that experiments with backdrops, like a story with multiple scenes or a slideshow.



START HERE

- ❑ Choose from the library, paint, or upload multiple backdrops into your project.
- ❑ Experiment with blocks from the Looks and Events categories to initiate switching backdrops.
- ❑ Add scripts to the stage and sprites to coordinate what happens when the backdrop changes in your project!



switch backdrop to backdrop1 ▾

when backdrop switches to backdrop1 ▾

backdrop name

THINGS TO TRY

- ❑ Look for blocks under the sprites and the stage related to backdrop and test them out to see what they do!
- ❑ Need more inspiration? Explore the Scratch online community to discover projects that use multiple backdrops.

FINISHED?

- + Add your project to the Scenes Studio: <http://scratch.mit.edu/studios/475550>
- + Challenge yourself to do more! Add more backdrop changes to your project.
- + Help a neighbor!
- + Return to one of your previous projects or find a project you are inspired by and remix it by adding switching backdrops.