

Day 1

Do Now

Do you know anyone who is a
computer scientist?
A programmer?

What kinds of jobs can you
have as a computer
scientist?



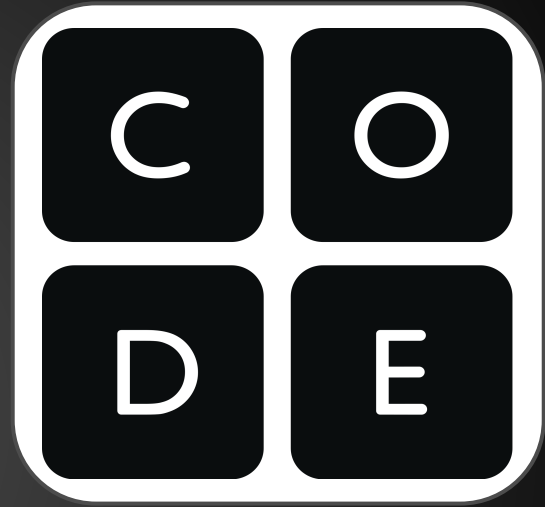
what type of job could a computer scientist have?

- Software Programmers
- Computer Programmers
- Hardware Engineers
- Website and App Developers
- Network Manager
- Graphic Designers for Digital Games/Apps
- and many more!



Learn More

- code.org
- [Khan Academy](https://www.khanacademy.org)
- [Scratch](https://scratch.mit.edu)
- [MIT App Inventor](https://MITAppInventor.org)
- [Computer Science Classes @ CRLS](#)



Goals for Today

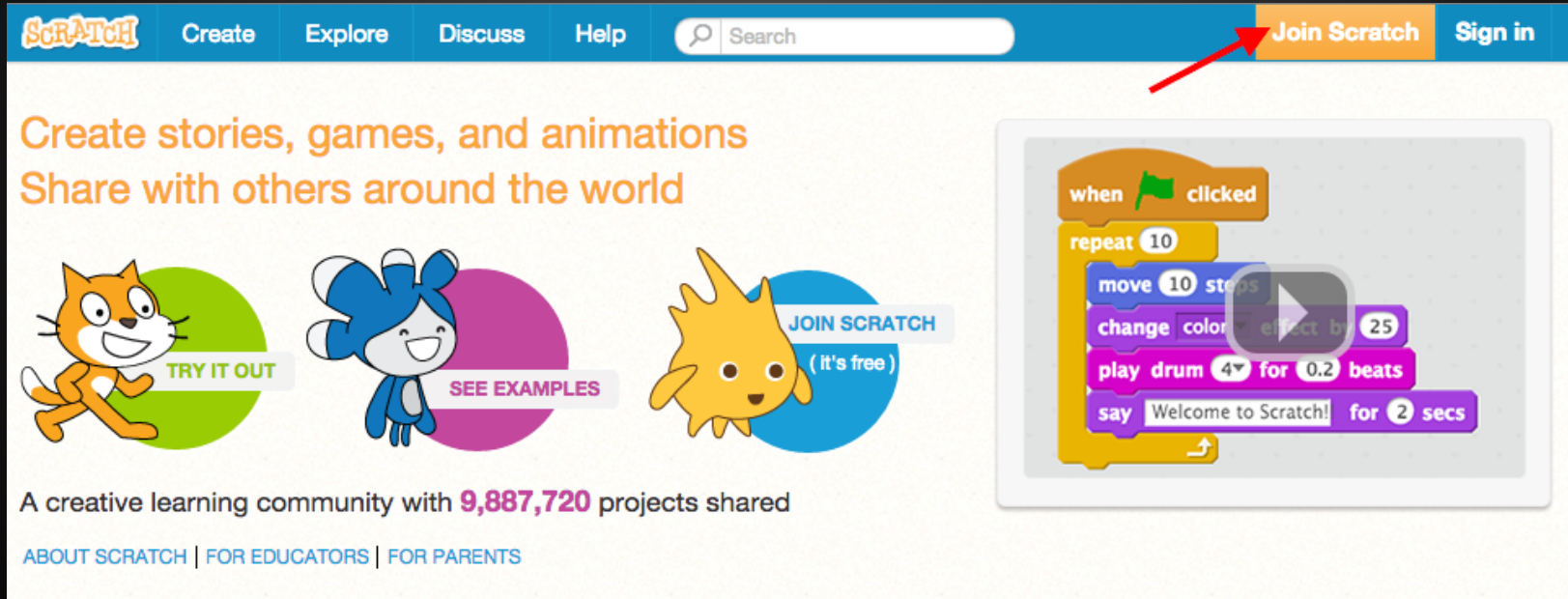
Learn about your Computer Scientist Roles
Knowing the strengths of different members of
your team, decide who will be doing which
Computer Scientist Role to contribute towards
your final project.

Setting Up Online Scratch Accounts

Setting up Online Scratch Accounts

<http://scratch.mit.edu>

Click on "Join Scratch"



The screenshot shows the Scratch website interface. At the top is a blue navigation bar with the Scratch logo, links for 'Create', 'Explore', 'Discuss', and 'Help', a search bar, and buttons for 'Join Scratch' and 'Sign in'. A red arrow points to the 'Join Scratch' button. Below the navigation bar, the main content area has a light orange background with the text 'Create stories, games, and animations' and 'Share with others around the world'. There are three circular icons: an orange cat for 'TRY IT OUT', a blue character for 'SEE EXAMPLES', and a yellow character for 'JOIN SCRATCH (it's free)'. At the bottom, it says 'A creative learning community with 9,887,720 projects shared' and provides links for 'ABOUT SCRATCH', 'FOR EDUCATORS', and 'FOR PARENTS'. On the right side, there is a preview of a Scratch script: 'when green flag clicked', 'repeat 10 times' containing 'move 10 steps', 'change color effect by 25', 'play drum 4 for 0.2 beats', and 'say Welcome to Scratch! for 2 secs'.

Scratch Create Explore Discuss Help Search Join Scratch Sign in

Create stories, games, and animations
Share with others around the world

TRY IT OUT SEE EXAMPLES JOIN SCRATCH (it's free)

A creative learning community with **9,887,720** projects shared

ABOUT SCRATCH | FOR EDUCATORS | FOR PARENTS

```
when green flag clicked
repeat (10)
  move 10 steps
  change color effect by 25
  play drum 4 for 0.2 beats
  say Welcome to Scratch! for 2 secs
```

Setting up Online Scratch Accounts

Create your own
uSername

Or uSe your School
Google Account
uSername


Join Scratch

It's easy (and free!) to sign up for a Scratch account.

Choose a Scratch Username

Choose a Password

Confirm Password




1

2

3

4



Next

Setting up Online Scratch Accounts

Enter your information.

Your information will be kept private.

Join Scratch


Your responses to these questions will be kept private.

Why do we ask for this info ?

Birth Month and Year

Gender ☐ Male ☐ Female

Country



1 2 3 4

Next

Setting up Online Scratch Accounts


Enter your School
Google account for
your email address.

Join Scratch

Enter your email address and we will send you an email to confirm your account.

Email address

Confirm email address




1

2

3

4

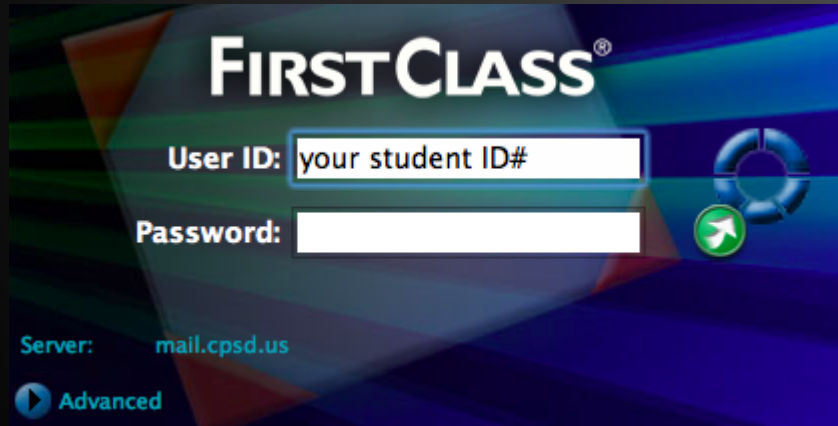


Next

Setting up Online Scratch Accounts



Login to FirstClass to confirm your Scratch account.

A screenshot of the FirstClass login interface. The background is dark blue with abstract geometric shapes. At the top, the text "FIRSTCLASS®" is displayed in white. Below it, there are two input fields: "User ID:" followed by a white box containing the text "your student ID#", and "Password:" followed by an empty white box. To the right of the password field is a blue circular icon with a white arrow pointing right. In the bottom left corner, the text "Server: mail.cpsd.us" is shown in a light blue font. Below that is a blue circular icon with a white arrow pointing right, followed by the word "Advanced" in white.

This will allow you to share your projects on the Scratch website.

Computer Scientist Roles

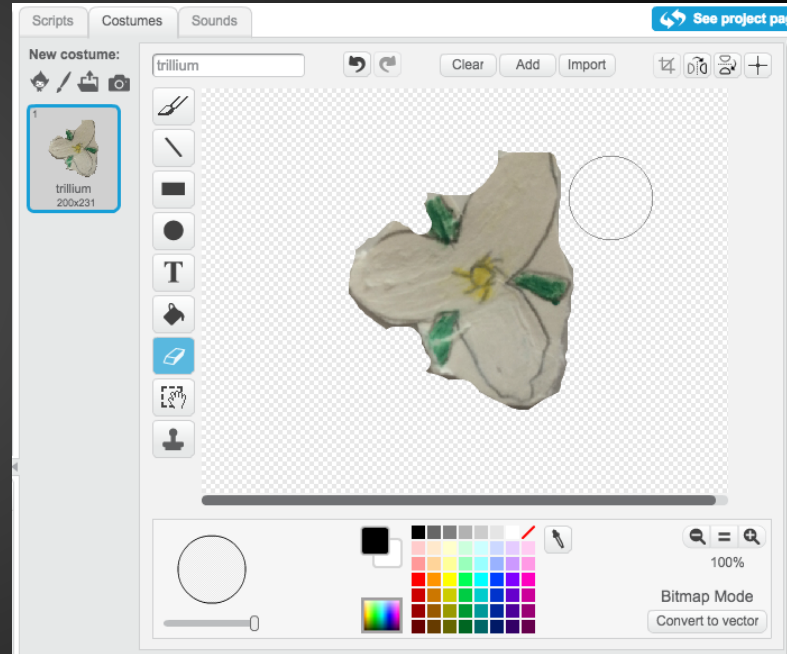
Computer Scientist Roles

- Image Specialist
- MakeyMakey Specialist
- Cloning Specialist
- Broadcast Specialist

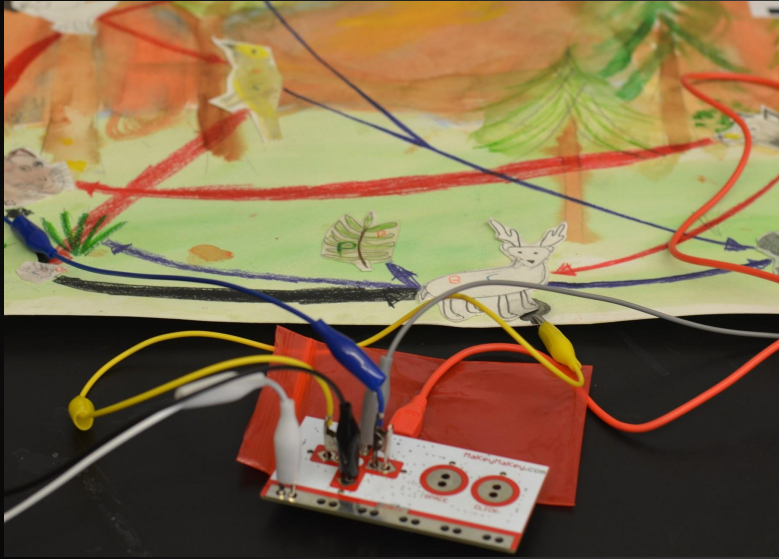


Image Specialist

You are in charge of making sure all your images are imported into Scratch and look the best they can look. You crop the images and erase anything that shouldn't be there, as well as label them if needed.



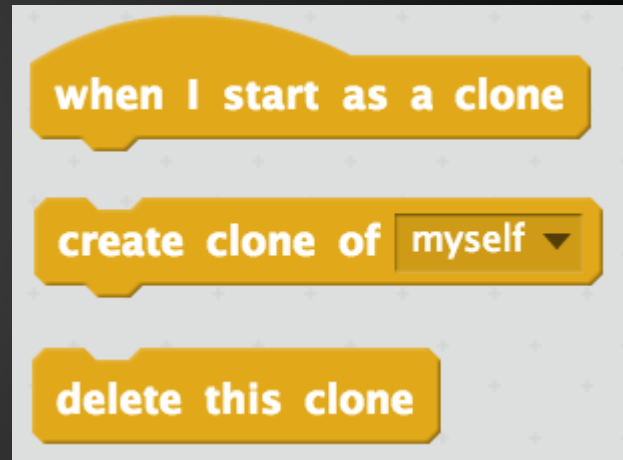
MakeyMakey Specialist



You are in charge of the MakeyMakey, hooking it up to your team watercolor food web, and making sure the programming is correct in Scratch.

Cloning Specialist

You are in charge of cloning organisms in your Scratch project. You make sure the correct number of organisms are being cloned and that they are being "deleted" when interacting with the right predators.



Broadcast Specialist



Broadcasting is a way to send messages to all the sprites (the organisms) in Scratch.

You will be in charge of making sure all the organisms react the right way when there is a change in the ecosystem.

Who will do which role?

Think about the strengths of your team members.

Image Specialist

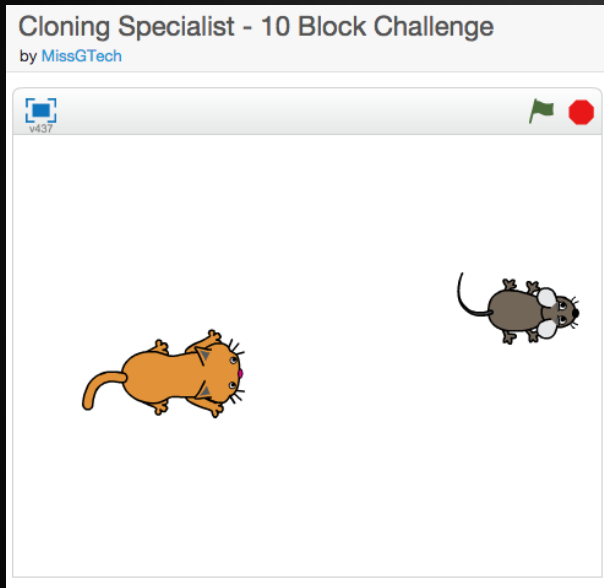
MakeyMakey Specialist

Cloning Specialist

Broadcast Specialist

Get Started!

10 Block Challenges - <https://goo.gl/fCDa9T>



Find your
Computer Scientist
10 Block Challenge
and start playing!

What can you make happen with your 10 blocks?

Feeling Stuck?

Try these strategies!

1. Play a little bit, then try it out, then play more. (experiment & iterate)
2. Make sure things work! Try and problem-Solve when they don't work. (test & debug)
3. Think about how your code relates to the goal of the whole project. (abstract and modularize)

Remember, you are **remixing** and **reusing** a starter project.

Be creative in your design and your programming/code!

How did it go?

In your groups, reflect on what it was like to be a computer scientist.

- How were you successful?
- What was challenging?
- How did you persevere?



Day 2

Do Now

Sit in your teams,
NOT your computer scientist groups.

Did you finish your
10 Block Challenge?

what questions do you still have
about using Scratch?



Goals for Today

- Learn more about your computer scientist role
- Begin working on your part of the Scratch Project
- Waiting to work on your part of the Scratch Project? Do these:
 - 10 Block Challenge
 - Team Google Slide presentation
 - Team watercolor food web and key

Computer Scientist Roles

Image

1. Learning 1st
2. Setup your team Scratch project.
3. Use Image Import Specialist Directions to get started!

MakeyMakey

1. Learning 2nd
2. Make Sure team watercolor food web is done.
3. After learning, complete MakeyMakey Planning Sheet.

Cloning

1. Learning 3rd
2. Work on team Google Slides presentation.
3. Get started when Image Specialist is done. Collaborate with MakeyMakey.

Broadcast

1. Learning 4th
2. Work on team Google Slides presentation.
3. Last one to program in Scratch. Focus on dependent relationships.