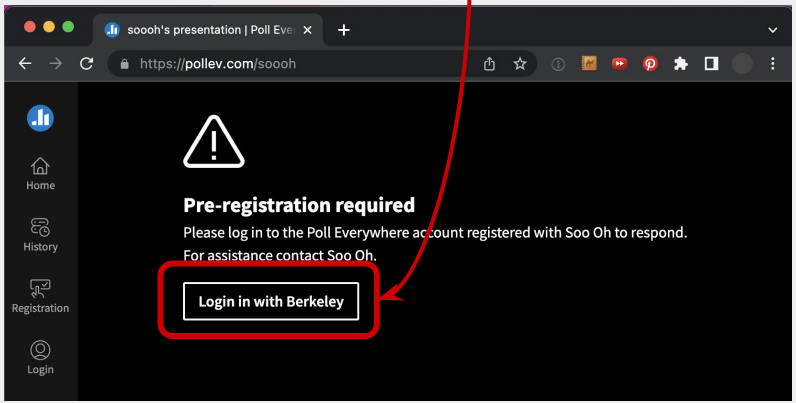
J220
Coding for Journalists

LECTURER
Soo Oh

Lecture will start at 6:10 pm

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 recording + captions

Agenda

Introductions

About J220

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

BREAK

Announcements

The building blocks of HTML

Homework

Introductions

Yoli Martinez

Soo Oh

Why are you taking this class?

To 0

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About J220

J220

Course description

Objective

Prerequisites

Required tools

Lectures

Announcements

Why take 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.

J220

Course description

Objective

Prerequisites

Required tools

Lectures

Announcements

What you'll learn

HTML (the structure of a webpage)

CSS (the style and layout of the page)

Wireframing and web design

Basic JavaScript

J220

Course description

Objective

Prerequisites

Required tools

Lectures

Announcements

Goals

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.

J220

Course description

Objective

Prerequisites

Required tools

Lectures

Announcements

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.

J220

Course description

Objective

Prerequisites

Required tools

Lectures

Announcements

None :)

J220

Course description

Objective

Prerequisites

Required tools

Lectures

Announcements

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

Color Oracle (accessibility tool for Mac)

Laptop with a Unix or Unix-like operating system (e.g. all Macbooks)

GitHub.com account (it's free!)

Polleverywhere.com account (log in with Berkeley email)

J220

Course description

Objective

Prerequisites

Required tools

Lectures

Announcements

Proactive inclusivity of and respectful communication with fellow students and instructors

J220

Course description

Objective

Prerequisites

Required tools

Lectures

Announcements

Classes will be held in person.

We will record lectures and post them to bCourses but will not offer a live Zoom option this semester. (Things that can go wrong with recordings: poor audio/video quality, poor wifi, etc.)

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

J220

Course description

Objective

Prerequisites

Required tools

Lectures

Announcements

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.

J220

Course description

Objective

Prerequisites

Required tools

Lectures

Announcements

We'll make announcements by **Slack**.

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

Grades

Grades

Attendance

Participation

Assignments

Final project

Extra credit

There will be no lectures on **President's Day (Feb. 20)** and **Spring break (March 27)**. So we only have 13 lectures together.

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

Extra credit

We'll adhere to Berkeley time and start lecture promptly at 6:10 pm.

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

Extra credit

We begin this class at 6 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

Extra credit

Participation is worth 5 points per lecture for 10 lectures.

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

Extra credit

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

Extra credit

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

Extra credit

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

Extra credit

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

Extra credit

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

Extra credit

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

Grades

Attendance

Participation

Assignments

Final project

Extra credit

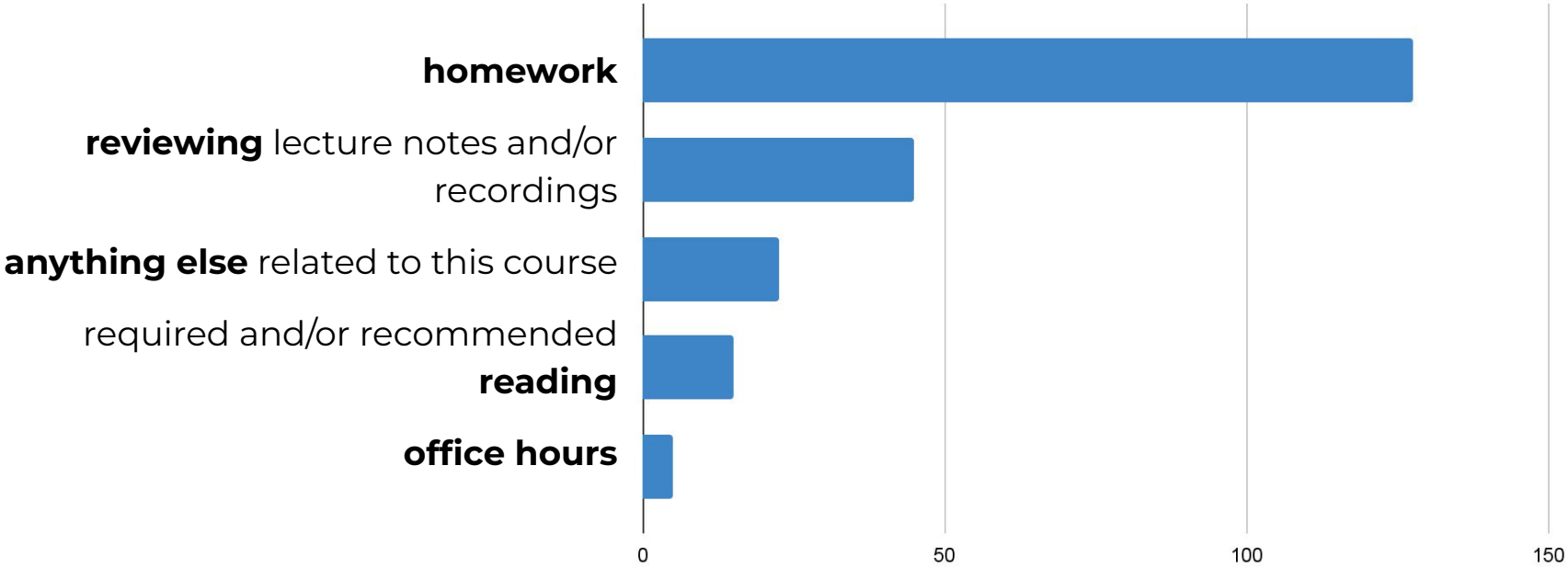
There are many extra credit opportunities in this class.

- If you book and attend office hours, you will receive **1 point per week, up to 4 points**. **You will lose 1 point if you do not show up or cancel after 9 am on the day of your booked office hours.**
- 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

Typical time spent on J220

In Spring 2022, students typically spent a total of 215 minutes (3.6 hours) weekly on class



What has been most helpful for your learning?

hand-coding homework (4x)

office hours (3x)

in-class assignments (3x)

review material from previous lectures or assignments (2x)

online tutorials or Codecademy (2x)

practice topics together

sharing slides in advance

asking questions in class

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

pace too fast (5x)

not practicing more in class (3x)

coding in general (2x)

nice pace

homework too complicated

lack of visual explainers

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

practice more in class (5x)

slow pace (3x)

review homework

more detailed example files

more interesting hand-coding homework

stopping with questions

so far so good

extra credit

more iClicker quizzes

Codecademy/etc. as homework

Changes we made to J220 for 2023

We slowed down the class.

- Part 1 (before Presidents' Day): HTML and accessibility
- Part 2 (between President's Day and spring break): Using CSS to style HTML; wireframing and grid layouts
- Part 3 (after spring break): Practicing HTML and CSS; basic JavaScript; working on your final project

You don't learn any new material in the final three weeks of class — you'll be working on your final projects.

The Final project rubric is posted on bCourses.

Office hours

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

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

Join us in the Berkeley J-School Slack Group: **#j220**

Questions?

When poll is active, respond at pollev.com/soooh
What time does lecture start on Mondays?
6:00 pm
6:10 pm
6:15 pm
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If lecture has to move to Zoom, where will that be announced?

- Email
- Slack
- Canvas
- None of the above

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When are homework assignments typically due?

Mondays at 5:29 pm

Saturdays at 11:59 pm

Sundays at 11:59 pm

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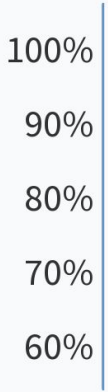
An assignment with no mistakes that is turned in late one minute after the deadline will receive what grade?



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Break

Meet back in 7:06 pm.

start Zoom recording + captions

Announcements

NICAR 2023 funding: go apply!
https://docs.google.com/forms/d/e/1FAIpQLSf05FLb0FFAP_uYWjz8pvy0wnYmp6NuWh_kQXtzEfVT8si8kQ/viewform

Intro to HTML

HTML

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

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

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

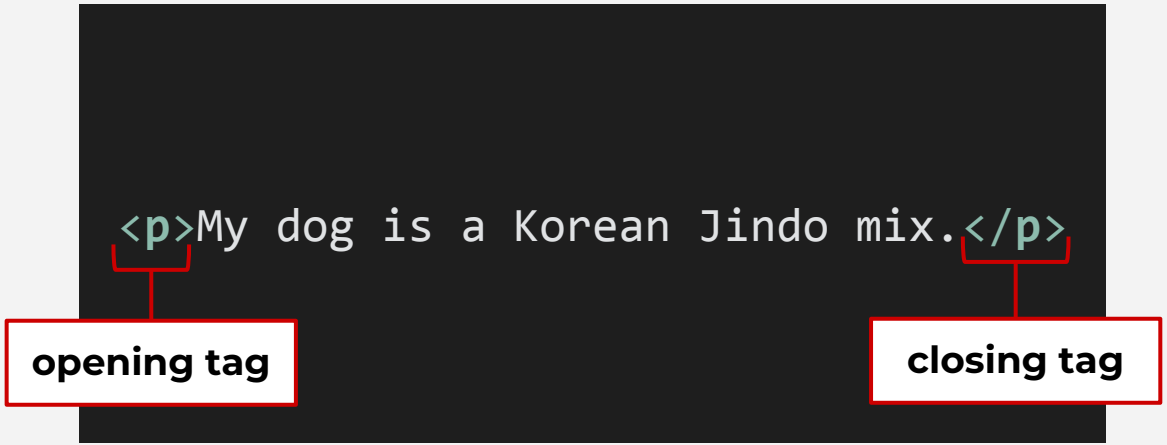
element attributes

nesting elements

empty elements

accessibility

commenting out HTML



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

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

Opening paragraph tag

Closing paragraph tag

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

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

HTML

HTML element

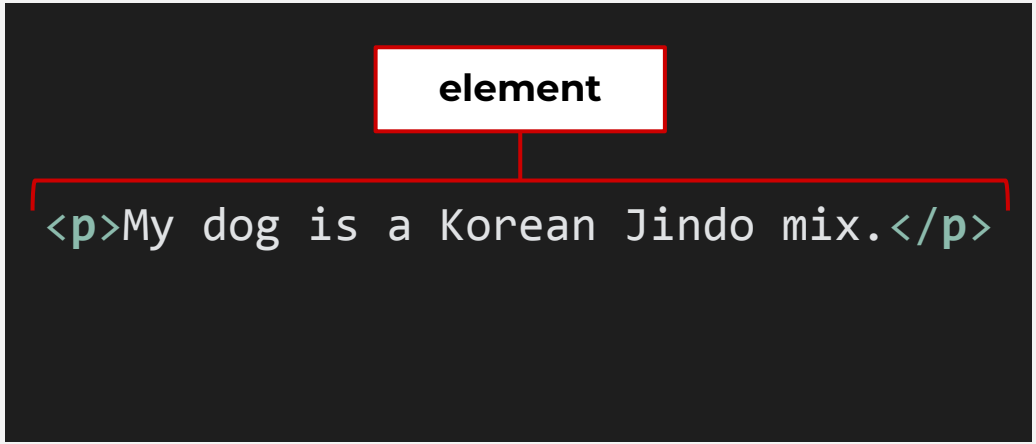
element attributes

nesting elements

empty elements

accessibility

commenting out HTML



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

attribute

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

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

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

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

```
<input disabled>
```

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

- **`disabled`** is the **name** of the attribute. The attribute has no value.

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

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

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

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

proper nesting or improper nesting?

Respond at **pollev.com/soooh**

Proper nesting or improper nesting?

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

proper

improper

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HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

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

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

proper nesting!

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

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

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

proper nesting or improper nesting?

When poll is active, respond at **pollev.com/soooh**

Proper nesting or improper nesting?

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

proper

improper

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

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

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

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

proper nesting!

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

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

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

proper nesting or improper nesting?

When poll is active, respond at **pollev.com/soooh**

Proper nesting or improper nesting?

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

proper

improper

Powered by Poll Everywhere

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

HTML

HTML element

element attributes

nesting elements

empty elements

accessibility

commenting out HTML

(The **** 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

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

<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" />
```

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

```
<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 **-->**.

Review

When poll is active, respond at **pollev.com/soooh**

Text **SOOOH** to **22333** once to join

Which parts of the HTML are attributes?

A

B

C

D

E

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When poll is active, respond at **pollev.com/soooh**

Which of the following denote an HTML comment?

```
A. # Comment

B. <!-- Comment -->

C. // Comment
```

A

B

C

None of the above

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What's wrong with the nesting here?

```
<main>
  <h1><a></h1></a>
  <p><a><img></a></p>
  <ul>
    <li></li>
    <li><a></li></a>
  </ul>
</main>
```

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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 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

```
<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 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 mix.

I adopted her a couple years ago from a rescue.

Homework

https://journ220.github.io