J220
Coding for Journalists

LECTURERS
Yoli Martinez and Soo Oh

PROMPTS

Go to cololoracle.org to download and install the Color Oracle program. You may have to restart your computer after.

start Zoom recording + captions

Agenda

Announcements

Guest Speaker: Holden Foreman

BREAK

Homework review

Lecture: Accessibility, tools

Next week's homework

In-class exercise: VoiceOver

Announcements

No class next week! (Presidents' Day)

Holden Foreman
The Washington Post
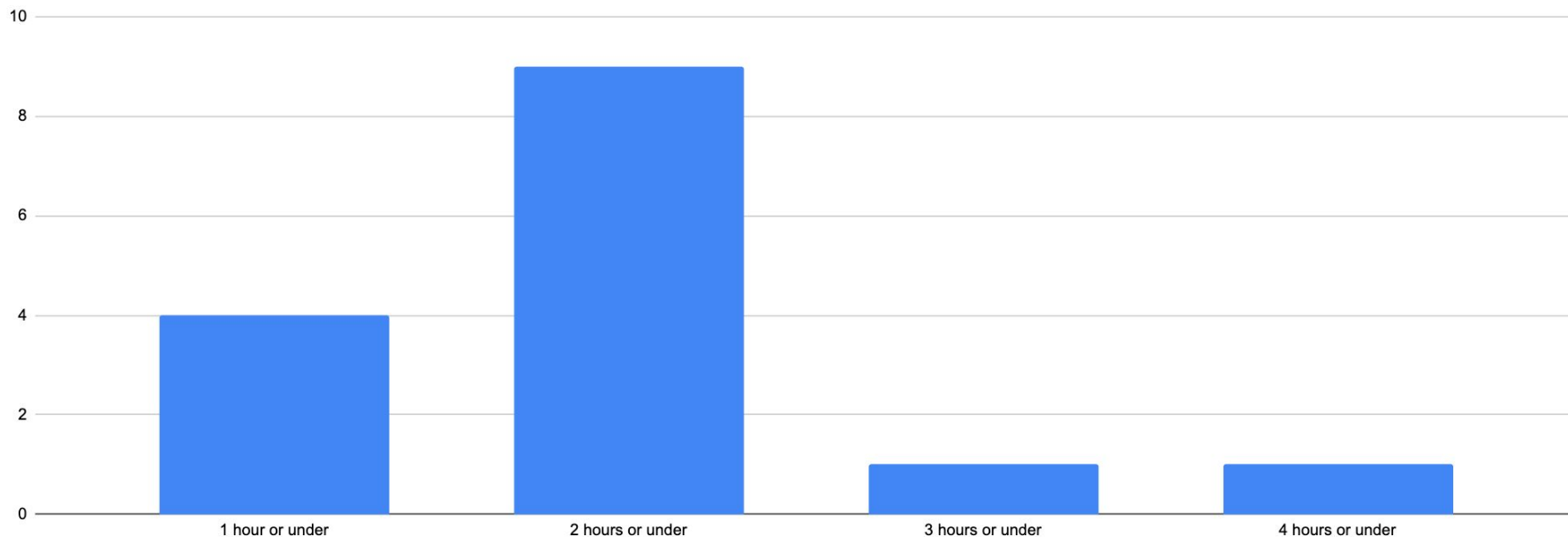
What questions do you have?

Break

Meet back in 15 minutes.

start Zoom recording + captions

How much time spent on J220 last week

Week 02-06: Number of students grouped by hours spent outside of lecture and office hours

Homework Review

HTML responses

Table

Go to journ220.github.io for answers to the HTML sections of Assignment 02-06.

The long link is here:
https://docs.google.com/document/d/1QkQP5lyCx9s36xIcBcyt-DRO4USHHrvEwD4EUs37yQk/edit

Homework Review

HTML responses

Table

Course Number	J221	J233	J220	J296
Semester	Fall	Fall	Spring	Spring
Course title	Intro to Data Visualization	Advanced Coding	Intro to Coding	Data Journalism
Languages or programs learned	R	Python	HTML, CSS, JavaScript	Google Sheets, Excel
Instructors	Peter Aldhous	Soo Oh	Yoli Martinez, Soo Oh	Dana Amihere

```html
<table>
  <caption>Classes involving code and data at the School of
Journalism</caption>
  <thead>
    <tr>
      <th scope="row">Course Number</th>
      <th scope="col">J221</th>
      <th scope="col">J233</th>
      <th scope="col">J220</th>
      <th scope="col">J296</th>
    </tr>
  </thead>
  ...
  ...
```

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 more accessible 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.

Review from last week!

```
<figure>

  <img src="flower.png"
  alt="Close-up shot of a blue
  flower by photographer Soo
  Oh.">

  <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.

```html
<figure>

  <img src="flower.png" alt="">

  <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>

  <img src="flower.png" alt="Close-up
  shot of a blue flower">

  <figcaption>Credit: Soo
  Oh.</figcaption>

</figure>
```

Specifying language

"You should always include the `lang` attribute inside the `<html>` tag, to declare the language of the Web page. This is meant to assist search engines and browsers" — [W3Schools](#)

```
<html lang="en">
...
</html>
```

Languages

Plain language

Original

Spanish

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.)

Log into
https://pollev.com/soooh

Which side is easier to read?

Which text is easier to read?

Lorem ipsum dolor... amet,
pulvinar fermentum... elit.
amet posuere. Ves...
In hac habitasse pl... ut est
sapien blandit. Sec... Donec
venenatis eget ma...
Pellentesque habit... am
egestas. Aenean et...

Vivamus dignissim... ex sit amet
placerat. In fringilla...
maximus in eu libe... iquet
malesuada fames a...
dignissim sit amet... mentum.
rhoncus sit amet a...
accumsan dolor, et... ac
nisl, semper ullamc...
nisi, fringilla quis c... mst. Proin
placerat convallis t...

Ut ornare maximus...
consequat ac dui a...
purus dignissim ut...
Maecenas vitae sus...
Phasellus consequat tincidunt consequat. Aenean facilis ultricies pulvinar.
Pellentesque condimentum faucibus mi, in molestie ex auctor sit amet. Fusce eu

Start the presentation to see live content. For screen share software, share the entire screen. Get help at **pollev.com/app**

Which side is easier to read?

Lorem ipsum [dolor sit amet, cons]ectetur
adipiscing elit[...] felis ut
nibh est. Aliqu[...] fficitur
sit amet posu[...] emper ex
porttitor ligula[...]
lacinia dolor. [...] uet
dictumst. Pro[...] t in
dignissim, in [...] cea
at lacus risus. [...]
lacinia non vo[...] erat
eget mauris. F[...] ndit. Sed
rhoncus, eu se[...]
Pellentesque [...] sus,
senectus et netus et malesuada fames ac

Which text is easier to read?

0

Which side is easier to read?

Lorem ips... consectetur adipiscing... nod felis ut est pulvin... ec efficitur nibh est. A... ue semper ex sit amet p... porttitor l... lacinia do... gula nec dictumst... r. In hac dignissim... oin posuere at lacus ri... gnissim lacinia no... eget mau... e nibh risus, rhoncus, e... venenatis

Which text is easier to read?

Start the presentation to see live content. For screen share software, share the entire screen. Get help at **pollev.com/app**

Which side is easier to read?

Lorem ipsum adipiscing e est pulvinar nibh est. Ali sit amet pos

Vestibulum elementum habitasse p arcu non er sapien blan

Sed at lacus lacinia non eget mauris

nsectetur od felis ut efficitur semper ex

ula nec In hac n posuere issim

nibh risus, enenatis s urna

Which text is easier to read?

Which side is easier to read?

Lorem ipsum ... sectetur
adipiscing el... d felis ut
est pulvinar f... efficitur
nibh est. Alio... semper ex
sit amet posu...

Vestibulum a... la nec
elementum. ... n hac
habitasse pla... posuere
arcu non era... ssim
sapien bland...

Sed at lacus ... ibh risus,
lacinia non v... enatis
eget mauris. ... urna

Which text is easier to read?

Start the presentation to see live content. For screen share software, share the entire screen. Get help at **pollev.com/app**

Which side is easier to read?

Lorem ipsum ... nsectetur

adipiscing el ... od felis ut

pulvinar fern ... efficitur

est. Aliquam ... semper ex

amet posuer ...

Vestibulum a ... ula nec

elementum. ... In hac

habitasse pla ... posuere

arcu non era ... issim

sapien bland ...

Which text 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.

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.

Start the presentation to see live content. For screen share software, share the entire screen. Get help at **pollev.com/app**

Which side is easier to read?

Lorem ipsum d[...]ctetur adipiscing elit. [...]elis ut est pulvinar fer[...]icitur nibh est. Aliqua[...]mper ex sit amet posue[...]

Vestibulum alic[...]nec elementum. Ut[...]hac habitasse plate[...] **posuere arcu non erat** [...]im sapien blandit.

Which side is easier to read?

Lorem ipsum... consectetur adipiscing e... ...od felis ut est pulvinar... ...efficitur nibh est. Ali... ...semper ex sit amet pos...

Vestibulum... ...ula nec elementum... In hac habitasse pl... **posuere arcu non er...** ...nissim sapien blan...

Accessibility Tools

Accessibility Checklist: WAI standards

The World Wide Web Consortium (W3C) is an international organization that creates web standards.

They have have a Web Accessibility Initiative (WAI) which created the **Web Content Accessibility Guidelines (WCAG)**

Accessibility Checklist: WAI standards

There have been a few WCAG versions (2.0 release in 2008 and 2.1 released in 2018) as people from the community learn and solve problems. Version 2.2 is suppose to be released in April.

WCAG 3 is in the works! You can find a working draft of WCAG3 on their site.

Accessibility Checklist: WAI standards

You can review the current WCAG 2.1 Guidelines. For testing, they have created some preliminary easy checks.

Let's review:

https://www.w3.org/WAI/test-evaluate/preliminary/

Scope

These checks cover just a few accessibility issues and are designed to be quick and easy, rather than definitive. A web page could seem to pass these checks, yet still have significant accessibility barriers. More robust assessment is needed to evaluate accessibility comprehensively.

This page provides checks for the following specific aspects of a web page. It also provides guidance on Next Steps and links to more evaluation resources.

Checks on this page:

- Page title
- Image text alternatives ("alt text") (pictures, illustrations, charts, etc.)
- *Text:*
  - Headings
  - Contrast ratio ("color contrast")
  - Resize Text
- *Interaction:*
  - Keyboard access and visual focus
  - Forms, labels, and errors (including Search fields)
- *General:*
  - Moving, Flashing, or Blinking Content
  - Multimedia (video, audio) alternatives
  - Basic Structure Check

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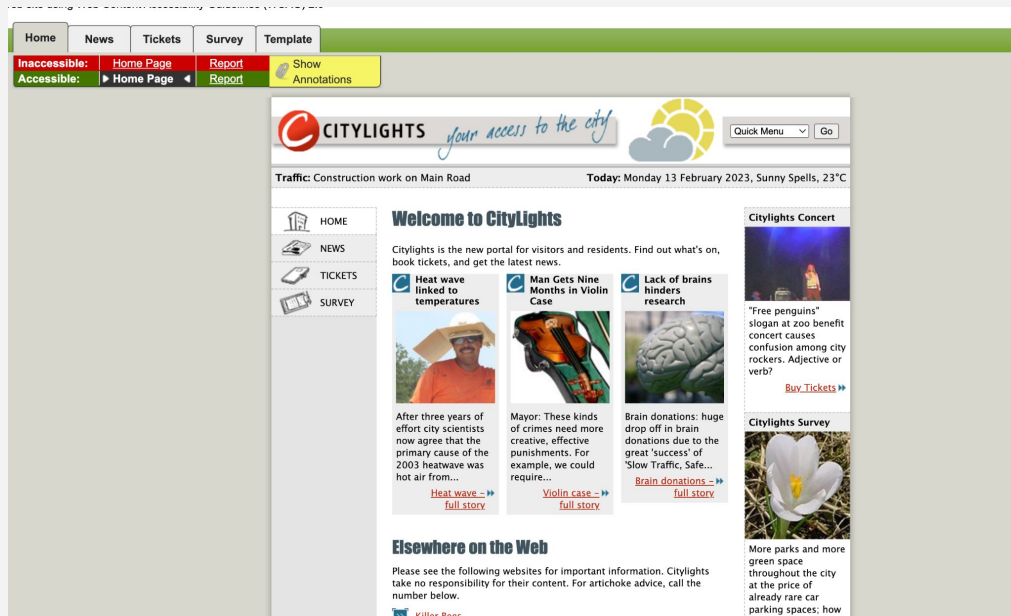 - Multimedia (video, audio) alte
  - Basic Structure Check

Demo time

Accessibility Checklist: WAI standards

Remember, one of the key points to creating accessibility websites comes down non-visuals decisions.

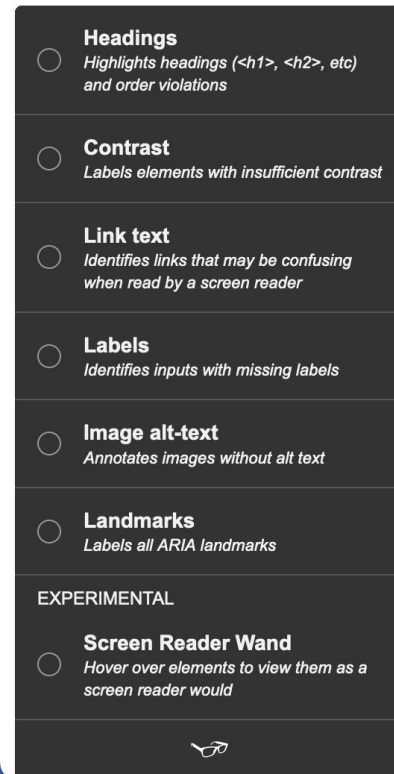We'll use this WAI tool to compare some websites

https://www.w3.org/WAI/demos/bad/after/home.html

Tools: Tota11y

This bookmark created by Khan Academy runs a script to check for several accessibility pitfalls.

https://khan.github.io/tota11y/#Installation
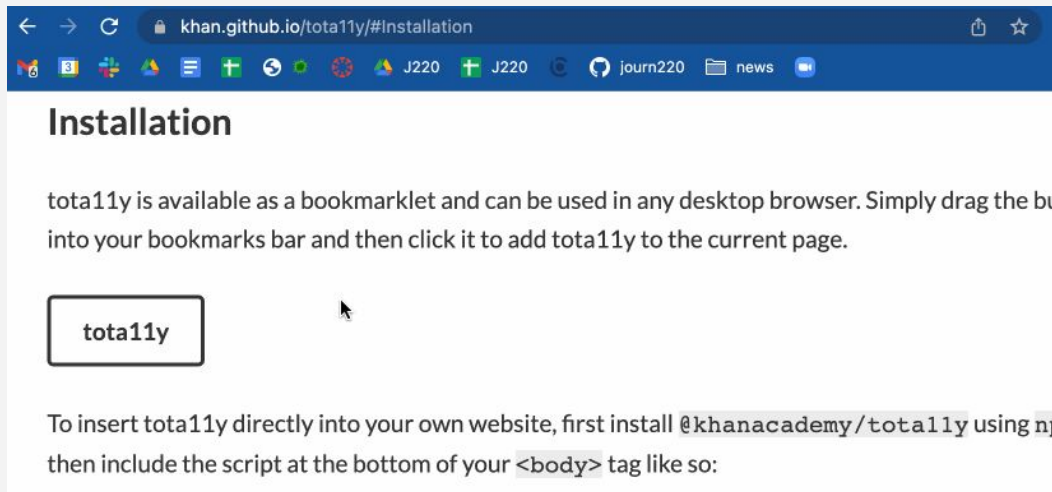
Tools: Tota11y

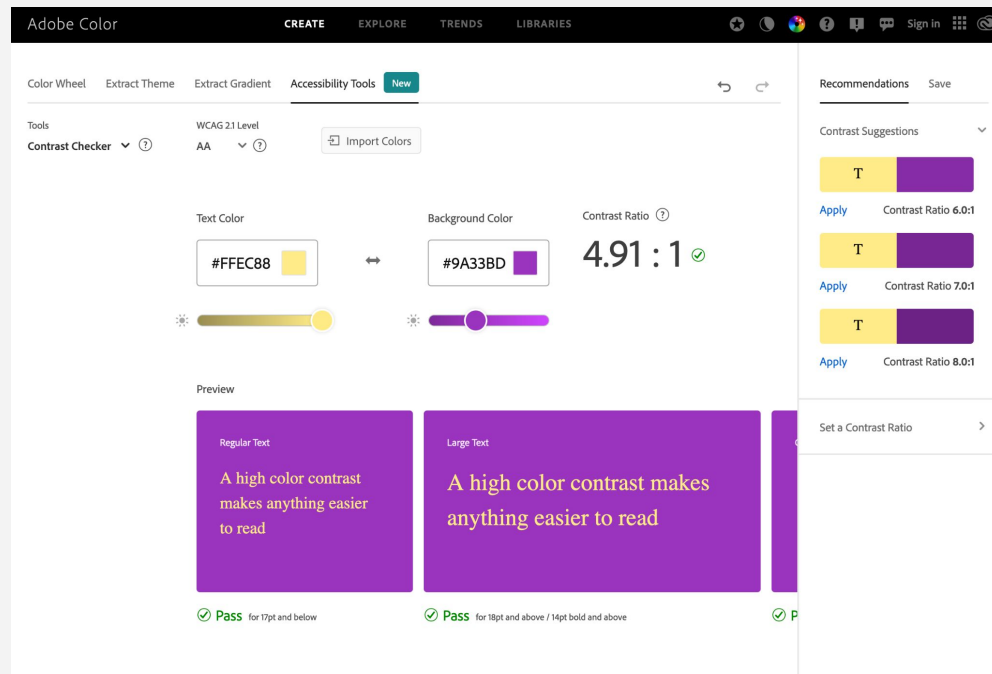Go to this website: https://khan.github.io/tota11y/#Installation

Drag the button into your bookmarks bar:
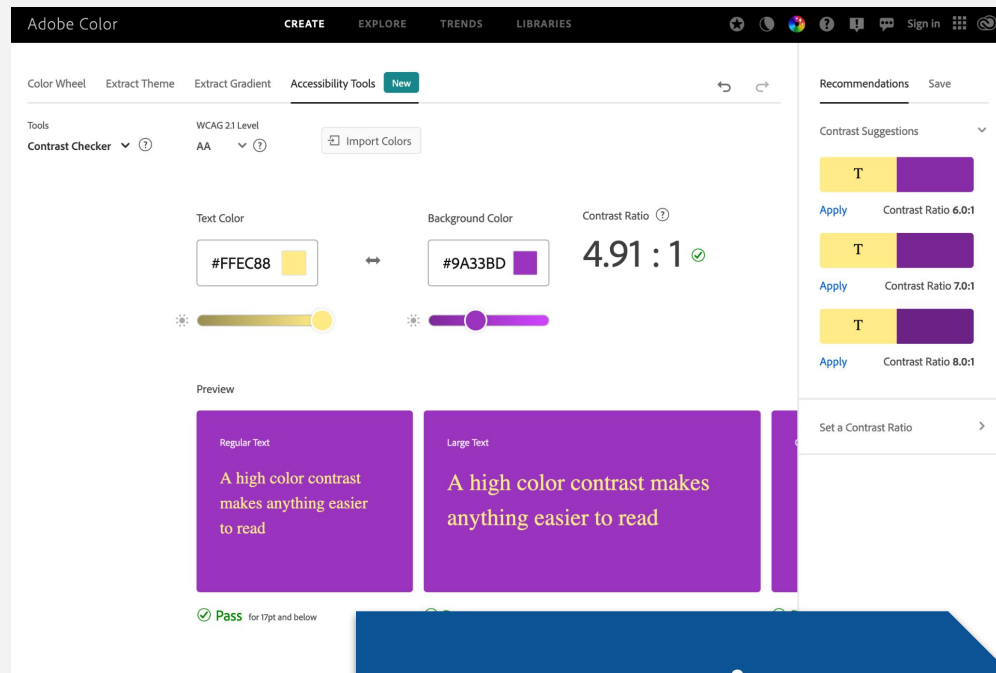

Demo time

Tools: Adobe Color

Using WCAG accessibility rules for font size and color contrast, the [Adobe Color tool](#) helps you select text and background colors

Tools: Adobe Color

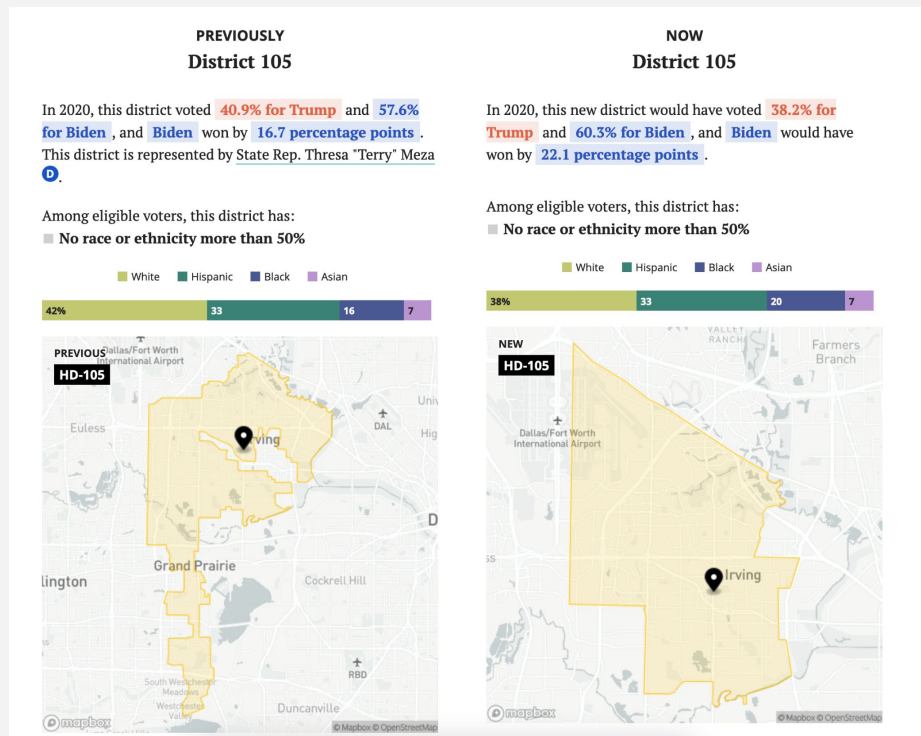Using WCAG accessibility rules for font size and color contrast, this tool helps you select text and background colors

Demo time

Tools: Color Oracle

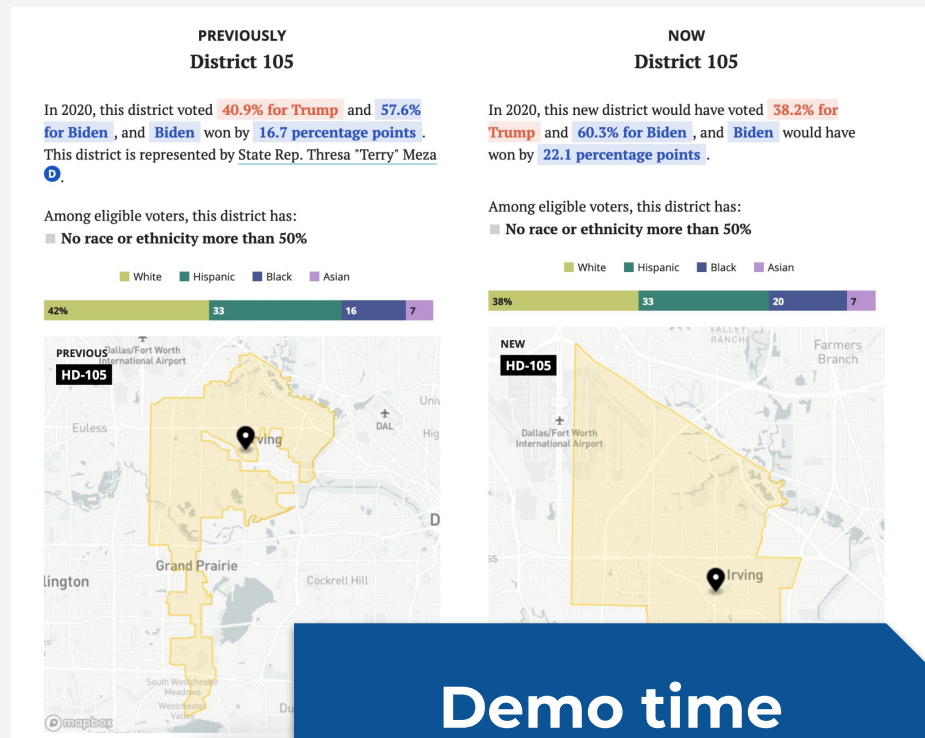Color Oracle lets you simulate for several types of color blindness.

Color blindness affects about 1 in 12 men (8%) and 1 in 200 women. There are a lot of tools to check for this accessibility component.

Tools: Color Oracle

Color Oracle lets you simulate for several types of color blindness.

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Demo time

Data viz color schemes

Colorbrewer2.org is a great website to look at color schemes for data visualizations.

Homework

Assignment 02-13 in bCourses
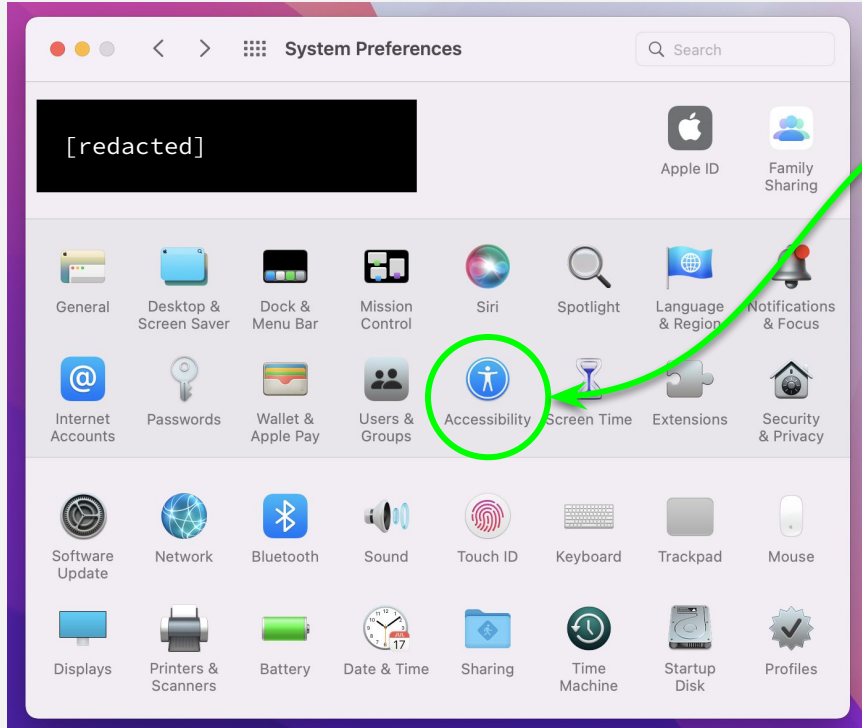
Optional recommended items: https://journ220.github.io

In-class exercise

Using a screen reader

On a Macbook

Plug in your headphones
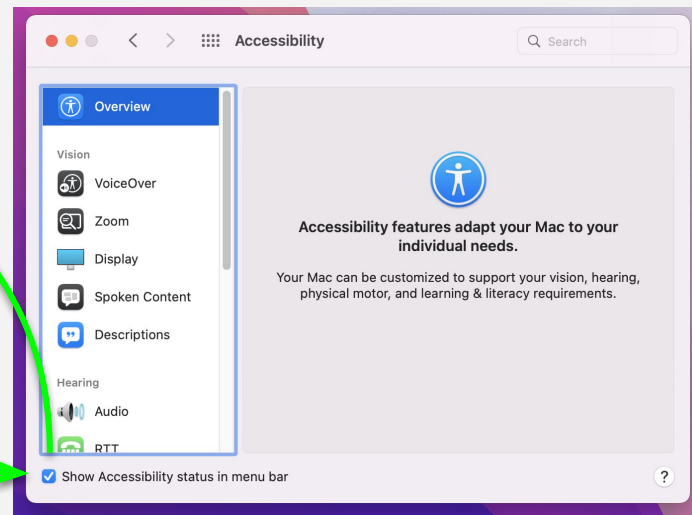or
Mute your laptop

Open **System Preferences**

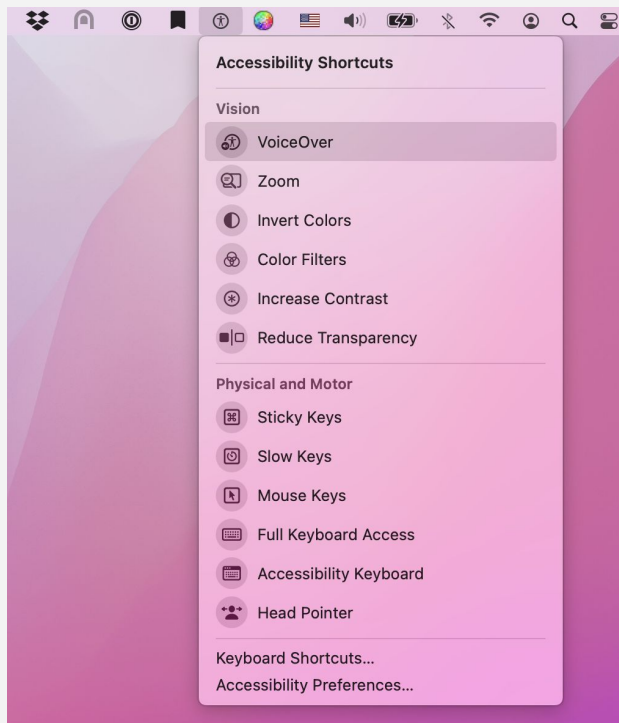Select Accessibility from your System Preferences window.

Show Accessibility status in menu bar

Check this box off. This allows you to access Accessibility features fast (and turn them off fast).

Trying out VoiceOver
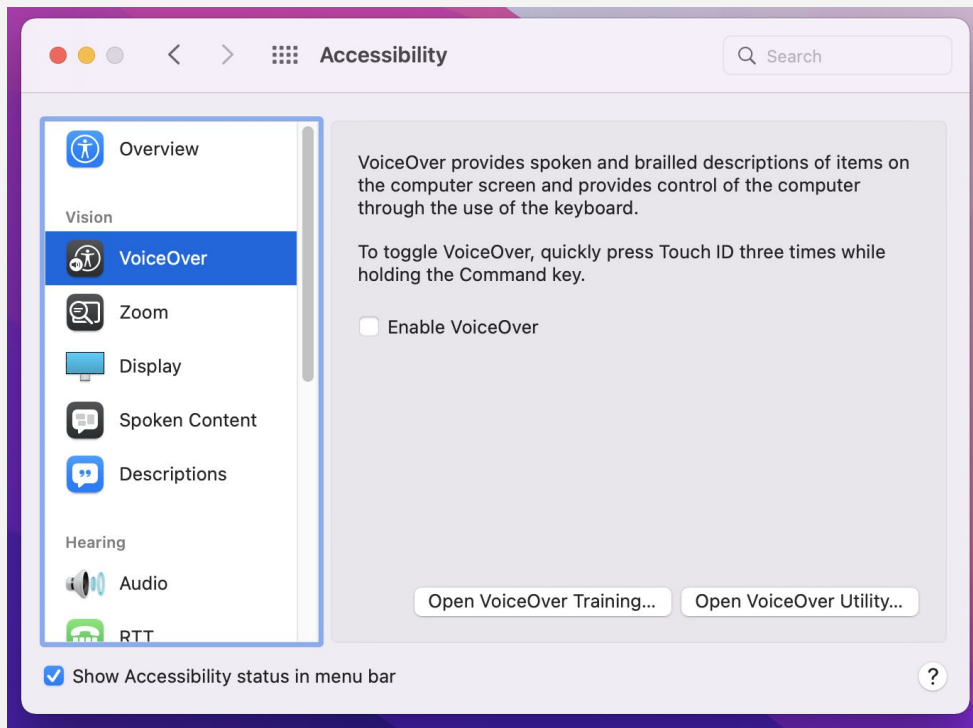

Now go to the Accessibility icon in the menu bar.

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

For today, we'll be using VoiceOver.

Last chance to plug in your headphones or mute your laptop
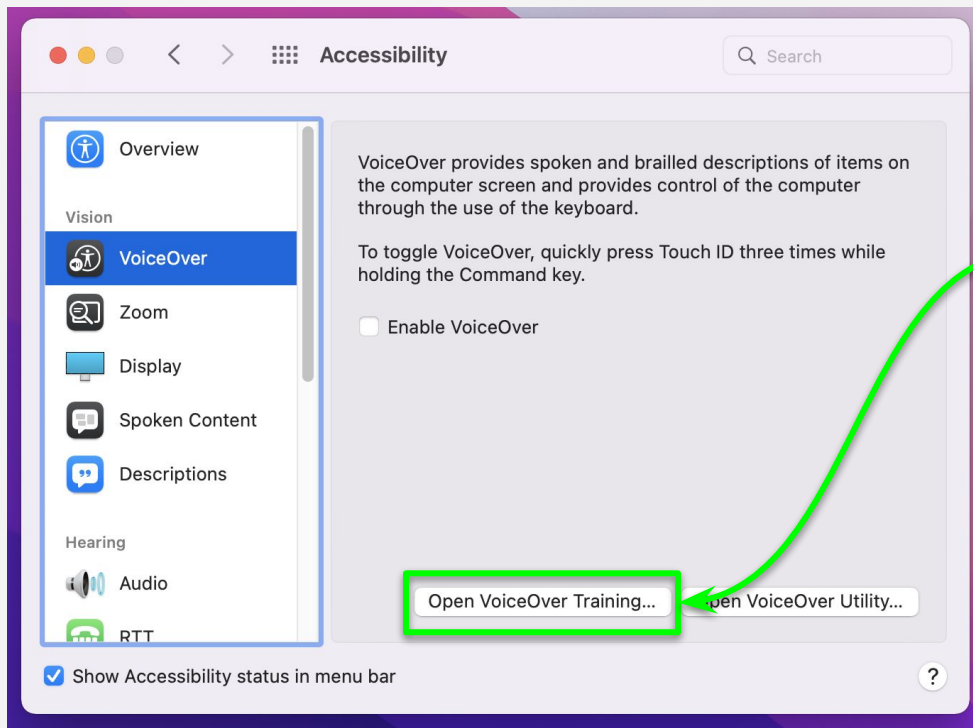
Demo time

VoiceOver stats

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.

In-class exercise

Let's take the VoiceOver training program on our own quietly.

After you're done, you can go home or stay to work on homework.