

J220

Coding for Journalists

LECTURE 6

March 7, 2022

PROMPTS

Use iClicker.com to log your attendance.

start Zoom recording + captions

Agenda

Log attendance via iClicker

GitHub Desktop + Publishing your portfolio online

BREAK

NICAR 2022 learnings

Homework

Extra credit survey on bCourses

GitHub Desktop

Installation + Publishing your portfolio online

What is git and GitHub?

Git is a type of tool that allows for **version control** on your code or software. It's **revision history** for your code, kind of like [Google Docs' Version history](#), except Git doesn't save your code automatically at intervals.

Instead, you have to **commit** (save) your code, which only happens on your computer.

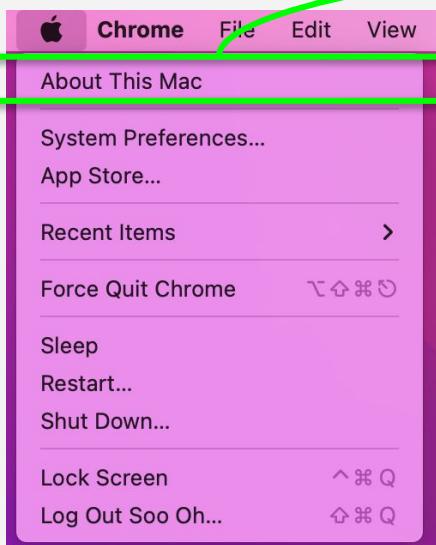
Then you **push or publish** changes, which moves your code to a central platform that your collaborators also have access to.

There are similar kinds of version control tools for code and software, but Git is the most popular.

[**GitHub.com**](#) is a web-based platform that offers Git version control as a service. There are other platforms that use Git. You can even install your own version of Git onto private servers so no one outside of your organization can see them.

What questions
do you have?

Determine what kind of chip you have



1. Go to the Apple icon in the upper-left of your screen, and click on **About This Mac**.
2. Find your **Chip or Processor** here:



Determine what kind of chip you have

Apple Silicon



Intel

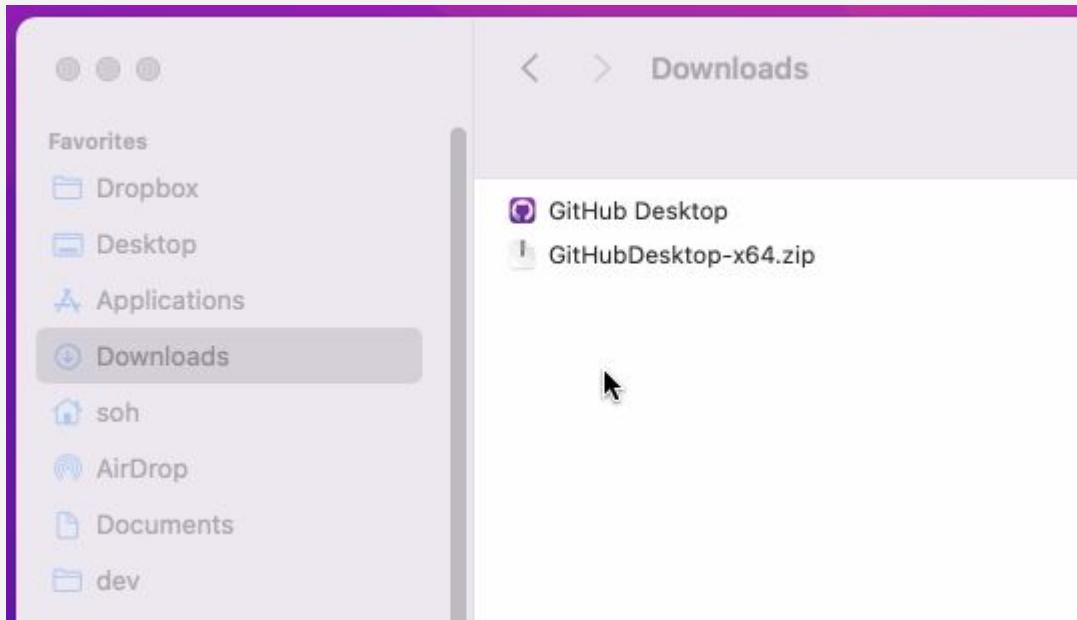


Download GitHub Desktop

Go to <https://desktop.github.com> and download the correct version for your Macbook.

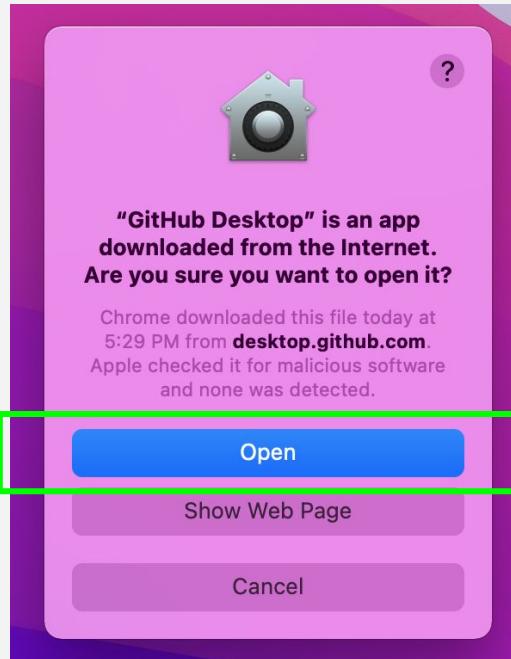


Unzip the downloaded file...



... then drag the app to your Applications folder (don't forget this!)

Go to your Applications folder and open the GitHub Desktop app



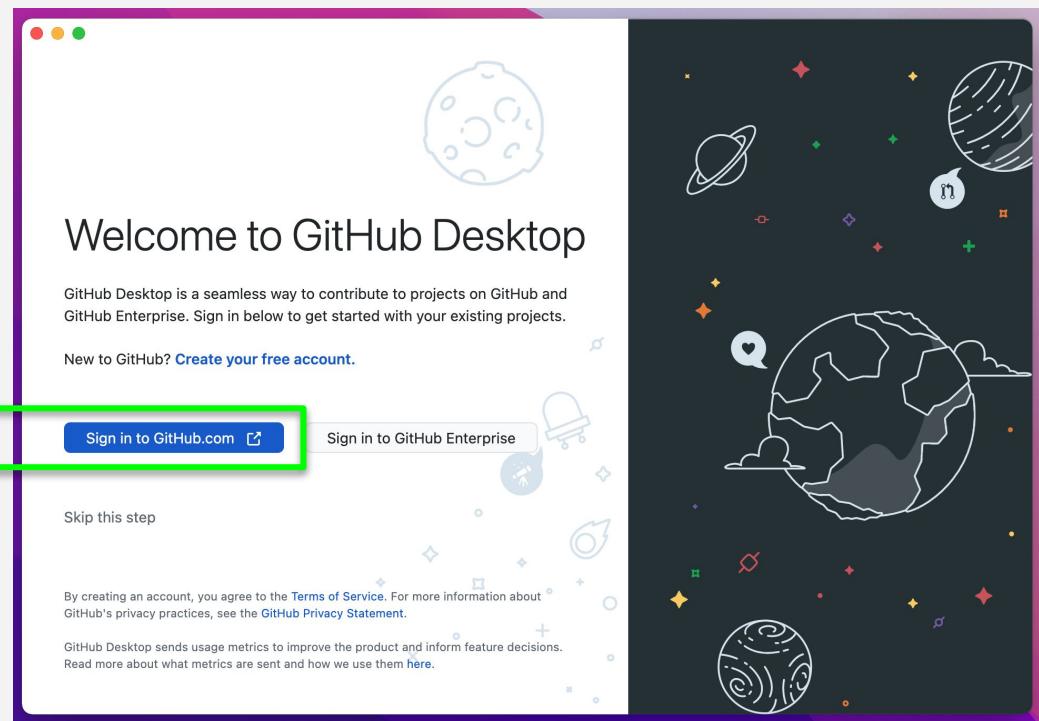
If you get this message, click on **Open**.

What questions
do you have?

Sign into GitHub.com

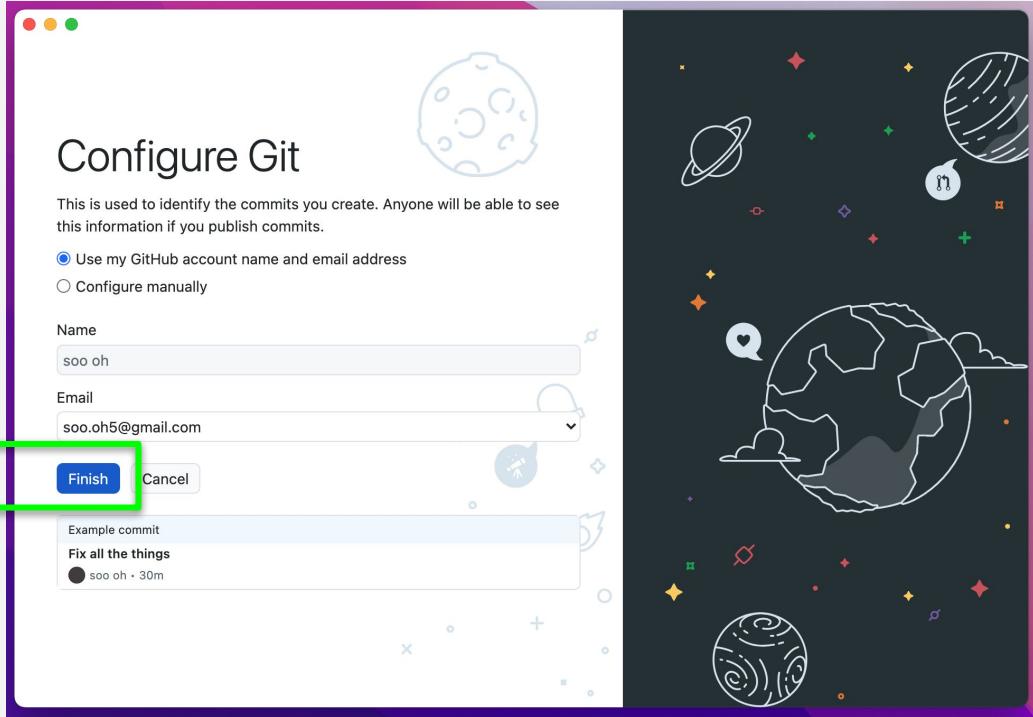
Click on the blue button.

That will open your default browser, and you'll log into GitHub.com.



Configure Git

The default settings are fine. Click **Finish**.



Create a new repository

Click the button that says “Create a new repository on your computer.”

What questions
do you have?

Let's get started!

Add a repository to GitHub Desktop to

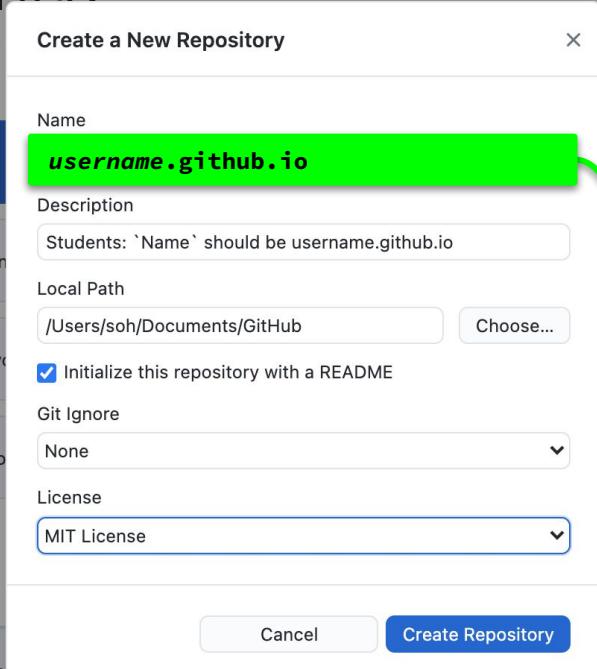
 Create a Tutorial Repository...

 Clone a Repository from the Internet

 + Create a New Repository on your computer

 Add an Existing Repository from your computer

 **ProTip!** You can drag & drop a file here to add it to Desktop

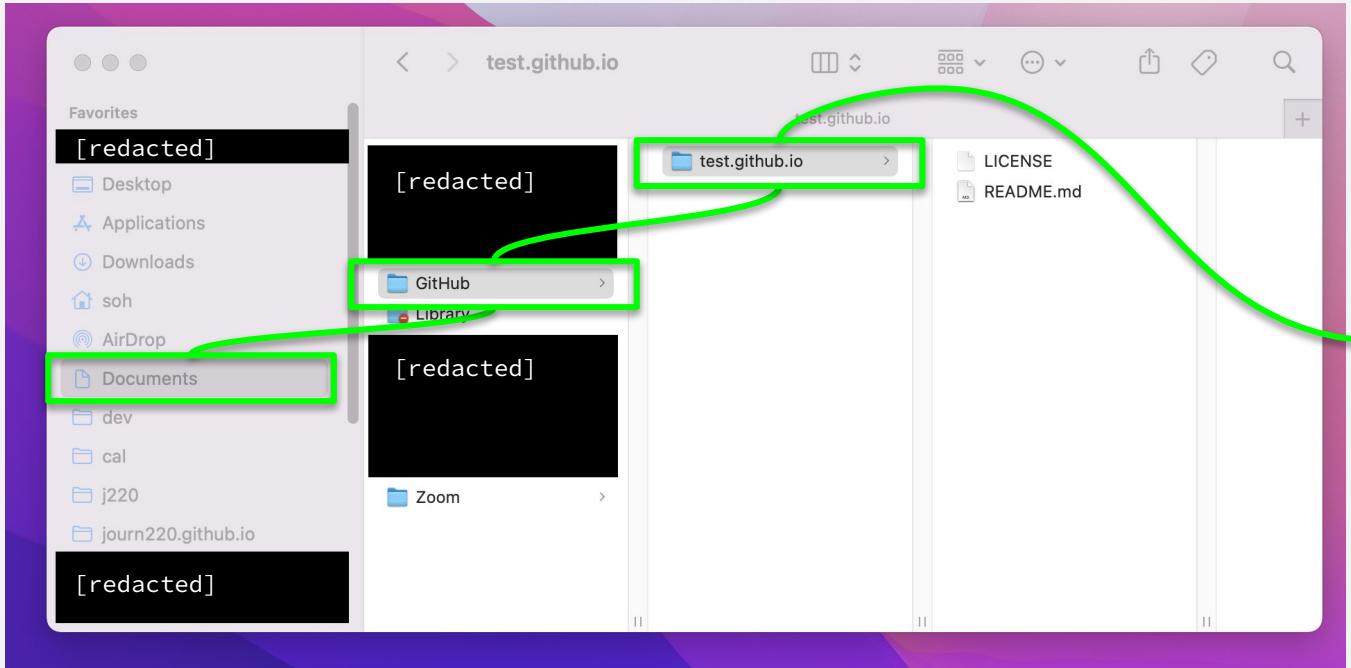


To publish your site the easy way, you need to follow this exact format:

username.github.io

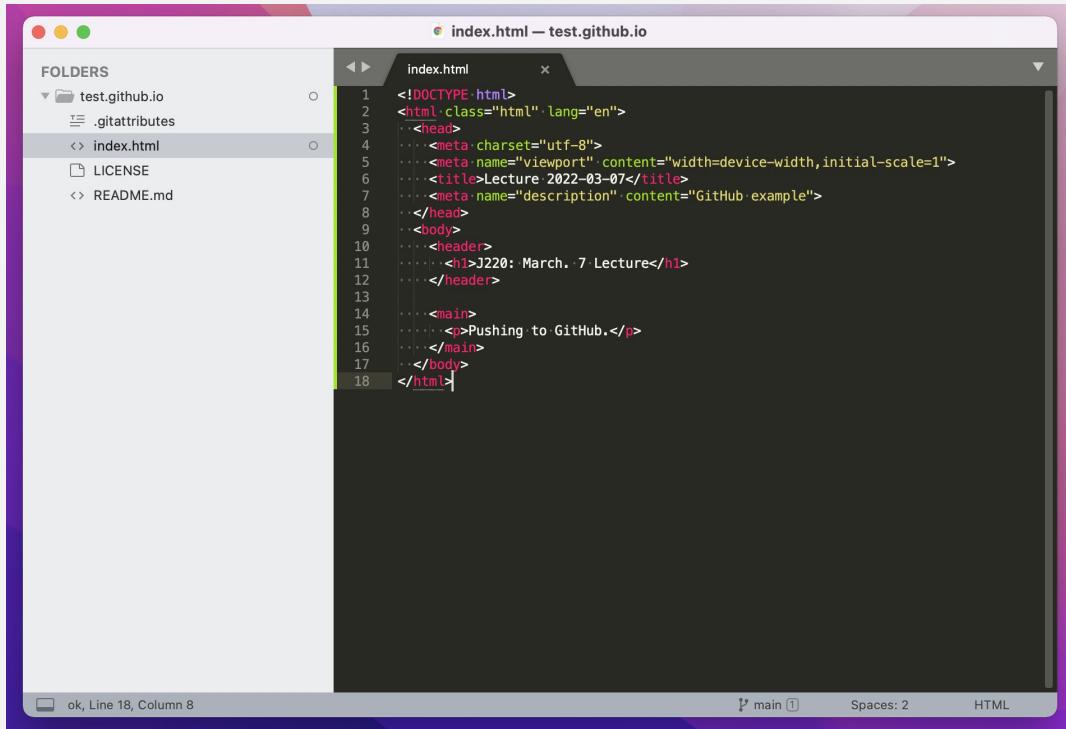
Replace *username* with your actual GitHub *username*!

Navigate to your repo. It's in
Documents > GitHub > username.github.io



Open the folder in your text editor by dragging it to **Sublime Text** (or other editor).

Create `index.html` within your folder



A screenshot of a code editor window titled "index.html – test.github.io". The left sidebar shows a file tree with "test.github.io" containing ".gitattributes", "index.html", "LICENSE", and "README.md". The main editor area displays the following HTML code:

```
<!DOCTYPE html>
<html class="html" lang="en">
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width,initial-scale=1">
    <title>Lecture 2022-03-07</title>
    <meta name="description" content="GitHub example">
  </head>
  <body>
    <header>
      <h1>J220: March. 7 Lecture</h1>
    </header>
    <main>
      <p>Pushing to GitHub.</p>
    </main>
  </body>
</html>
```

The status bar at the bottom indicates "ok, Line 18, Column 8".

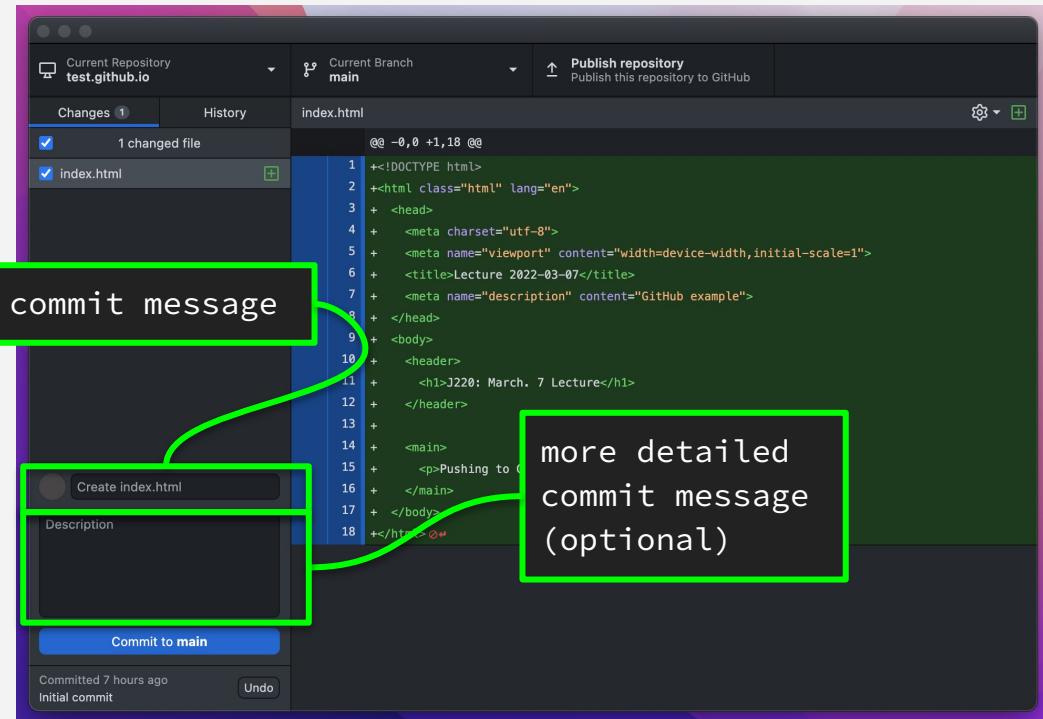
You can copy your portfolio HTML here.

Return to GitHub Desktop

You should now see
index.html here.

You now need to write a summary message, which is often called a “commit.”

“Committing” a file just means you’re saving a version of it.



About commit messages

Every time you want to save a version of your code, you need to come up with a commit message.

A good commit message tells you what you did in case you want to go back and revert changes.

Writing good commit messages matters

- o Commits on Feb 15, 2022
 - adding slides and recordings**
 **sooh** committed 19 days ago
- o Commits on Feb 14, 2022
 - adding feb 14 resources**
 **yolimartinez** committed 20 days ago
- o Commits on Feb 8, 2022
 - adding feb 7 slides and video**
 **sooh** committed 26 days ago

- o Commits on Feb 7, 2022
 - adding feb 7 materials**
 **sooh** committed 27 days ago
- o Commits on Feb 1, 2022
 - adding jan 31 slides and recording**
 **yolimartinez** committed on Feb 1
- o Commits on Jan 31, 2022
 - fixed assignment link**
 **yolimartinez** committed on Jan 31
 - added homework and recommended reading for Jan 31**
 **yolimartinez** committed on Jan 31

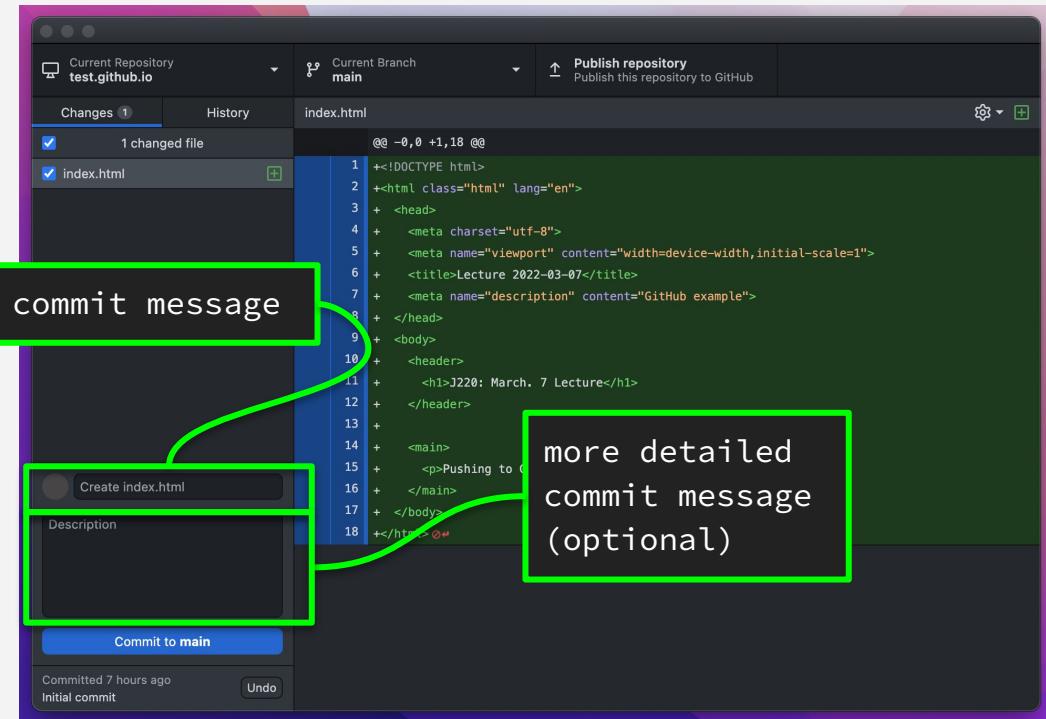
These are the commit messages for the J220 website.

How do you think we could have improved our commit messages?

What questions
do you have?

Write your first commit message

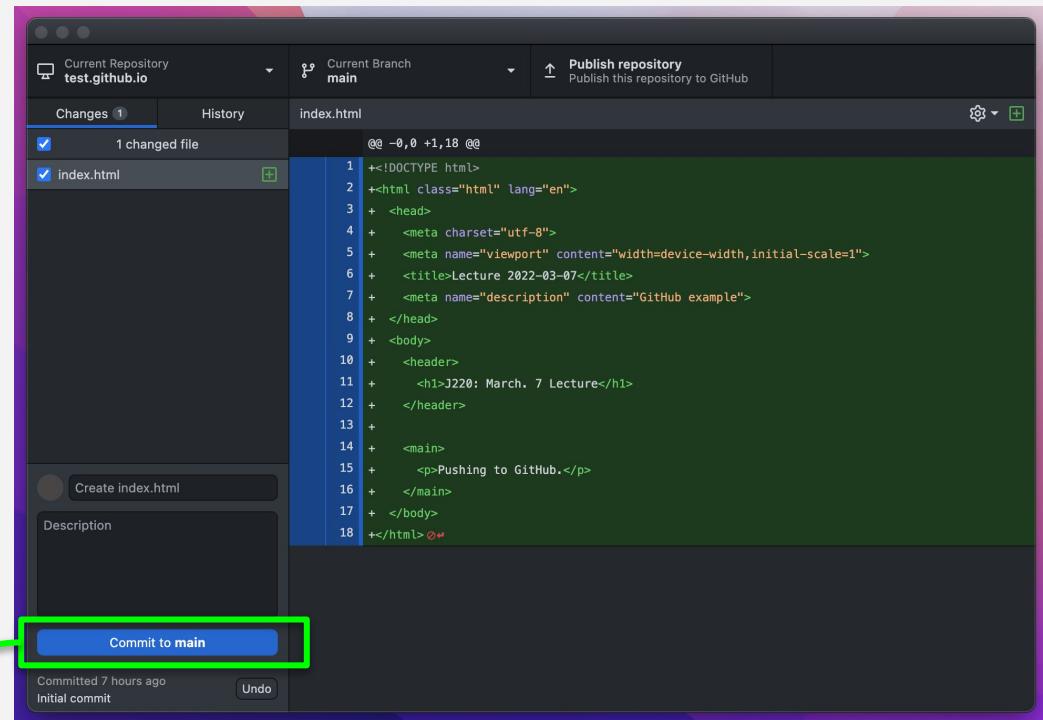
Write your first commit message. (Actually, the default one is pretty good, for now! But later you might want to write more specific ones.)



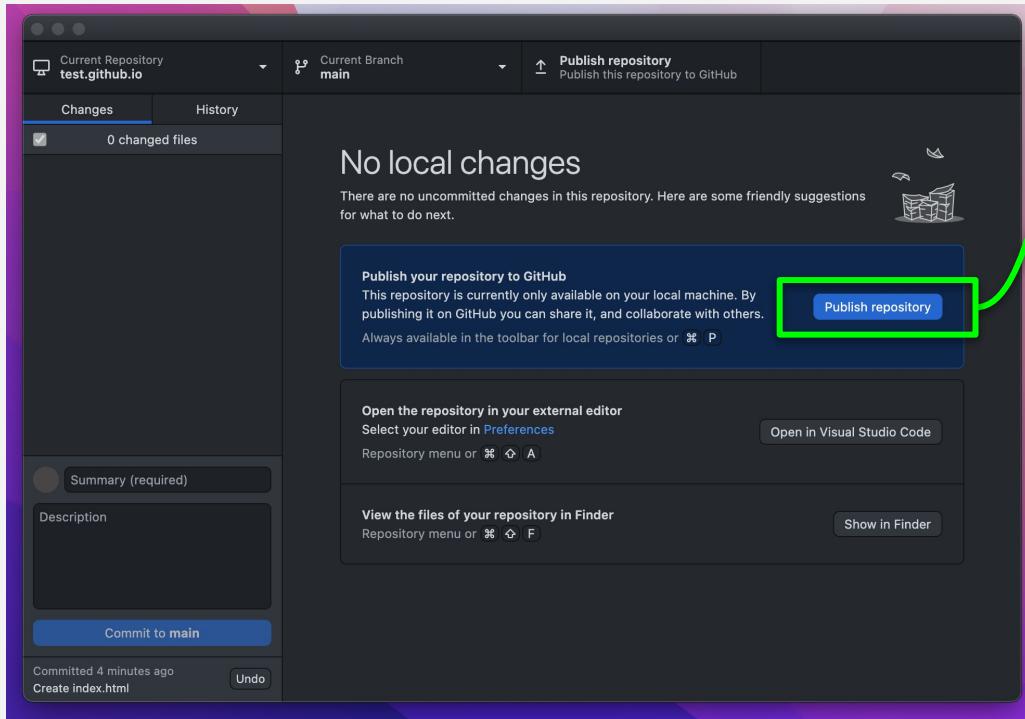
Press the blue button to commit

After you've written a good commit message, you can press the blue button that says "Commit to **main**."
(**main** is the name of the current branch, but you don't need to know this.)

Press this button
to commit.

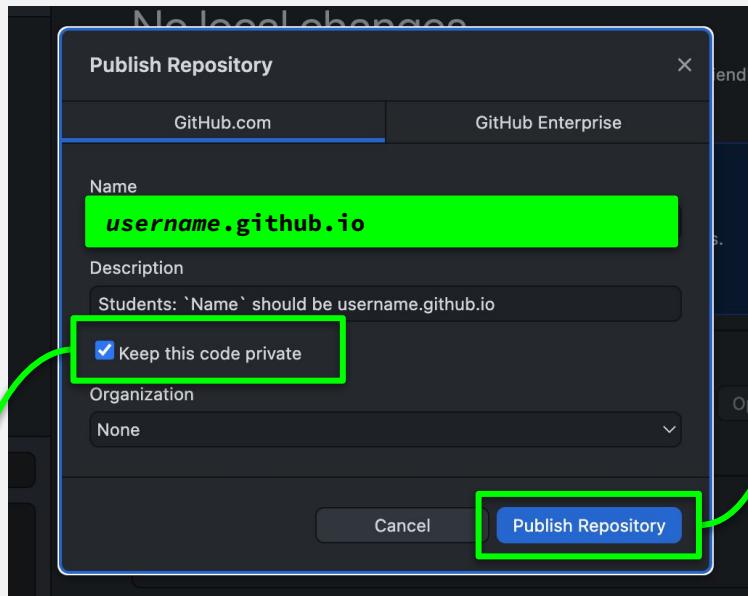


Publish your repo to GitHub



Then you'll click on the button that says "**Publish repository.**"

You'll get another popup...



Push this button!

It doesn't matter if you check off this box right now.

What questions
do you have?

Navigate to GitHub.com in your browser

Go to **GitHub.com** > **Settings** > **Pages**

Or, you can type the following in your browser (make sure to replace username with your actual username):

<https://github.com/username/username.github.io/settings/pages>

That's it!

GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

[redacted]

Source

Your GitHub Pages site is currently being built from the /docs folder in the main branch. [Learn more.](#)

Branch: main ▾

Folder / (root) ▾

Save

Theme Chooser

Select a theme to publish your site with a Jekyll theme. [Learn more.](#)

Choose a theme

Custom domain

Custom domains allow you to serve your site from a domain other than journ220.github.io. [Learn more.](#)

Save

Remove

Enforce HTTPS

— Required for your site because you are using the default domain (journ220.github.io)

HTTPS provides a layer of encryption that prevents others from snooping on or tampering with traffic to your site.

When HTTPS is enforced, your site will only be served over HTTPS. [Learn more.](#)

You'll get to this page. You don't have to change anything. GitHub.com will automatically start building your site at *username.github.io*.

Your site will be ready in about 5 to 10 minutes (or less).

pause Zoom recording

BREAK

Meet back in 15 minutes

start Zoom recording

What questions
do you have?

Making changes

You're still going to be using your **text editor** (like Sublime Text) to make your web pages.

You won't write any code in **GitHub Desktop**.

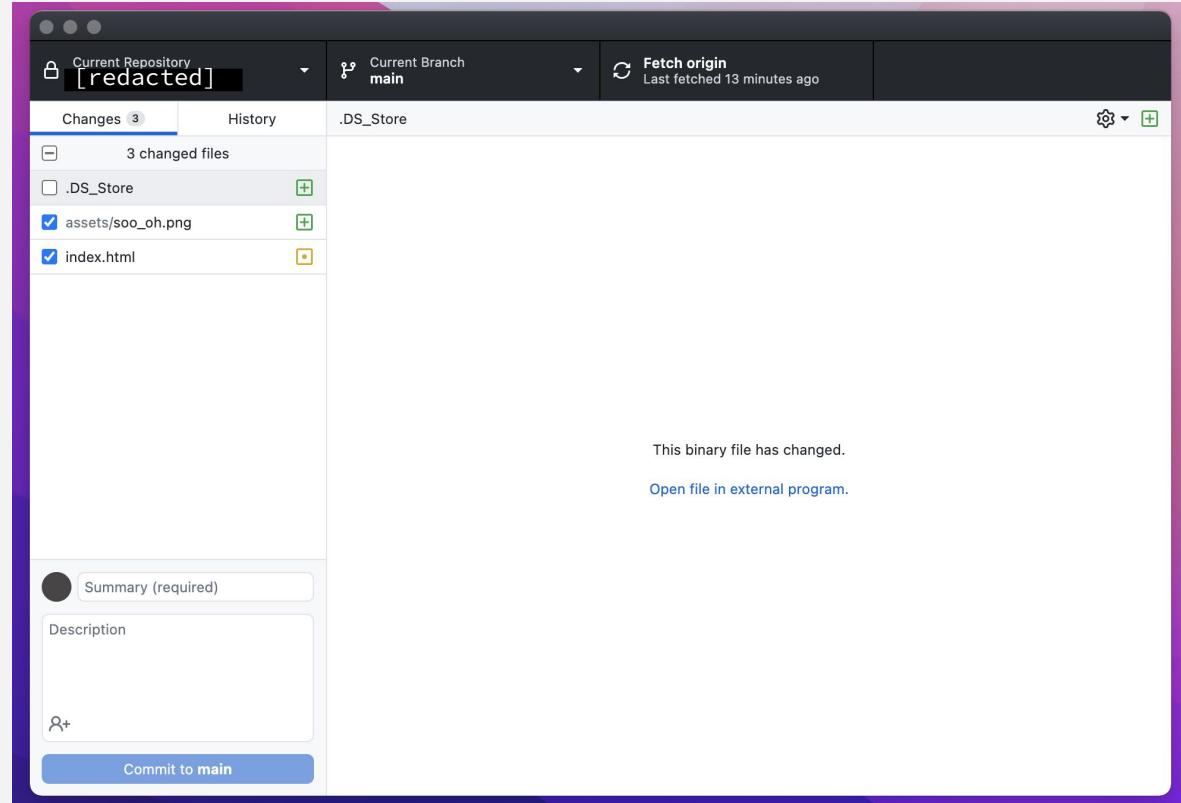
Anytime you want to make changes to your website, you'll go back to **GitHub Desktop**, write a **commit** message, then **publish** your repository.

Let's see what that looks like...

Making changes

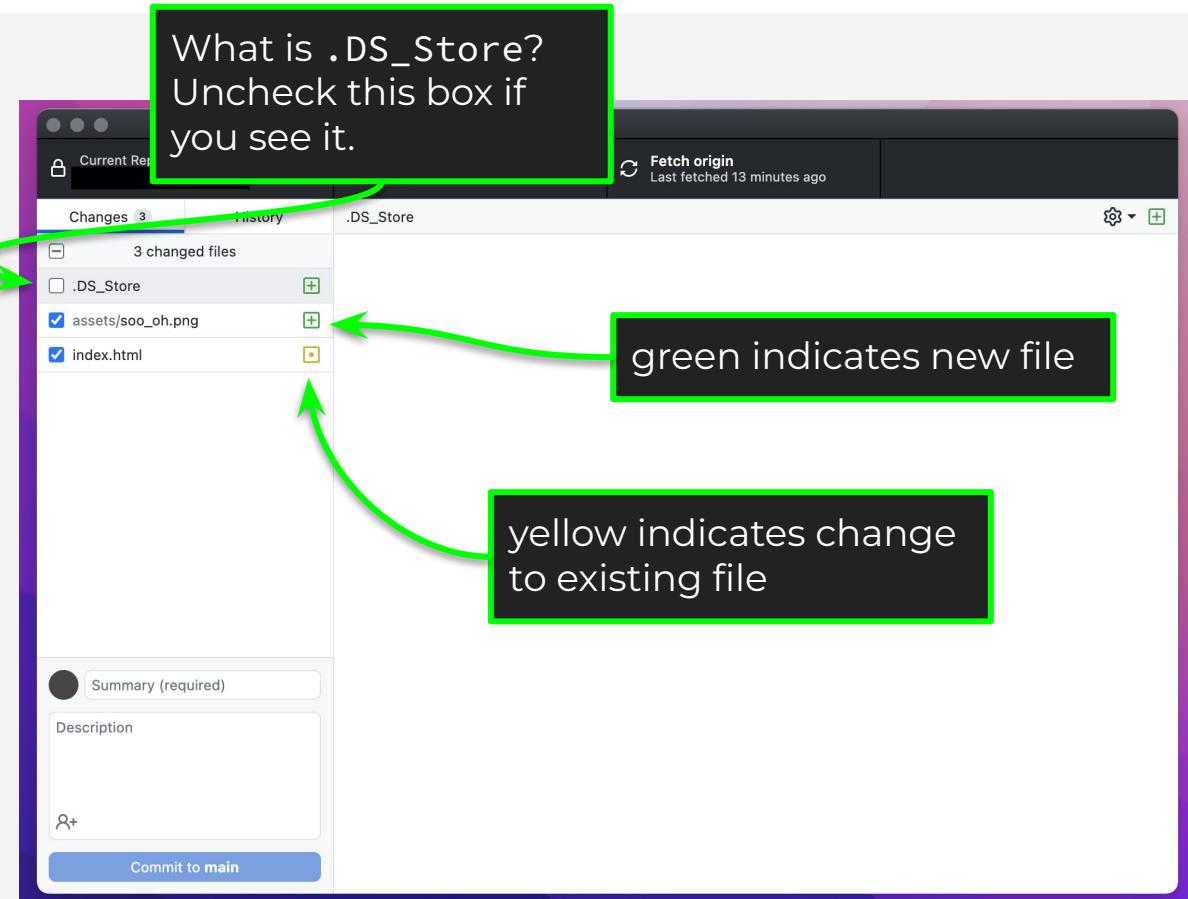
- I created an assets folder.
- I placed an image in my assets folder.
- I also edited index.html with my portfolio text.

Then I went back to GitHub Desktop.



Making changes

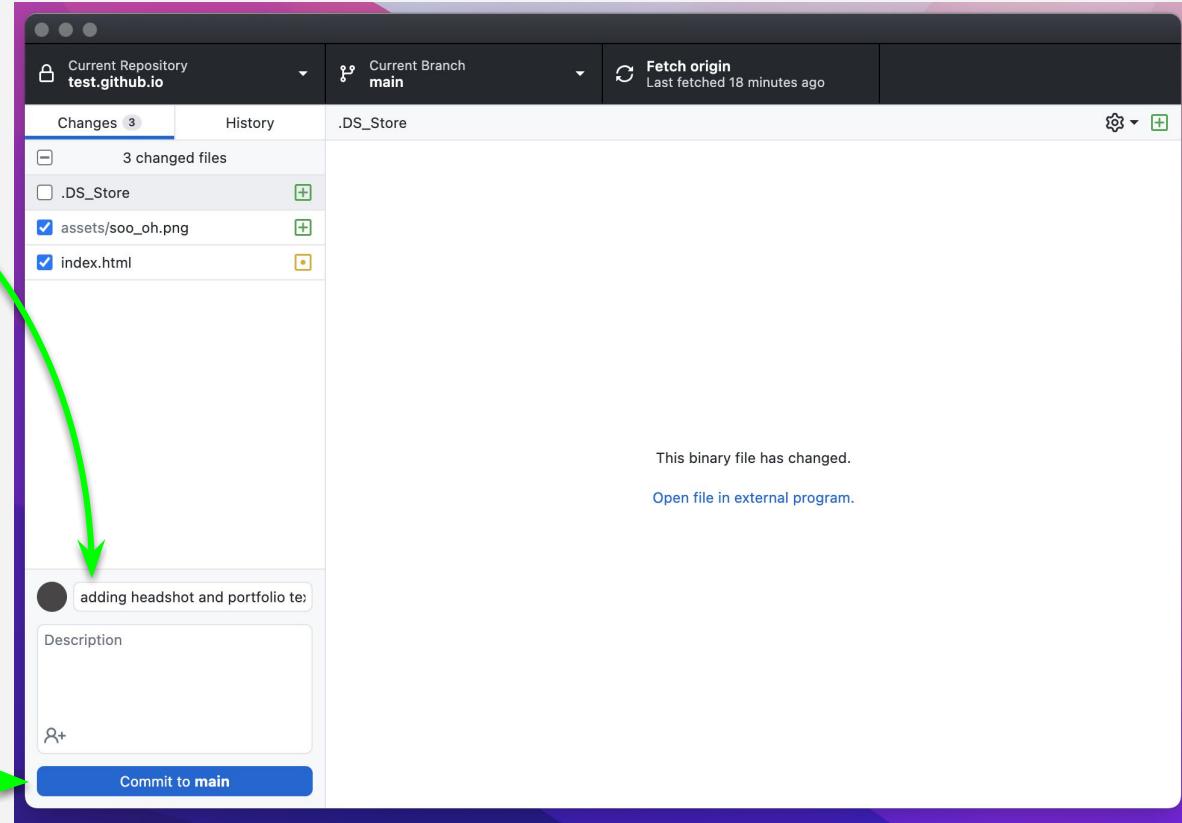
- .DS_Store is a Mac file. Uncheck this box.
- I placed an image in my assets folder.
- I also edited index.html with my portfolio text.



What questions
do you have?

Commit message

Write your commit message, push that blue button, and publish your repository.



In-class activity before break

Commit and publish the rest of your portfolio to GitHub.

Bonus activity: Adding fonts

How do you add special fonts to your website?

Google Fonts is the easiest way: <https://fonts.google.com>

Adobe Fonts is the next easiest way but might cost money:

<https://fonts.adobe.com>

Google Fonts

Go to [https://fonts.google.com.](https://fonts.google.com)

Find a font you like.

Click into the font page.

Select each version of the style you like

Extra-light 200 italic

Almost before we knew it

+ Select this style

Light 300

Almost before we knew i

- Remove this style

Light 300 italic

Almost before we knew i

+ Select this style

Bolded 400

The more styles you select, the longer it will take for your website to load.

View your selected font families

The screenshot shows the Google Fonts interface for the Montserrat font family. At the top left is the "Google Fonts" logo. To the right are three icons: a gear for settings, a grid for collections, and a plus sign for adding fonts. A green arrow points from the text "Open up this icon here." to the grid/collections icon. Below the header, the font name "Montserrat" is displayed in a large, bold, black sans-serif font. Underneath it, the text "Designed by Julieta Ulanovsky, Sol Matas, Juan Pablo del Peral, Jacques Le Bailly" is shown in a smaller, gray font. A navigation bar below includes "Select styles" (which is underlined), "Glyphs", "About", and "License". The main content area is titled "Styles" and contains a text input field with placeholder text "Type here to preview text". Below the input field is a rounded rectangle containing the sentence "Almost before we knew it, we had left the ground.". To the right of the text input is a font size dropdown set to "64px" and a horizontal slider.

Open up this
icon here.

A panel will open up...

The screenshot shows the 'Use on the web' section of the Google Fonts interface for the Montserrat font family. It includes:

- A list of styles: Montserrat (selected), Light 300, and others.
- Buttons for 'Add more styles' and 'Remove all'.
- A section titled 'Use on the web' with instructions: "To embed a font, copy the code into the <head> of your html".
- A radio button group between '<link>' and '@import'.
- The code for embedding the font, which is highlighted with a green box and a green arrow pointing to it from the text on the right.

```
<link rel="preconnect" href="https://fonts.googleapis.com">
<link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
<link href="https://fonts.googleapis.com/css2?family=Montserrat:wght@300&display=swap" rel="stylesheet">
```

Copy this text and paste it into the **<head>** of your HTML page.

It doesn't matter whether you use the **<link>** version or the **@import** version.

Add the font to your CSS files

CSS rules to specify families

```
font-family: 'Montserrat', sans-serif;
```

I recommend putting font-family within body, like so:

```
body {  
  font-family: 'Montserrat' sans-serif;  
}
```

NICAR 2022 learnings

Reporting back from Atlanta

Accessibility

You've already been learning it!

Hearing

Visual

Mobility

Cognitive

Designing around accessibility

Once you start making more complex websites, it is difficult to make every part of it 100% accessible to everybody.

There are sometimes legal reasons why a website should be accessible, but laws are not always the basis to do something.

Do your best with accessibility.

What you've already learned

- Semantic HTML
- Alt text on images

This is already better than the vast majority of websites on the Internet.

When to not use img alt text

Don't use alt text if you already have a description caption nearby.

A screen reader will read both the alt text and the caption.

```
<figure>  
  
    
  
  <figcaption>Close-up shot of a  
  blue flower by photographer Soo  
  Oh.</figcaption>  
  
</figure>
```

When to not use img alt text

Instead, leave the alt text attribute blank.

```
<figure>  
    
  
  <figcaption>Close-up shot of a  
  blue flower by photographer Soo  
  Oh.</figcaption>  
  
</figure>
```

When to not use `img alt` text

Use alt text if the caption isn't a description of the image.

```
<figure>  
    
  
  <figcaption>Credit: Soo  
  Oh</figcaption>  
  
</figure>
```

What questions
do you have?

Good link text

Here's good link text on accessibility.

This is a bad one.

Accessibility is fun to learn. Click here for more info. (In case you didn't know, that was bad link text, too.)

What questions
do you have?

Text: Which side is easier to read?

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent euismod felis ut est pulvinar fermentum. Donec efficitur nibh est. Aliquam pellentesque semper ex sit amet posuere. Vestibulum aliquet porttitor ligula nec elementum. Ut in lacinia dolor. In hac habitasse platea dictumst. Proin posuere arcu non erat dignissim, in dignissim sapien blandit. Sed at lacinia risus. Suspendisse nibh risus, lacinia non volutpat sit amet, venenatis eget mauris. Proin porta leo quis urna rhoncus, eu semper dolor efficitur. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Aenean et commodo dolor.

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Text: Which side is easier to read?

Text: Which side is easier to read?

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Vestibulum aliquet porttitor ligula nec elementum. Ut in lacinia dolor. In hac habitasse platea dictumst. Proin posuere arcu non erat dignissim, in dignissim sapien blandit.

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eget mauris. Proin porta leo quis urna

What questions
do you have?

Languages

Plain language

PROPUBLICA

Donate

Many people think Arizona does a good job helping people with developmental disabilities. But some people have problems getting help. It can be confusing. People wait a long time.

These are stories about people who had problems getting help in Arizona.

Developmental disabilities are sometimes called DD. There are many kinds of DD. Some of them are:

- Cerebral palsy
- Autism
- Intellectual disability
- Epilepsy

The place that helps people with DD in Arizona is called the Division of Developmental Disabilities. It is sometimes called DDD.

Kyra Wade is 11 years old. She likes:

- The color pink
- The movie "Monsters, Inc."
- Watching people laugh
- Noodles and rice

Original

PROPUBLICA

Donate

Kyra Wade's favorite color is pink. The 11-year-old likes road trips and the movie "Monsters, Inc." She loves to watch people laugh. Her culinary preferences run to noodles and rice.

Beyond that, her parents don't know much about her needs and wants.

Kyra is autistic and profoundly deaf. She was born premature at about 27 weeks, just a little over 2 pounds, which has impacted pretty much everything: eyesight, hearing, digestion, sleep patterns. A strong tremor in her hand makes it impossible for her to use American Sign Language. Her parents think she recognizes a couple dozen signs.

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They know she's frustrated. Kyra often smacks herself on the side of the head with her hand or bites her palm so hard she draws blood, said her mother, Ka Wade. The Wades assume she is doing it when she is in pain. Kyra is not potty trained, but she got her period recently. Ka couldn't explain what was happening.

The Wades moved to Arizona in the summer of 2017 with the expectation that services

▶ Play the audio

Spanish

PROPUBLICA

Donate

El color favorito de Kyra Wade es el rosa. A esta niña de 11 años le gustan los viajes por carretera y la película "Monsters, Inc.". Le encanta ver reír a la gente. Sus preferencias culinarias se inclinan hacia los fideos y el arroz.

A parte de eso, sus padres no saben mucho sobre sus necesidades y deseos.

Kyra es autista y profundamente sorda. Nació prematura, a las 27 semanas y pesando un poco más de 2 libras, lo cual le ha afectado en casi todo: la vista, el oído, la digestión, los patrones de sueño. Tiene un fuerte temblor en la mano que le impide usar el lenguaje de señas americano. Sus padres creen que reconoce un par de docenas de señas.

Saben que está frustrada. Con frecuencia, Kyra se golpea en un lado de la cabeza con la mano o se muerde la palma de la mano con tanta fuerza que le sale sangre, dijo su madre, Ka Wade. Los Wade suponen que lo hace cuando tiene dolor. Kyra no sabe ir al baño, pero recientemente comenzó a menstruar. Ka no pudo explicarle lo que estaba pasando.

ADVERTISEMENT



Los Wades se mudaron a Arizona en el verano de 2017, con la expectativa de que los servicios proporcionados por el estado les ayudarían a cuidar de Kyra. Arizona gozaba desde hacía mucho tiempo de prestigio como uno de los mejores lugares del país para las personas con discapacidades de desarrollo y sus familias. Gracias a un programa especial de Medicaid creado en 1988, Arizona tenía un sistema

What questions
do you have?

Contrast: Which side is easier to read?

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Sed at lacinia risus. Suspendisse nibh risus, lacinia non volutpat sit amet, venenatis eget mauris. Proin porta leo quis urna

Contrast: Which side is easier to read?

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent euismod felis ut est pulvinar fermentum. Donec efficitur nibh est. Aliquam pellentesque semper ex sit amet posuere.

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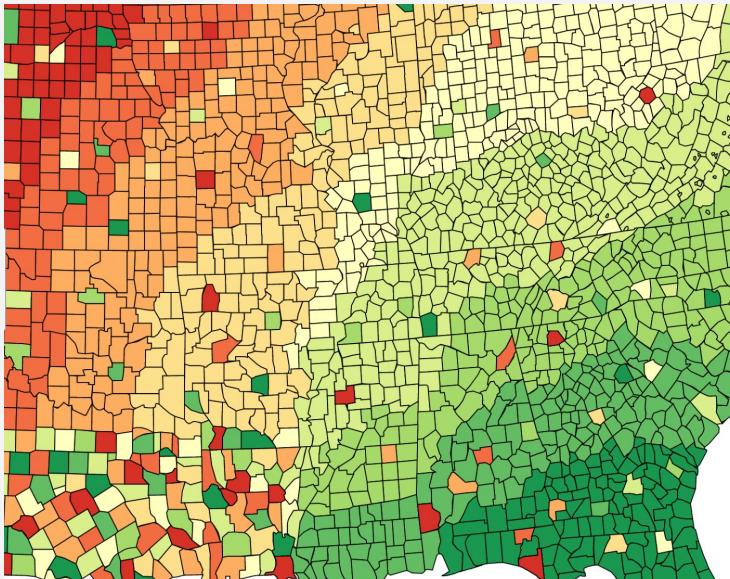
Vestibulum aliquet porttitor ligula nec elementum. Ut in lacinia dolor. In hac habitasse platea dictumst. Proin **posuere arcu non erat** dignissim, in dignissim sapien blandit.

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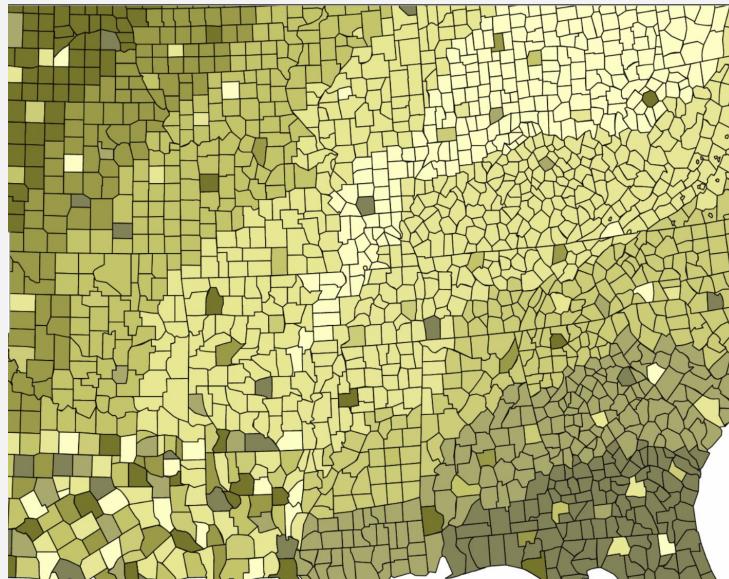
What questions
do you have?

Data viz color schemes

Typical trichromatism



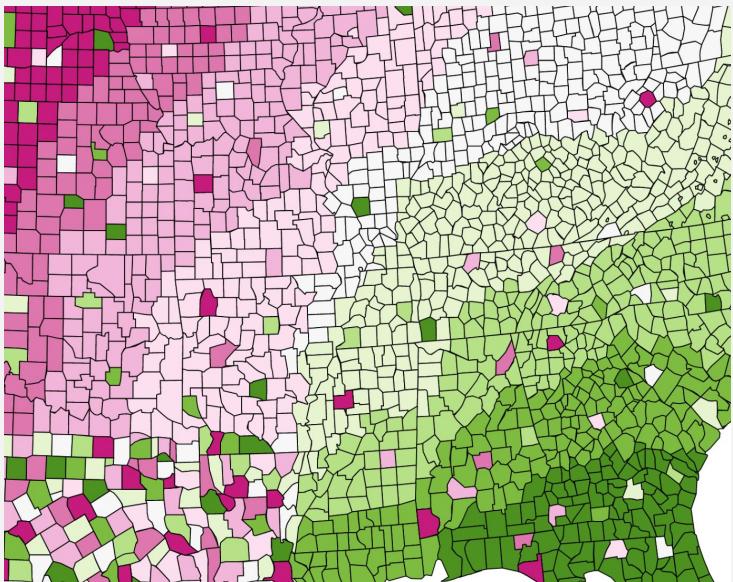
Red-green colorblindness



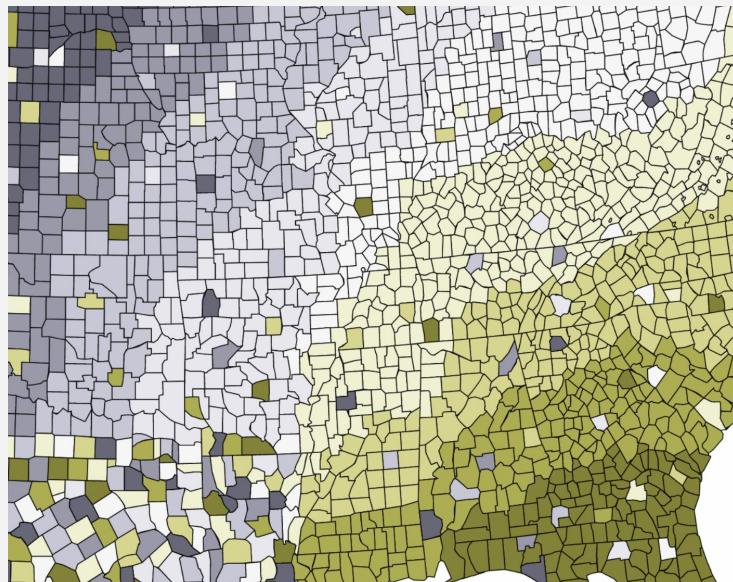
Screenshots from random choropleth maps from colorbrewer2.org

Data viz color schemes

Typical trichromatism



Red-green colorblindness



Screenshots from random choropleth maps from colorbrewer2.org

Data viz color schemes

[Colorbrewer2.org](https://colorbrewer2.org) is a great website to look at color schemes for data visualizations.

What questions
do you have?

ARIA labels

Accessible Rich Internet Applications

The first rule of ARIA use is "If you can use a native HTML element or attribute with the semantics and behavior you require already built in, instead of re-purposing an element and adding an ARIA role, state or property to make it accessible, then do so."

Not all screen readers have implemented ARIA features. So it's still best practice to do stuff without ARIA.

[More about ARIA on Mozilla.](#)

A mini lesson on ARIA labels

REQUIRED READING BEFORE THE NEXT LECTURE

-  Re-read [Control flow](#) (from last week)
-  Read [Data structures](#)

RECOMMENDED READING

-  [Take Python 3 course on Codecademy](#) – site has a free one-week trial

This is a screengrab from the **J233: Coding for Journalists** course website from Fall 2021.

According to the first ARIA rule, you should use an image instead of an emoji.

But there are times when you have reasons to break that rule.

A mini lesson on ARIA labels

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```
<h5>Required reading before the next lecture</h5>

<ul>
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    <li><span role="img" aria-label="document"></span> Read <a href="https://docs.python.org/3/tutorial/datastructures.html">Data structures</a></li>
</ul>

<h5>Recommended reading</h5>

<ul>
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A mini lesson on ARIA labels

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</ul>
```

A mini lesson on ARIA labels

Remember, `` has no semantic meaning. It is also “inline” with text.

```
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</ul>
```

A mini lesson on ARIA labels

role="img"

You're telling the browser to treat the emoji like

(You can't just put any HTML element into **role!** There's a defined list.)

```
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</ul>
```

A mini lesson on ARIA labels

aria-label="document"

aria-label="snake"

This is kind of like an alt
description for the
emoji.

```
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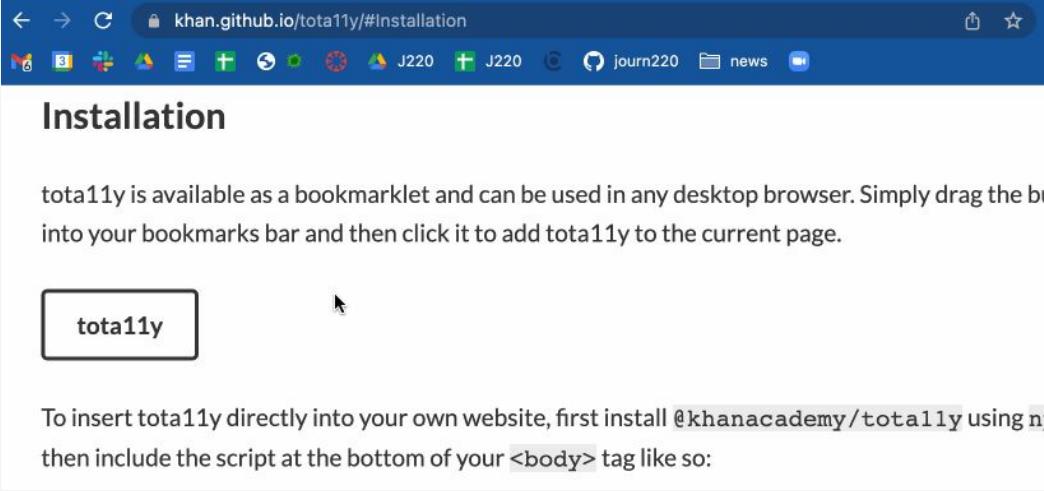
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</ul>
```

What questions
do you have?

Installing an accessibility tool

Go to this website: <https://khan.github.io/tota11y/#Installation>

Drag the button into your bookmarks bar:



khan.github.io/tota11y/#Installation

Installation

tota11y is available as a bookmarklet and can be used in any desktop browser. Simply drag the button into your bookmarks bar and then click it to add tota11y to the current page.

tota11y

To insert tota11y directly into your own website, first install @khanacademy/tota11y using npm, then include the script at the bottom of your <body> tag like so:

Demo time

What questions
do you have?

Using a screen reader

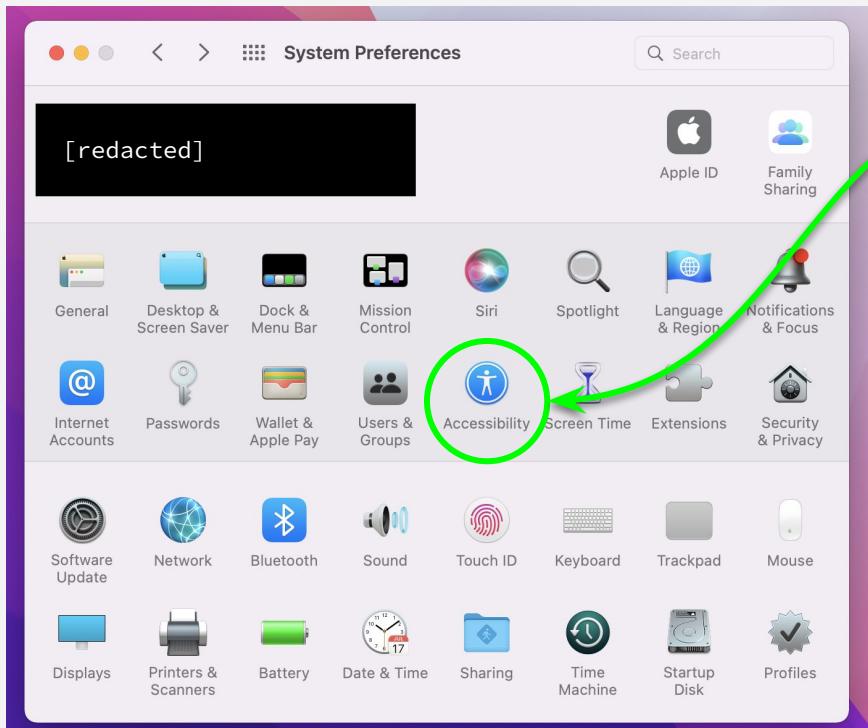
On a Macbook

Plug in your headphones

or

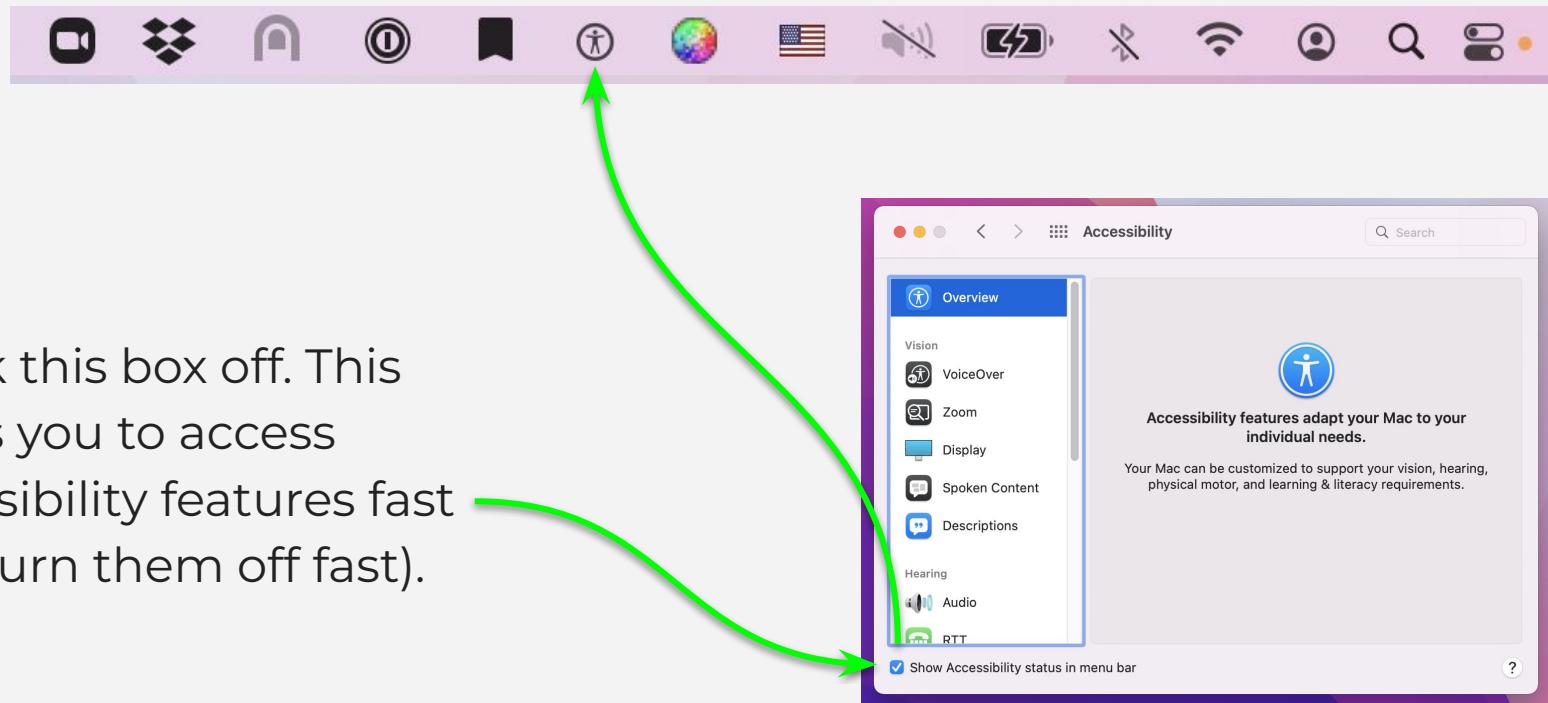
Mute your laptop

Open System Preferences

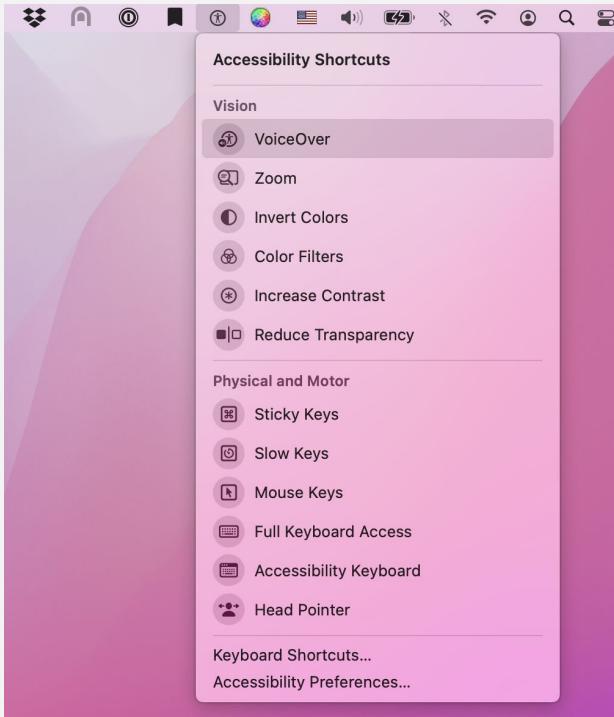


Select Accessibility from your System Preferences window.

Show Accessibility status in menu bar



Trying out VoiceOver



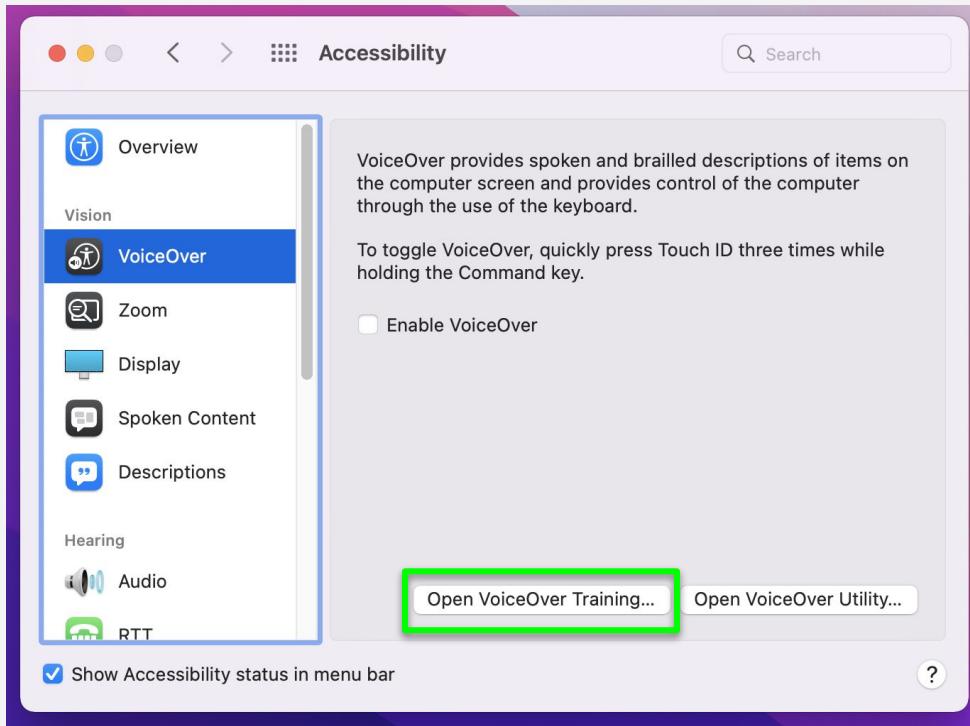
Now go to the Accessibility icon in the menu bar.

There are lots of ways websites and software can make their content accessible.

For today, we'll be using VoiceOver.

Demo time

VoiceOver offers a training program



This is a recommended exercise, but not mandatory.

Only 13% of screen reader users use VoiceOver, according to accessibility nonprofit WebAIM.

The most popular screen readers, **NVDA** and **JAWS**, requires Windows and/or payment.

What questions
do you have?

Homework

Homework

Assignment #6 in Canvas: Very similar to last week, but a more complicated layout. You'll also write out your idea for your final project.

Mid-semester evaluation: 10 points extra credit. Due Thursday, March 10.

Recommended: Take Apple's VoiceOver training.

**Note to
students:** Please
help close the
windows on your
way out

end Zoom recording