J220Coding for Journalists

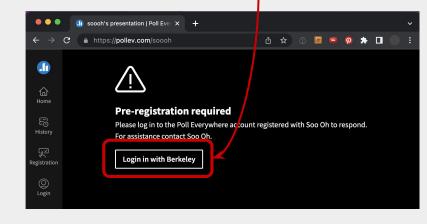
Soo Oh



PROMPTS

- Take a look at the syllabus here: https://journ220.github.io
- Go to this link and register for Poll Everywhere:

https://pollev.com/soooh



start Zoom recording

Agenda

Introductions

About J220

- How this class works
- Policies (grades, COVID, office hours)

BREAK

The building blocks of HTML

Homework

Introductions



Yoli Martinez



Soo Oh

About J220

This section used to be a set of slides.

But it's all on the website, so let's go check it out (and go through the website together, too).

https://journ220.github.io

Miscellaneous

Agreements

Final project

Extra credit

Our agreements with each other

We will post preliminary slides ahead of lecture.

We will be available by office hours.

You will keep up with assignments.

You will come to office hours if you're having trouble.

Miscellaneous

Agreements

Final project

Extra credit

Your final project will be to design and build a website. The rubric will be available on bCourses.

Miscellaneous

Agreements

Final project

Extra credit

There are many extra credit opportunities in this class.

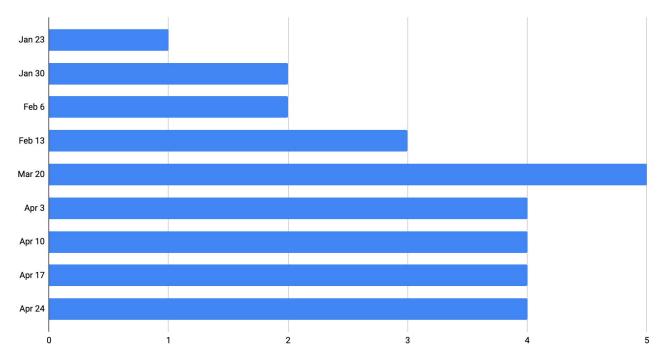
- If you book and attend office hours, you will **receive 1 point per week**.
- Almost every week, we will ask you how much time you spent on the class outside of lecture for 1 point.
- Mid-semester evaluation: 10 points

Previous J220 feedback

elective ≠ easy

Typical time spent on J220 in Spring 2023

Median hours per week



What has been most helpful for your learning?

From last year's students

In-class activities (7)

Real world examples

Homework is practical/useful (5)

Code academy links

Reviewing slides/recording (5)

Accessibility focus

Homework review (2)

What has caused you the most difficulty in terms of learning?

Moving too fast (7)

Understanding concepts (6)

Too many tangents and hypotheticals (4)

HW including material not reviewed in class (2)

If this happens, it'll be extra credit

Class moving too slow (2)

Time constraints outside of class

What suggestion(s) can you make that would enhance your learning experience?

Speed of class (some concepts too fast, others too slow) (5)

More in-class activities (4)

More individual work (3)

More practical assignments

More visual aids

Career opportunities

Changes we made to J220 for 2024

- We removed one guest lecture to spread out what you're learning (a.k.a. going slower).
- We have one additional JavaScript lecture.
- We have more hands-on exercises.
- The final project rubrics will be posted on bCourses early.

Questions?

Break

Meet back in 15 minutes.

start Zoom recording

Intro to HTML

HTML element element attributes nesting elements empty elements accessibility commenting out HTML

Hypertext Markup Language

HTML element element attributes nesting elements empty elements accessibility commenting out HTMI

Hypertext Markup Language

"Hypertext" is text that can link out to other things.

To "mark up" hypertext is to label text so a browser can structure it properly.

HTML element

element attributes nesting elements

empty elements

accessibility

commenting out HTML

My dog is a Korean Jindo mix.

HTML element element attributes nesting elements empty elements accessibility commenting out HTMI

My dog is a Korean Jindo mix.

tags are used for paragraphs.

HTML element element attributes nesting elements empty elements accessibility commenting out HTMI



There's an opening tag and a closing tag. The closing tag has a **slash** in it.

HTML element element attributes nesting elements empty elements accessibility commenting out HTMI

Opening paragraph tag



Closing paragraph tag



HTML element element attributes nesting elements empty elements accessibility commenting out HTMI



The stuff between the tags is the **content**.

HTML element element attributes nesting elements empty elements accessibility commenting out HTMI



The opening tag, the closing tag, and what's in between those tags make up an **element**.

HTML element element attributes nesting elements empty elements accessibility commenting out HTMI

```
My dog is a <a href="http://www.jindos.org">Korean Jindo</a>
mix.
```

To create a link, we'll use **<a>** (anchor) tags.

HTMI element element attributes nesting elements empty elements accessibility commenting out HTMI

```
My dog is a <a href="http://
www.jindos.org">Korean Jindo</a>
mix.
attribute
```

Elements can have **attributes**. An attribute is everything inside a tag that's not the actual tag itself.

href stands for hypertext reference

HTML element element attributes nesting elements empty elements accessibility commenting out HTMI

```
attribute name/key

My dog is a <a href="http://
www.jindos.org">Korean Jindo</a>
mix.
attribute value
```

Most attributes come in key/value pairs...

- href is the name or key of the attribute
- http://www.jindos.org is the attribute's value

HTML element element attributes nesting elements empty elements accessibility commenting out HTMI

<input disabled>

... but sometimes you'll come across attributes without values.

 disabled is the name of the attribute. The attribute has no value.

HTML element element attributes nesting elements empty elements accessibility commenting out HTML

```
My dog is a <a href="http://www.jindos.org">Korean Jindo</a>
mix.
```

Nesting elements: placing an element inside another element

HTML element element attributes nesting elements empty elements accessibility commenting out HTMI

```
My dog is a <a href="http://www.jindos.org">Korean Jindo</a>
mix.
```

Proper nesting

HTMI element element attributes nesting elements empty elements accessibility commenting out HTMI

```
My dog is a <a href="http://www.jindos.org">Korean Jindo</a>
mix.
```

Improper nesting

HTML element element attributes nesting elements empty elements accessibility commenting out HTML

Imagine an element as a box and lid.



HTML element element attributes nesting elements empty elements accessibility commenting out HTML



HTML element element attributes nesting elements empty elements accessibility commenting out HTML

You match up the box and lids. Boxes can be nested inside other boxes, and multiple boxes can be nested within a single box.



HTML element element attributes nesting elements empty elements accessibility commenting out HTML

But you can't match up boxes that don't match with their lids. It doesn't make sense. It's chaos.



HTMI element element attributes nesting elements empty elements accessibility commenting out HTMI

Q. Proper nesting or improper nesting?

(The **** tag is used to make text **bold**.)

HTML element element attributes nesting elements empty elements accessibility commenting out HTMI

Q. Proper nesting or improper nesting?

HTML element element attributes nesting elements empty elements accessibility commenting out HTMI

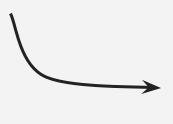
Q. Proper nesting or improper nesting?

HTMI element element attributes nesting elements empty elements accessibility commenting out HTMI

Most elements will have an opening tag and a closing tag.

However, **empty elements** do not need two separate opening and closing tags. Empty elements don't have content.

One kind of empty HTML element is the **'img'** tag, used to embed images onto a web page.





HTMI element element attributes nesting elements empty elements accessibility commenting out HTMI

```
<img src="https://soooh.net/assets/
images/6b0b8001-320.jpg" alt="medium
black-and-tan dog laying on rug">
```

 is the tag for embedding images.

HTMI element element attributes nesting elements empty elements accessibility commenting out HTMI

```
opens with angle bracket
```

```
<img src="https://soooh.net/assets/
images/6b0b8001-320.jpg" alt="medium
black-and-tan dog laying on rug">
```

ends with closed angle bracket

 is the tag for embedding images.

HTMI element element attributes nesting elements empty elements accessibility commenting out HTMI

```
<img src="https://soooh.net/assets/
images/6b0b8001-320.jpg" alt="medium
black-and-tan dog laying on rug"/>
```

can also end with a slash and closed angle bracket

 is the tag for embedding images.

HTMI element element attributes nesting elements empty elements accessibility commenting out HTMI

```
<img src="https://soooh.net/assets/
images/6b0b8001-320.jpg" alt="medium
black-and-tan dog laying on rug">
```

attributes

Empty elements don't have content but they can have **attributes**. Remember, an attribute is everything inside a tag that's not the actual tag itself.

HTMI element element attributes nesting elements empty elements accessibility commenting out HTMI

```
<img src="https://soooh.net/assets/
images/6b0b8001-320.jpg" alt="medium
black-and-tan dog laying on rug">
```

Above, the **** element has two attributes, **src** (source) and **alt** (alternative text).

HTMI element element attributes nesting elements empty elements accessibility commenting out HTMI

```
<img src="https://soooh.net/assets/
images/6b0b8001-320.jpg" alt="medium
black-and-tan dog laying on rug">
```

A **** element won't work without a **src** attribute. That's the file location of the image.

But what is **alt**?

HTMI element element attributes nesting elements empty elements accessibility commenting out HTMI

```
<img src="https://soooh.net/assets/
images/6b0b8001-320.jpg" alt="medium
black-and-tan dog laying on rug">
```

Accessibility is the practice of making your product usable to as many people as possible.

In HTML, element tags, attributes, and even the written content of your site can determine how accessible it is to users.

HTMI element element attributes nesting elements empty elements accessibility commenting out HTMI

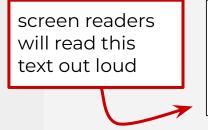
```
<img src="https://soooh.net/assets/
images/6b0b8001-320.jpg" alt="medium
black-and-tan dog laying on rug">
```

The **alt** text attribute in an **** element is a text-based description of the image.

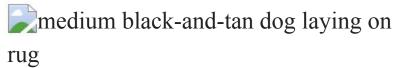
HTMI element element attributes nesting elements empty elements accessibility commenting out HTMI

```
<img src="https://soooh.net/assets/
images/6b0b8001-320.jpg" alt="medium
black-and-tan dog laying on rug">
```

The **alt** text attribute in an **** element is a text-based description of the image.



BROWSER OUTPUT WITH SLOW CONNECTION



HTML element element attributes nesting elements empty elements accessibility commenting out HTMI

Who might benefit from image alt text?

- visually impaired people
- people with slow Internet
- people on a mobile device

HTMI element element attributes nesting elements empty elements accessibility commenting out HTMI

```
My dog is a <a href="http://www.jindos.org">Korean Jindo</a> mix.
Adoption story TK.
```

Sometimes, you'll want to hide text from the browser.

HTML element element attributes nesting elements empty elements accessibility commenting out HTML

```
My dog is a <a href="http://
www.jindos.org">Korean Jindo</a> mix.
<!-- Adoption story TK. -->
```

Use <!-- and -->.

Review

In-class exercise

Combining HTML elements

WHAT I WANT

My dog is a Korean Jindo mix.

I adopted her a couple years ago from a rescue.



Use the cards to recreate the image.

Use the blank pieces of paper to write in content, attributes, and values that don't exist.

Homework

https://journ220.github.io