J220
Coding for
Journalists

LECTURERS
Yoli Martinez
Soo Oh

PROMPTS

We'll get started when everyone's signed in.

Unmute and say hello if you like (no pressure).

Take a look at the syllabus here: https://journ220.github.io

Agenda

Introductions

About J220

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

The building blocks of HTML

Introductions

Yoli Martinez

Soo Oh

How this class works

Course description

Objective

Prerequisites

Required tools

Course description

Why take this class?

What you will learn in this class

It is increasingly hard to work in journalism without having a basic understanding of how your work will be presented online.

In this course, you will be introduced to basic concepts, terms and approaches to web development

Course description

Why take this class?

What you will learn in this class

- HTML (the structure of a webpage)

- CSS (the style and layout of the page)

- Wireframing and web design

- Basic JavaScript

Objective

Goals

Thoughtfulness and editorial judgement

By the end of the semester, you will have the tools and knowhow to efficiently communicate with newsroom developers, graphics reporters and designers, whether you want to collaborate on creating a newsletter, a story page or even a site for your documentary or podcast.

Or, you might even be interested in becoming a newsroom technologist yourself.

Objective

Goals

Thoughtfulness and editorial judgement

How you present the work, the layout, page hierarchy and interactive elements are at their core critical editorial conversations that require the same thoughtfulness and discussion as any other journalism endeavour.

Expect to have those critical conversations in this class, too.

Prerequisites

NONE!

Tools

Applications you need to download

Others

Most important

Text editor: Sublime Text (one-time payment of $99 or ignore the prompt 😬), Atom (free), Brackets (free)

Color Oracle (accessibility tool for Mac)

Balsamiq Desktop (free student license available, we'll discuss later in the semester)

Tools

Applications you
need to download

Others

Most important

Laptop with a Unix or Unix-like operating system (e.g. all Macbooks; a Dell, Lenovo, or ThinkPad with Ubuntu; message us in the slack now if you have something else)

GitHub account (it's free!)

Tools

Applications you
need to download

Others

Most important

Proactive inclusivity of and respectful communication with fellow students and instructors

Policies and Procedures

Grades

COVID crisis

Office hours

Grades

Attendance

Participation

Assignments

Final project

There will be no lectures on President's Day (Feb. 21) and Spring break (March 21). So we only have 13 lectures together.

Grades

Attendance

Participation

Assignments

Final project

2 unexcused absences will result in dropping a full letter grade; 3 unexcused absences will result in an F.

Grades

Attendance

Participation

Assignments

Final project

We'll adhere to Berkeley time and start lecture promptly at 5:40 pm.

Being late after the first 5 minutes of class will result in 70% of your attendance grade.

If you're going to be late, message both Yoli and Soo in the J-school Slack. One of us will try to monitor the Slack near the beginning of class. Be the least disruptive as you can when you arrive to not disturb the lecture and other students.

Grades

Attendance

Participation

Assignments

Final project

We begin this class at 5:30 pm to give you time to eat dinner before. So we'll only have one 15-minute break in the middle of class. Occasionally, we will end the class early.

Grades

Attendance

Participation

Assignments

Final project

Set your phone to silent or Do Not Disturb mode before class begins. Do not text or answer calls during class.

If it's an emergency, quietly step outside to take the call.

If you need to use the restroom, you can go without asking for permission, but do your best to not disturb the lecture or other students.

Grades

Attendance

Participation

Assignments

Final project

Bring your laptop to class.

Don't check email, social media, notifications, or the news (!!!) during the lecture portions of the class. Be respectful of our time together.

Points will be docked if you get caught texting or browsing while in class.

Grades

Attendance

Participation

Assignments

Final project

Try your hardest to receive feedback constructively. Your work will be subject to intensive and substantial editing in the future.

Grades

Attendance

Participation

Assignments

Final project

We won't demean people for their experiences, lack of experiences, or difference in interpretation of those experiences.

We will trust that people are doing the best they can.

Grades

Attendance

Participation

Assignments

Final project

All assignments must be submitted on time in bCourses.

There will be no exceptions made for late assignments, except for DSP, medical, and family emergencies.

Grades

Attendance

Participation

Assignments

Final project

An assignment will be dropped a full letter grade for every 24 hours that pass after the deadline, starting the minute after deadline.

For example, an assignment with no mistakes will be graded as 90% one minute after deadline, 80% one minute and 24 hours after deadline, etc.

Grades

Attendance

Participation

Assignments

Final project

Your final project will be…

COVID crisis

As of now, our next class will be on campus.

Wear an N95, KN95, or similar respirator indoors.

Keep six feet apart at separate tables if possible.

If a student refuses to wear a mask in the class, lecture will be canceled.

If you feel sick, **stay home**.

COVID ^{and climate} crisis

COVID ^ crisis

and climate

A lecture may be remote for COVID-19 related quarantines, poor air quality due to fires, power outages, instructor illness or exposure, changing public health guidance, etc.

If a class needs to be shifted to Zoom, we will send an announcement by **email**. We will also send a Calendar invite with the Zoom link.

Please let us know if you have ANY concerns about our return to campus.

Office hours

Yoli's office hours: https://calendly.com/yolimartinez

Soo's office hours: https://calendly.com/soooh/j220

Please also join us in the Berkeley Slack Group:

#j220-spring2022

Questions?

Break

Meet back in 15 minutes

Note to lecturers: Pause recording

Intro to HTML

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

Hyper**t**ext **M**arkup **L**anguage

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out
HTML

Hyper**t**ext **M**arkup **L**anguage

"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

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

```
My dog is a Korean Jindo mix.
```

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

```
<p>My dog is a Korean Jindo mix.</p>
```

<p> tags are used for paragraphs.

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

```
<p>My dog is a Korean Jindo mix.</p>
```

opening tag

closing tag

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

HTML

HTML element

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commenting out
HTML

Opening paragraph tag

`<p>`

Closing paragraph tag

`</p>`

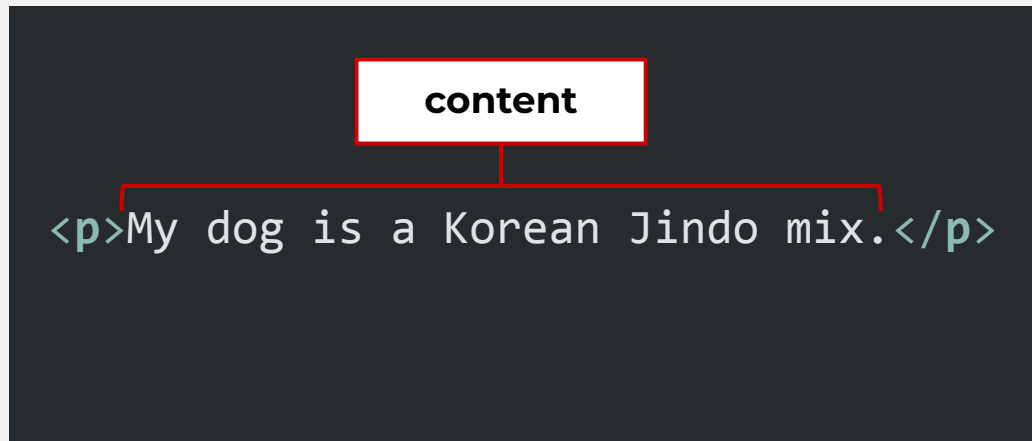# HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out
HTML

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

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out
HTML


```
<p>My dog is a Korean Jindo mix.</p>
```

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

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

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

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

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

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

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

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out
HTML

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

Nesting elements: placing an element
inside another element

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out
HTML

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

Proper nesting

```
<p><a></a></p>
```

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out
HTML

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

Improper nesting

```
<p><a></p></a>
```

HTML

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

```
<p><strong><a></a></strong></p>
```

proper nesting or improper nesting?

HTML

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

```
<p><strong><a></a></strong></p>
```

proper nesting!

HTML

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

```
<p><strong></strong><a></a></p>
```

proper nesting or improper nesting?

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

(The **`<strong>`** tag is used to make text **bold**.)

```
<p><strong></strong><a></a></p>
```

proper nesting!

HTML

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

```
<p><strong><a></strong></a></p>
```

proper nesting or improper nesting?

HTML

(The **`<strong>`** tag is used to make text **bold**.)

```
<p><strong><a></strong></a></p>
```

improper nesting!

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

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.

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

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

`<img>` is the tag for embedding images.

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out
HTML

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

`<img>` is the tag for embedding images.

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out
HTML

```html
<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**

\<img\> is the tag for embedding images.

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out
HTML

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

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.

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out
HTML

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

attributes

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out
HTML

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

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

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

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

A `<img>` element won't work without a `src` attribute. That's the file location of the image.

But what is `alt`?

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out
HTML

```
<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.

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out
HTML

```
<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 **<img>** element is a text-based description of the image.

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

```html
<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 **<img>** element is a text-based description of the image.

screen readers will read this text out loud

BROWSER OUTPUT WITH SLOW CONNECTION

medium black-and-tan dog laying on rug

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out
HTML

Who might benefit from image alt text?

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

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out
HTML

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

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

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out
HTML

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

Use **<!--** and **-->** TK.

Exercise

Combining HTML elements

HTML

```
My dog is a Korean Jindo mix
(http://www.jindos.org).

I adopted her a couple years ago from a
rescue. Note to self: Write adoption
story here.

Here's a picture of her:
https://soooh.net/assets/
images/6b0b8001-320.jpg
```

WHAT I WANT

My dog is a [Korean Jindo](#) mix.

I adopted her a couple years ago from a rescue.

Combining HTML elements

HTML

```
My dog is a Korean Jindo mix
(http://www.jindos.org).

I adopted her a couple years ago from a
rescue. Note to self: Write adoption
story here.

Here's a picture of her:
https://soooh.net/assets/
images/6b0b8001-320.jpg
```

ACTUAL BROWSER OUTPUT

My dog is a Korean Jindo mix (http://www.jindos.org). I adopted her a couple years ago from a rescue. Note to self: Write adoption story here. Here's a picture of her: https://soooh.net/assets/ images/6b0b8001-320.jpg

Combining HTML elements

HTML

```
<p>My dog is a Korean Jindo mix
(http://www.jindos.org).</p>

<p>I adopted her a couple years ago
from a rescue. Note to self: Write
adoption story here.</p>

<p>Here's a picture of her:
https://soooh.net/assets/
images/6b0b8001-320.jpg</p>
```

BROWSER OUTPUT

My dog is a Korean Jindo mix (http://www.jindos.org).

I adopted her a couple years ago from a rescue. Note to self: Write adoption story here.

Here's a picture of her: https://soooh.net/assets/images/6b0b8001-320.jpg

Combining HTML elements

HTML

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

<p>I adopted her a couple years ago
from a rescue. Note to self: Write
adoption story here.</p>

<p>Here's a picture of her:
https://soooh.net/assets/
images/6b0b8001-320.jpg</p>
```

BROWSER OUTPUT

My dog is a [Korean Jindo](http://www.jindos.org) mix.

I adopted her a couple years ago from a rescue. Note to self: Write adoption story here.

Here's a picture of her: https://soooh.net/assets/images/6b0b8001-320.jpg

Combining HTML elements

HTML

BROWSER OUTPUT

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

<p>I adopted her a couple years ago
from a rescue. Note to self: Write
adoption story here.</p>

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

My dog is a [Korean Jindo](http://www.jindos.org) mix.

I adopted her a couple years ago from a rescue. Note to self: Write adoption story here.

Combining HTML elements

HTML

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

<p>I adopted her a couple years ago
from a rescue.<!-- Note to self: Write
adoption story here. --></p>

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

BROWSER OUTPUT

My dog is a [Korean Jindo](http://www.jindos.org) mix.

I adopted her a couple years ago from a rescue.

Homework

https://journ220.github.io