

SCRATCH FINAL PROJECT

HERE IS YOUR CHANCE TO SHOW
OFF YOUR CODING SKILLS!

In this project, you will design and build a Scratch
project that can be of two general types - a story
or a greeting card. It is up to you what kind of project you will make.



START HERE

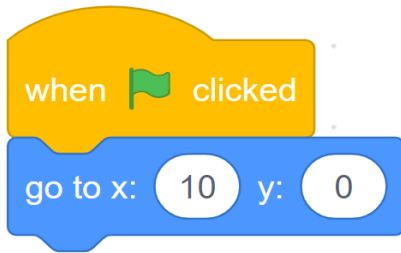
- Think about the kind of project you and your partner would like to make.
- What was your favourite Scratch project so far?
- Would you like to make a story or a greeting card?
- Would you like to take one of your previous Scratch projects and build something based on that?
- With your partner, fill out the *Scratch Final Project Design Worksheet* to plan out your project.



As you plan your project, think about the blocks you have used before. For your project, try to use as many of the Scratch blocks you've learned about so far.

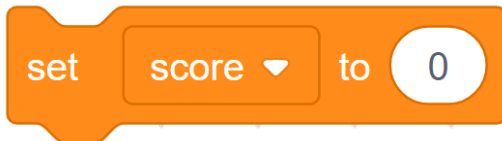
EVENTS

Control sprites based on an event like a key press.



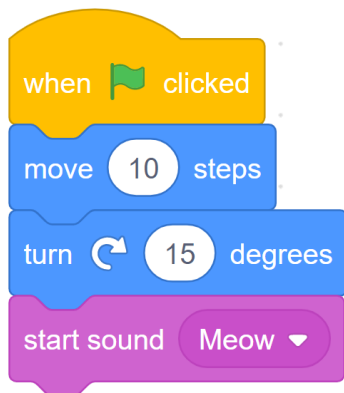
VARIABLES

Variables can help you save information and update it in your Scratch project.



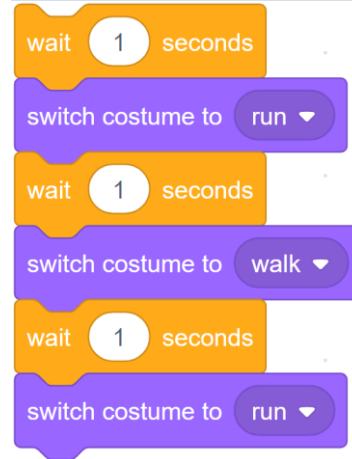
SEQUENCES

Multiple instructions put together form a sequence that happens in order.



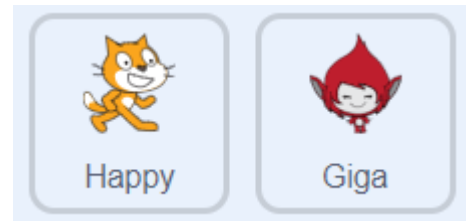
COSTUME CHANGES

Show movement by changing a sprite's costume!



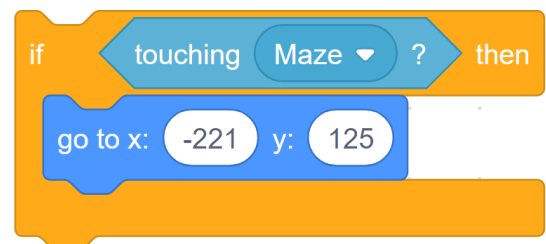
NAMING

Give an good name to the sprites is also important.



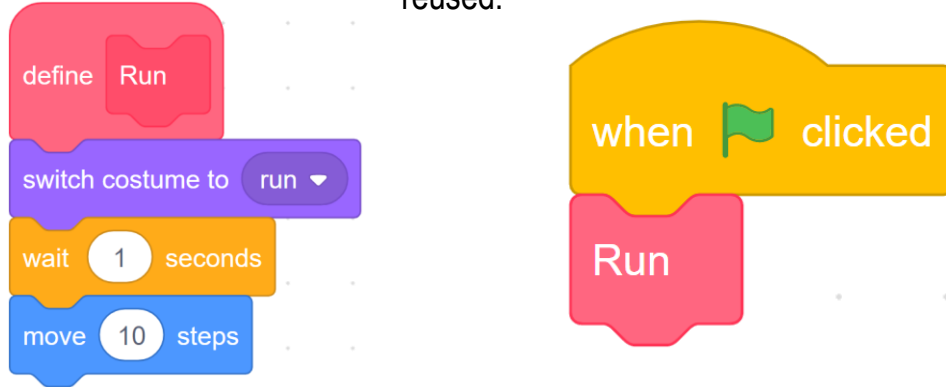
CONDITIONALS

Sometimes you need to make decisions. Trigger sprite action based on **if-then** blocks.



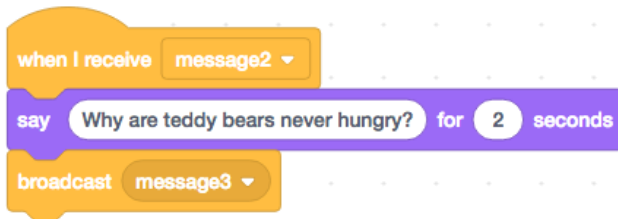
MY BLOCKS

Use custom blocks (My Blocks) to break complex tasks into smaller blocks of code that can be reused.



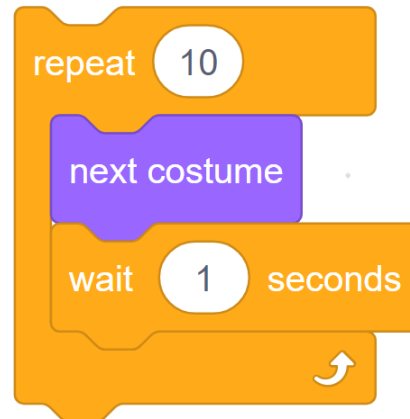
BROADCASTS

Broadcast and **when I receive** blocks let sprites talk to each other to trigger actions.



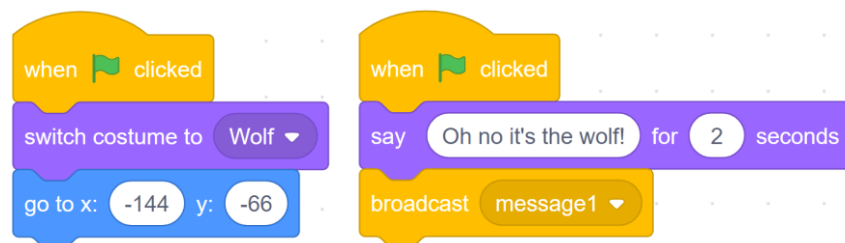
REPETITION

Repeat blocks let your sprite easily do things over and over.



PARALLELISM

You can have sprites do things at the same time with the help of events or broadcasts.



- When your teacher tells you, your team should pair up with another team.
- Take turns showing each other your *Scratch Final Project Design Worksheet* and explaining your project.
- Listen carefully to your classmates when they explain the project. Ask questions if anything is not clear.
- Pick out two things you like about the project and tell them.
- Now tell them one wish you have for their project.
- When your classmates ask questions or give suggestions about your project, write what they say on the last page of the *Scratch Final Project Design Worksheet*. Write everything down, even if you don't agree!
- When you go back to finish your project, read your classmates' suggestions. If you want to update your project design based on their comments, make those changes now.



ARE YOU READY TO CODE?

- Sign into your account on scratch.mit.edu and create a new Scratch project.
- Give it an appropriate name.
- Using your *Scratch Final Project Design Worksheet*, add your sprites to the project.

Remember Rules for Pair Programming

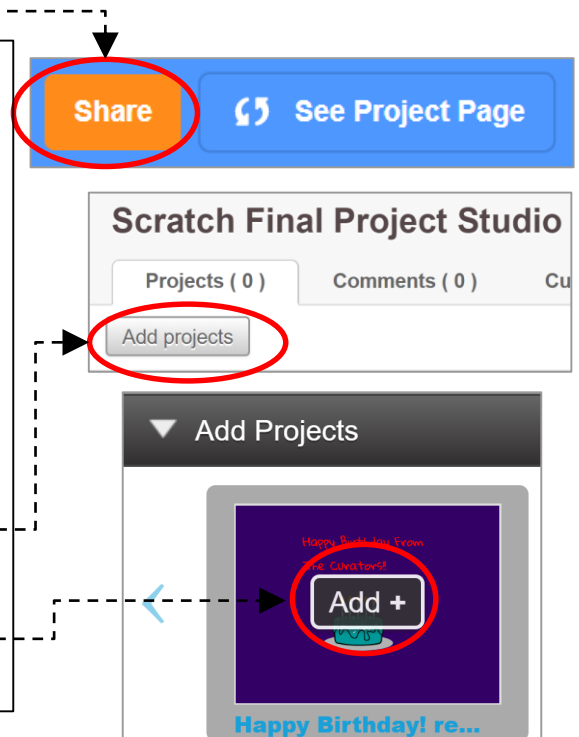
- DO: Be respectful
- DO: Talk to one another about the work
- DO: Explain what you are doing
- DO: Think ahead and make suggestions
- DO: Switch roles often
- DON'T: Be a bossy navigator
- DON'T: Grab the driver's mouse or keyboard

- Add a backdrop to your stage for your story or card.
- Start Coding!

- ❑ Now you should have completed part of your project.
- ❑ When your teacher tells you, your team should pair up with another team in your class.
- ❑ Take turns trying out each other's project.
- ❑ Ask the other group to answer the following questions about your project:
 1. What did you like about the project?
 2. Was there any part of the project that did not work well or was unclear?
 3. Is this project similar to your own project? How?
 4. What could be added to make the project more interesting or fun?
- ❑ Based on their answers, complete the *Scratch Final Project Peer Feedback Worksheet*.
- ❑ Update your design and the remaining tasks in your Design Worksheet, based on the feedback from your peers.
- ❑ There should be at least one improvement or added feature integrated into your design.

FINISHING UP

- ❑ When you finish, you will add your Scratch project to your teacher's studio.
 1. Save your project by clicking the **Save** button at the top left.
 2. Click **Share** button at the top centre.
 3. Go to your teacher's Scratch Final Project Studio (they will give you a URL).
 4. Click the **Add Projects** button.
 5. Select your project from the bottom of the page and add it to the Studio.



PRESENTATION

- Following your teacher's instructions, you may present orally or assess each other's work using the Scratch Studio and *Two Stars and a Wish Worksheet*.
 1. If you present orally, you should explain:
 - The theme/goal of the project (to tell a story, or a greeting card);
 - What you are most proud of accomplishing with the project;
 - Difficulties you overcame with the project.
 2. If you review other groups' projects through the Scratch studio, you should
 - Open the teacher's Scratch Final Project Studio;
 - Choose two projects to assess;
 - Fill out the *Two Stars and a Wish Worksheet*.

REFLECTION

Think about your project ... some questions to ponder.

- Did you meet your own goals for your project?
- If you could redo your project, would you change anything about how you designed or coded the project?

