J220: Intro to Coding

Class 2 Monday Jan. 31

TOPIC:

- 1. HTML, continued
- 2. Preparing a simple portfolio

Note to lecturers: start Zoom recording

Agenda

- Announcements/Reminders
- Lightning review on iClicker
- Text Editor (making your code readable)
- Semantic HTML
- Hierarchy
- Catching bugs 🐞

Break

- File structure
- Class workshop

Announcements/reminders

- Message <u>both Yoli and Soo in a group DM on Slack</u> for logistical questions or requests about attendance, tardiness, assignments, etc.
- Do not take off your masks in class for water or food. Step outside if you need to drink water, doing your best to disrupt the class as little as possible.
- OK to remotely attend* lectures today, Feb. 7, and Feb. 14. We will discuss near Presidents' Day how we want to move forward.
 - * With the understanding that the livestream and/or recordings may be low quality; that wifi may be spotty; that auto-transcriptions might not be accurate; that we might not see your questions if we are helping others in the classroom and are away from the chat. Please remember that we are doing our best.



Lightning Review +



Sign into iClicker.com

1. How do you mark up the closing tag?

Beware, for I am fearless and therefore powerful.

Quote from Mary Shelley's Frankenstein

1. How do you mark up the closing tag?

Beware, for I am fearless and therefore powerful.

Quote from Mary Shelley's Frankenstein

2. What's the correct attribute for a link?

```
The assigned reading is
posted on the <a
 ="https://journ
220.github.io/">J220 course
website</a>.
```

- A. alt
- B. href
- C. name
- D. src
- E. url

2. What's the correct attribute for a link?

```
The assigned reading is
posted on the <a
href="https://journ
220.github.io/">J220 course
website</a>.
```

- A. alt
- B. href
- C. name
- D. src
- E. url

3. How do you mark up comments in HTML?

- A. <-- This is the right way. -/>
- B. <%- No, this is the right way. -%>
- C. {= You're wrong, this is the method. =}
- D. <!-- Excuse me, this is the right way. -->
- E. <?-- This is the correct comment. --?>

3. How do you mark up comments in HTML?

- A. <-- This is the right way. -/>
- B. <%- No, this is the right way. -%>
- C. {= You're wrong, this is the method. =}
- D. <!-- Excuse me, this is the right way. -->
- E. <?-- This is the correct comment. --?>

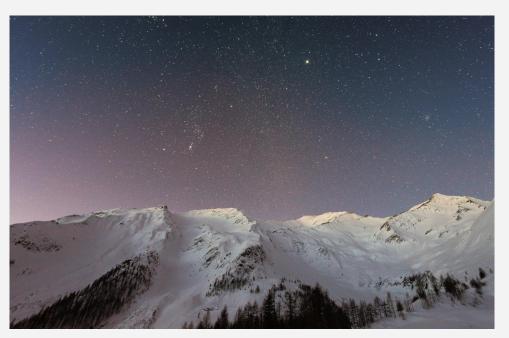
4. What are the attributes for (a), (b)?



<img (a) ="https://images.</pre> pexels.com/photos/1624496/p exels-photo-1624496.jpeg?au to=compress&cs=tinysrgb&dpr =3&h=256&w=384" (b) ="snow capped mountain at night under a starry sky">



4. What are the attributes for (a), (b)?



<img src="https://images.
pexels.com/photos/1624496/p
exels-photo-1624496.jpeg?au
to=compress&cs=tinysrgb&dpr
=3&h=256&w=384" alt="snow
capped mountain at night
under a starry sky">



5. Which example(s) show proper nesting?

You can find placeholder images of dogs on placedog.net/">placedog.net/

You can find placeholder images of dogs on placedog.net/">placedog.net/

You can find placeholder
images of dogs on placedog.net/
">placedog.net.
<img src="https://placedog.
net/500/280" alt="close-up
shot of brown dog with
tongue out">

A. B. C.

5. Which example(s) show proper nesting?

```
You can find placeholder
images of dogs on <a
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">placedog.net</a>.
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```

Α.

```
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">placedog.net</a>.
<img src="https://placedog.
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tongue out">
```

Β.

```
You can find placeholder
images of dogs on <a
href="https://placedog.net/">placedog.net/
">placedog.net.
<img src="https://placedog.
net/500/280" alt="close-up
shot of brown dog with
tongue out"></a>
```

C.,

Text Editor, and making your code readable



You can write code anywhere, but a text editor will:

1. Make it readable

```
<html>
  <head>
    <!-- metadata goes here -->
  </head>
  <body>
    <header>
      <h1>This is a h1 header</h1>
      <h2>This is a subhead, which is wrapped in an h2</h2>
    </header>
    <nav>
      <u1>
        Link 1
        Link 2
        \langle 1i \rangle Link 3 \langle /1i \rangle
      </nav>
    <article>
      <h3>This is an article header</h3>
      This is an opening section that also has a <a</p>
href="www.oaklandnorth.net>link to a website"</a>.
      Adding a second paragraphs for good measure
      <img src="photo.jpg" alt="A cat sleeping on some</pre>
newspapers">
      Finishing paragraph.
    </article>
  </body>
</html>
```

- 1. Make it readable
- 2. Give you visual cues when tags are not closed

```
<html>
  <head>
    <!-- metadata goes here -->
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  <body>
    <header>
     <h1>This is a h1 header</h1>
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     Finishing paragraph.
    </article>
  </body>
</html>
```

- 1. Make it readable
- Give you visual cues when tags are not closed
- Allows you to leave comments.

```
<html>
  <head>
   <!-- metadata goes here -->
  </head>
  <body>
   <header>
     <h1>This is a h1 header</h1>
     <h2>This is a subhead, which is wrapped in an h2</h2>
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- 1. Make it readable
- Give you visual cues when tags are not closed
- Allows you to leave comments.

```
<html>
  <head>
    <!-- metadata goes here -->
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     Adding a second paragraphs for good measure
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newspapers">
     Finishing paragraph.
    </article>
  </body>
</html>
```

Also notice how things are being formatted.

There is spacing and indentation to be aware of.

Let's take a closer look.

```
<html>
  <head>
   <!-- metadata goes here -->
 </head>
  <body>
   <header>
     <h1>This is a h1 header</h1>
     <h2>This is a subhead, which is wrapped in an h2</h2>
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href="www.oaklandnorth.net">link to a website</a>.
     Adding a second paragraphs for good measure
     <img src="photo.jpg" alt="A cat sleeping on some newspapers">
     Finishing paragraph.
   </article>
   <footer>
     Copyright @2022
   </footer>
  </body>
</html>
```

Here's an empty HTML page.

Ignore the fact that you might not know what these tags are. Let's look at how they are spaced

```
<!DOCTYPE html>
<html>
    <head>
        <!-- metadata goes here -->
        </head>
        <!-- stuff inside of body -->
        </body>
        </html>
```

<!DOCTYPE html>

All HTML documents have to start with this declaration. It lets the browser know that the page is an HTML document.

```
<!DOCTYPE html>
<html>
  <head>
    <!-- metadata goes here -->
  </head>
  <body>
    <!-- stuff inside of body -->
  </body>
</html>
```

This is followed by the <html> tag. It needs to wrap around the whole document.

It should have no indentation.

This is followed by the <html> tag. It needs to wrap around the whole document.

It should have no indentation.

Some text editors also give you a faint gray line that connects the opening and closing tags. It helps with lining up your document.

```
<!DOCTYPE html>
<html>
  <neaa>
    <!-- metadata goes here -->
  </head>
  <body>
    <!-- stuff inside of body -->
  </body>
</html>
```

Let's now look at the <head> tag.

```
<!DOCTYPE html>
<html>
  <head>
   <!-- metadata goes here -->
  </head>
  <body>
   <!-- stuff inside of body -->
  </body>
</html>
```

Let's now look at the <head> tag.

Why does does it have space in front of it?

```
<!DOCTYPE html>
<html>
  <head>
   <!-- metadata goes here -->
  </head>
  <body>
   <!-- stuff inside of body -->
  </body>
</html>
```

Let's now look at the <head> tag.

Why does does it have space in front of it?

Because it is a nested element inside of the httml> tag.

```
<!DOCTYPE html>
<html>
  <head>
   <!-- metadata goes here -->
  </head>
  <body>
   <!-- stuff inside of body -->
  </body>
</html>
```

Anytime something is nested inside of another tag, you should add 2-4 spaces (or click the tab key) to create the spacing.

Anytime something is nested inside of another tag, you should add 2-4 spaces (or click the tab key) to create the spacing.

Why is this necessary?

```
<!DOCTYPE html>
<html>
    <head>
        <!-- metadata goes here -->
        </head>
        <body>
            <!-- stuff inside of body -->
            </body>
        </html>
```

The browser does not care about spacing.

The browser does not care about spacing.

You can have a page set up like this and it would be able to build it correctly.

```
<!DOCTYPE html><html><head><!--
metadata goes here
--></head><body><!-- stuff inside of
body --></body></html>
```

BUT THIS IS HARD FOR A HUMAN TO READ (AND EDIT)!

```
<!DOCTYPE html><html><head><!--
metadata goes here
--></head><body><!-- stuff inside of
body --></body></html>
```

So why focus on spacing?

Remember, you are not just writing code for the browser. You are writing it for yourself and anyone else who might be collaborating with you now (or in the future!)

```
<!DOCTYPE html><html><head><!--
metadata goes here
--></head><body><!-- stuff inside of
body --></body></html>
```

So using correct spacing shows that you can be organized with your code and are being a thoughtful collaborator.

```
<!DOCTYPE html>
<html>
    <head>
        <!-- metadata goes here -->
        </head>
        <body>
            <!-- stuff inside of body -->
            </body>
        </html>
```

As you learn more HTML and start building pages, this HTML in a text editor will start looking less scary. You'll see how the text editor is helping you.

```
<html>
  <head>
   <!-- metadata goes here -->
 </head>
  <body>
   <header>
     <h1>This is a h1 header</h1>
     <h2>This is a subhead, which is wrapped in an h2</h2>
   </header>
   <nav>
     <u1>
       Link 1
       Link 2
       Link 3 
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   <article>
     <h3>This is an article header</h3>
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href="www.oaklandnorth.net">link to a website</a>.
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     <img src="photo.jpg" alt="A cat sleeping on some newspapers">
     Finishing paragraph.
   </article>
   <footer>
     Copyright @2022
   </footer>
  </body>
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<html>
 <head>
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     Adding a second paragraphs for good measure
     <img src="photo.jpg" alt="A cat sleeping on some newspapers">
     Finishing paragraph.
   </article>
   <footer>
     Copyright @2022
   </footer>
 </body>
</html>
```

Here are some best practices:

 Keep your <head> and <body> tags at the same indentation. They are your two structural anchors on the page

```
<head>
</head>
<body>
 <article>
 </article>
</body>
```

- Keep your <head> and <body> tags at the same indentation. They are your two anchors on the page
- 2. Inside of the <body>, anything that appears nested inside receives a second indentation.

```
<body>
  <header>
  </header>
  <nav>
  </nav>
  <article>
  </article>
  <footer>
  </footer>
</body>
```

- Keep your <head> and <body> tags at the same indentation. They are your two anchors on the page
- 2. Inside of the <body>, anything that appears nested inside receives a second indentation.
 - a. Look at the inside of <nav>

```
<nav>
  Link 1
  Link 2
  Link 3
</nav>
<article>
</article>
```

- Keep your <head> and <body> tags
 at the same indentation. They are
 your two anchors on the page
- Inside of the <body>, anything that appears nested inside receives a second indentation.
 - a. Look at the inside of <nav>
 - b. Look at the <h3> and inside of <article>

```
<article>
     <h3>This is an article header</h3>
     This is an opening section that also has a <a</p>
href="www.oaklandnorth.net">link to a website</a>.
     Adding a second paragraphs for good measure
     <img src="photo.jpg" alt="A cat sleeping on some newspapers">
     Finishing paragraph.
   </article>
```

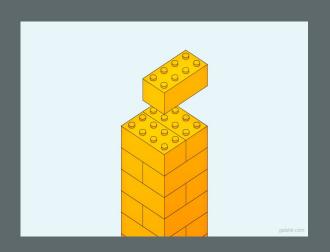
The text editor will show you proper nesting, some typos and make it all readable.

```
<html>
  <head>
   <!-- metadata goes here -->
  </head>
  <body>
   <header>
     <h1>This is a h1 header</h1>
     <h2>This is a subhead, which is wrapped in an h2</h2>
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     Adding a second paragraphs for good measure
     <img src="photo.jpg" alt="A cat sleeping on some newspapers">
     Finishing paragraph.
   </article>
   <footer>
     Copyright @2022
   </footer>
  </body>
</html>
```

Readable code

Making code readable is something you'll always be working on. Don't worry if you are so focused on your first runthrough that you forget about addings spacing and tabs. We all do this. Just take the time in the end to review your code.

Semantic HTML



Semantic HTML

What is it?

Both humans and the browsers read the document. But there are tags that make is easy for both the browser and the person reading to the code to know what is being built.

```
<!DOCTYPE html>
<html>
  <head>
    <!-- metadata goes here -->
  </head>
  <body>
    <header>
      <!--Stuff in header -->
    </header>
    <nav>
      <!--Stuff in nav -->
    </nav>
    <article>
      <!--Stuff in article -->
    </article>
    <footer>
      <!--Stuff in footer -->
    </footer>
  </body>
</html>
```

Semantic HTML

The **<head>** tag is read by the browser. It should include all your **metadata**.

This is not seen by readers. But it is necessary because the **metadata** tells the browser what it'll find on your page and how to process it.

```
<!DOCTYPE html>
<html>
  <head>
    <!-- metadata goes here -->
  </head>
  <body>
    <header>
      <!--Stuff in header -->
    </header>
    <nav>
      <!--Stuff in nav -->
    </nav>
    <article>
      <!--Stuff in article -->
    </article>
    <footer>
      <!--Stuff in footer -->
    </footer>
  </body>
</html>
```

The **metadata** in **head** can include the following:

```
<head>
  <meta charset="utf-8">
  <meta name="viewport"
content="width=width-device,initial-scale=1
">
  <title>First web page</title>
  <meta name="description" content="Page</pre>
showing all the HTML I have learned.">
  k rel="stylesheet" href="main.css">
</head>
```

The **metadata** in **head** can include the following:

<meta charset="utf-8">

This tag will specify the "character set" to the latest, most universal range of characters for many different languages.

```
<head>
  <meta charset="utf-8">
  <meta name="viewport"
content="width=width-device,initial-scale=1
">
  <title>First web page</title>
  <meta name="description" content="Page</pre>
showing all the HTML I have learned.">
  k rel="stylesheet" href="main.css">
</head>
```

The **metadata** in **head** can include the following:

<meta name="viewport"
content="width=width-device,
initial scale=1">

It will set your page up for mobile compatibility so that the initial scale is equivalent to the resolution of the device. By changing the initial-scale to a different number (1 is the same as 100%) may make your web page appear zoomed in.

```
<head>
  <meta charset="utf-8">
  <meta name="viewport"</pre>
content="width=width-device,initial-scale=1
">
  <title>First web page</title>
  <meta name="description" content="Page</pre>
showing all the HTML I have learned.">
  <link rel="stylesheet" href="main.css">
</head>
```

The **metadata** in **<head>** can include the following:

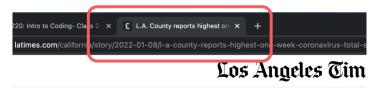
<title>First webpage</title>

This won't appear on the page itself, but rather at the top of the browser, and when people bookmark or link to the page. (And in some Google search results.)

```
<head>
  <meta charset="utf-8">
  <meta name="viewport"
content="width=width-device,initial-scale=1
">
  <title>First web page</title>
  <meta name="description" content="Page</pre>
showing all the HTML I have learned.">
  <link rel="stylesheet" href="main.css">
</head>
```

Semantic HTML: <head>

Top of browser tab





L.A. County reports highest onetotal of pandemic



Google search

https://www.latimes.com.x.california.x.story.x.2022-01-08.x.l-a-county-reports-highest-on...

L.A. County reports highest one-week coronavirus total ...

Los Angeles County continued to report a high number of new coronavirus cases Saturday amid an Omicron-fueled surge that has yet to abate. County public health officials announced they had recorded...

https://todaynewspost.com > news > us-news > l-a-county-reports-highest-one-week-cor---

L.A. County reports highest one-week coronavirus total ...

Los Angeles County continued to report a high number of new coronavirus cases Saturday amid an Omicron-fueled surge that has yet to abate. County public health officials announced they had recorded more than 200,000 new coronavirus cases over the past seven days, the highest one-week total since the pandemic began.

The **metadata** in **head** can include the following:

<meta name= "description"
content= "Page showing all the
HTML I have learned.">

This tag is an optional description you can add to the page that Google and other vendors use to knowing more about the page's purpose and function. Be clear, descriptive and concise.

```
<head>
  <meta charset="utf-8">
  <meta name="viewport"
content="width=width-device,initial-scale=1
">
  <title>First web page</title>
  <meta name="description" content="Page</pre>
showing all the HTML I have learned.">
  k rel="stylesheet" href="main.css">
</head>
```

Google search

- https://www.latimes.com > california > story > 2022-01-08 > l-a-county-reports-highest-on...
- L.A. County reports highest one-week coronavirus total ...

Los Angeles County continued to report a high number of new coronavirus cases Saturday amid an Omicron-fueled surge that has yet to abate. County public health officials announced they had recorded...

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Los Angeles County continued to report a high number of new coronavirus cases Saturday amid an Omicron-fueled surge that has yet to abate. County public health officials announced they had recorded more than 200,000 new coronavirus cases over the past seven days, the highest one-week total since the pandemic began.

The **metadata** in **head** can include the following:

<link rel="stylesheet"
href="main.css">

This tag optionally includes a separate CSS file that will style your page.

```
<head>
  <meta charset="utf-8">
  <meta name="viewport"
content="width=width-device,initial-scale=1
">
  <title>First web page</title>
  <meta name="description" content="Page</pre>
showing all the HTML I have learned.">
  <link rel="stylesheet" href="main.css">
</head>
```

Quick note:

There are additional versions of these tags to customize heds and deks on Twitter (Cards) and Facebook (Open Graph). They also have specialized tags for share images.

Facebook:

<meta property="og:title" content="First
webpage"/>

Twitter:

<meta name="twitter:title" content="First
webpage"/>

```
<head>
  <meta charset="utf-8">
  <meta name="viewport"
content="width=width-device,initial-scale=1
">
  <title>First web page</title>
  <meta name="description" content="Page</pre>
showing all the HTML I have learned.">
  k rel="stylesheet" href="main.css">
</head>
```

Semantic HTML: What the reader sees

The **<body>** tag includes everything seen by the reader!

Here is where most semantic HTML tags are used. They help structure the page, but also, let you and the browser know what is nested inside.

```
<html>
  <head>
    <!-- metadata goes here -->
  </head>
  <body>
    <header>
      <!--Stuff in header -->
    </header>
    <nav>
      <!--Stuff in nav -->
    </nav>
    <article>
      <!--Stuff in article -->
    </article>
    <section>
      <!--Stuff in section -->
    </section>
    <footer>
      <!--Stuff in footer -->
    </footer>
  </body>
</html>
```

Here are **some** examples....

```
</body>
```

Here are **some** examples....

 <header></header> (not the same as the <head> that includes your metadata.

```
</body>
```

```
<header>
<h1>Yoli Martinez</h1>
<h2>Page showing all the HTML I have learned.</h2
</header>
```

<header></header>

This appears on top of your webpage. It should be one of the first elements inside your body tags.

With this tag, you are signifying that inside the browser will find important identifying information about the page it will display. Such as a headline or description.

*h tags will be reviewed later!

Here are **some** examples....

- 1. <header></header> (not the same as the <head> that includes your metadata.
- 2. <nav></nav>

```
<html>
  <head>
    <!-- metadata goes here -->
  </head>
  <body>
    <header>
      <!--Stuff in header -->
    </header>
    <nav>
      <!--Stuff in nav -->
    </nav>
```

```
</body>
```

```
<nav>
  ul>
     Home
     Blog
     Portfolio
     Contact
  </nav>
```

<nav></nav>

The top navigation for your webpage! It can be a dropdown, shown horizontally across the page or tucked in a hamburger icon.

These
 and elements
 could be surrounded by a
 undescriptive <div> or even a
 section>, but by using <nav>,
 it is an identifying feature.
 Anyone reading or the browser
 will know this is the main
 navigation for you page.

Here are **some** examples....

- 1. <header></header> (not the same as the <head> that includes your metadata.
- 2. <nav></nav>
- 3. <article></article>

```
<html>
  <head>
    <!-- metadata goes here -->
  </head>
  <body>
    <header>
      <!--Stuff in header -->
    </header>
    <nav>
      <!--Stuff in nav -->
    </nav>
    <article>
      <!--Stuff in article -->
    </article>
```

```
</body>
```

<article>

<h3>Cranberry Spritzer Watermelon</h3>

Sulgarian carrot strawberry mango smoothie mediterranean tomato and basil blackberries cilantro lime vinaigrette roasted butternut squash crispy iceberg lettuce jalapeño bruschetta peppermint cherries salty sesame soba noodles double dark chocolate kimchi picnic fig arugula cashew salad spiced peppermint blast overflowing cookies ginger tofu peaches red grapes.

</article>

<article></article>

The <article> tag describes a piece of syndicated content (where content changes on an interval, like a news website.)

Most of your content will live here.

Here are **some** examples....

- 1. <header></header> (not the same as the <head> that includes your metadata.
- 2. <nav></nav>
- 3. <article></article>
- 4. <section></section>

```
<html>
  <head>
    <!-- metadata goes here -->
  </head>
  <body>
    <header>
      <!--Stuff in header -->
    </header>
    <nav>
      <!--Stuff in nav -->
    </nav>
    <article>
      <!--Stuff in article -->
    </article>
    <section>
      <!--Stuff in section -->
    </section>
  </body>
```

```
</body:
```

```
<section>
 <h3>Contact</h3>
 For freelance or job opportunities reach me via <a</p>
href="mailto:fakeemail@berkeley.edu">fakeemail@berkeley.edu</
a>.
 You can also reach me via social media
 <l
   Twitter: <a href=
"https://twitter.com/twitterName">@TwitterName</a>
    Facebook: <a href= "https://facebook.com/fbName"</pre>
>fbName</a>
 </section>
```

<section></section>

It's designed more for structuring static content that doesn't typically change much; think a "section" of a web page.

All sections typically come with an h tag, headlining what will be found inside

A **<section>** could wrap around your contact information or clips that don't change.

Here are **some** examples....

- 1. <header></header> (not the same as the <head> that includes your metadata.
- 2. <nav></nav>
- 3. <article></article>
- 4. <section></section>
- 5. <footer></footer>

```
<html>
  <head>
    <!-- metadata goes here -->
  </head>
  <body>
    <header>
      <!--Stuff in header -->
    </header>
    <nav>
      <!--Stuff in nav -->
    </nav>
    <article>
      <!--Stuff in article -->
    </article>
    <section>
      <!--Stuff in section -->
    </section>
    <footer>
      <!--Stuff in footer -->
    </footer>
  </body>
</html>
```

```
<footer>
    ul>
        Copyright @2022
        Subscribe to newsletter
    <img src= "logo.jpg" alt= "brand logo"/>
</footer>
```

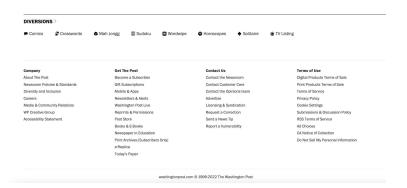
<footer></footer>

It is the last element in your webpage. It can include copyright, legal info, sitemap and related links.

Most company pages have footers as well as news orgs.

HTML Document: Inside <body>









As we'll learn later when working with CSS, being as descriptive as possible is helpful for you and for those loading your page.

"One of the best accessibility aids a screen reader user can have is an excellent content structure with headings, paragraphs, lists, etc." Read more:

https://developer.mozilla.org/en-US/docs/ s/Learn/Accessibility/HTML

```
<html>
  <head>
    <!-- metadata goes here -->
  </head>
  <body>
    <header>
      <!--Stuff in header -->
    </header>
    <nav>
      <!--Stuff in nav -->
    </nav>
    <article>
      <!--Stuff in article -->
    </article>
    <section>
      <!--Stuff in section -->
    </section>
    <footer>
      <!--Stuff in footer -->
    </footer>
  </body>
</html>
```

Hierarchy

Hierarchy



H tags

Typically, h tags represent the heading of a page or section.

Hierarchy



H tags

Like most HTML elements, they need an opening and closing tag.

- <h1>This is a hed</h1>
- <h2>This is a hed</h2>
- <h3>This is a hed</h3>
- <h4>This is a hed</h4>
- <h5>This is a hed</h5>
- <h6>This is a hed</h6>

H tags

There are 6 variations to pick from. They are ordered from most important to least important heading on your page.

Most websites don't use anything past the h3 or h4 tags.

- <h1>This is a hed</h1>
- <h2>This is a hed</h2>
- <h3>This is a hed</h3>
- <h4>This is a hed</h4>
- <h5>This is a hed</h5>
- <h6>This is a hed</h6>

H tags

A page is only allowed one <h1> tag. It's usually your headline/title.

Tags have to used in hierarchical order. You're telling the browser which text matters. You can decide if the <h2> is your dek.

<h3> can be around all your subheads/section names (if you have any)

- <h1>This is a hed</h1>
- <h2>This is a hed</h2>
- <h3>This is a hed</h3>
- <h4>This is a hed</h4>
- <h5>This is a hed</h5>
- <h6>This is a hed</h6>

H tags

Even without CSS, the h tags come with a bit of built-in styling. <h1> will look bigger than <h2>'s and so on.

The tags have to be used in order. You cannot skip to an h4 from an h2. You have to use a h3 before using the h4.

Let's look at the h tags in action. Double click the htags.html file This should open it in your browser.

Review

Here is a very simple webpage.

```
<html>
 <!-- READ BY THE BROWSER -->
 <head>
   <meta charset="utf-8">
   <meta name="viewport" content="width=width-device, initial-scale-1">
   <title>First webpage</title>
   <meta name="description" content="Page showing all the HTML I have learned.">
   <link rel="stylesheet" href="main.css">
 </head>
 <!-- SEEN BY THE READER -->
 <body>
    <header>
     <h1>Yoli Martinez's first web page.</h1>
     <h2>Page showing all the HTML I have learned.</h2>
    </header>
    <nav>
     <u1>
       Home
       Blog
       Work Samples
     </nav>
   <article>
     <h3>Cranberry Spritzer Watermelon</h3>
     Sulgarian carrot strawberry mango smoothie mediterranean tomato and basil
blackberries cilantro lime vinaigrette.
     Butternut squash crispy iceberg lettuce jalapeño bruschetta
peppermint.
     <img src="photo.jpg" alt="A cat sleeping on some newspapers">
   </article>
   <footer>
     Copyright @2022
   </footer>
 </body>
</html>
```

Here is a very simple webpage.

We have the <head> with the metadata (It's read by the browser)

```
<html>
 <!-- READ BY THE BROWSER -->
   <meta charset="utf-8">
   <meta name="viewport" content="width-width-device, initial-scale-1">
   <meta name="description" content="Page showing all the HTML I have learned.">
   <link rel="stylesheet" href="main.css">
  <!-- SEEN BY THE READER -->
 <body>
    <header>
     <h1>Yoli Martinez's first web page.</h1>
     <h2>Page showing all the HTML I have learned.</h2>
    </header>
    <nav>
     <u1>
       Home
       Blog
       Work Samples
     </nav>
   <article>
     <h3>Cranberry Spritzer Watermelon</h3>
     Sulgarian carrot strawberry mango smoothie mediterranean tomato and basil
blackberries cilantro lime vinaigrette.
     Butternut squash crispy iceberg lettuce jalapeño bruschetta
peppermint.
     <img src="photo.jpg" alt="A cat sleeping on some newspapers">
   </article>
    <footer>
     Copyright @2022
   </footer>
 </body>
</html>
```

Here is a very simple webpage.

We have the <head> with the metadata (It's read by the browser)

Followed by the **<body>** with all the information the reader will see.

```
<html>
  <!-- READ BY THE BROWSER -->
 <head>
    <meta charset="utf-8">
   <meta name="viewport" content="width=width-device, initial-scale-1">
   <title>First webpage</title>
   <meta name="description" content="Page showing all the HTML I have learned.">
   <link rel="stylesheet" href="main.css">
 </head>
  <!-- SEEN BY THE READER -->
 <body>
   <header>
     <h1>Yoli Martinez's first web page.</h1>
     <h2>Page showing all the HTML I have learned.</h2>
   </header>
   <article>
     <h3>Cranberry Spritzer Watermelon</h3>
     >Bulgarian carrot strawberry mango smoothie mediterranean tomato and basil
blackberries cilantro lime vinaigrette.
     Butternut squash crispy iceberg lettuce jalapeño bruschetta
     <img src="photo.jpg" alt="A cat sleeping on some newspapers">
   </article>
   <footer>
     Copyright @2022
 </body>
</html>
```

1. <head> is always above <body> tags

```
<html>
  <head>
   <meta charset="utf-8">
   <meta name="viewport" content="width-width-device, initial-scale-1">
   <title>First webpage</title>
   <meta name="description" content="Page showing all the HTML I have learned.">
   <link rel="stylesheet" href="main.css">
  </head>
  <!-- SEEN BY THE READER -->
 <body>
    <header>
     <h1>Yoli Martinez's first web page.</h1>
     <h2>Page showing all the HTML I have learned.</h2>
   </header>
    <nav>
     <u1>
       Home
       Blog
       Work Samples
     </nav>
   <article>
     <h3>Cranberry Spritzer Watermelon</h3>
     Sulgarian carrot strawberry mango smoothie mediterranean tomato and basil
blackberries cilantro lime vinaigrette.
     Butternut squash crispy iceberg lettuce jalapeño bruschetta
peppermint.
     <img src="photo.jpg" alt="A cat sleeping on some newspapers">
   </article>
   <footer>
     Copyright @2022
   </footer>
 </body>
</html>
```

- 1. <head> is always above <body> tags
- 2. <header> is the first tag within <body>

```
<html>
 <!-- READ BY THE BROWSER -->
 <head>
    <meta charset="utf-8">
   <meta name="viewport" content="width=width-device, initial-scale-1">
   <title>First webpage</title>
   <meta name="description" content="Page showing all the HTML I have learned.">
   <link rel="stylesheet" href="main.css">
 </head>
 <!-- SEEN BY THE READER -->
 < hody>
    <header>
     <h1>Yoli Martinez's first web page.</h1>
     <h2>Page showing all the HTML I have learned.</h2>
   <header>
    <nav>
     <u1>
       Home
       Blog
       Work Samples
     </nav>
   <article>
     <h3>Cranberry Spritzer Watermelon</h3>
     Sulgarian carrot strawberry mango smoothie mediterranean tomato and basil
blackberries cilantro lime vinaigrette.
     Butternut squash crispy iceberg lettuce jalapeño bruschetta
peppermint.
     <img src="photo.jpg" alt="A cat sleeping on some newspapers">
   </article>
    <footer>
     Copyright @2022
   </footer>
 </body>
</html>
```

- 1. <head> is always above <body> tags
- <header> is the first tag within <body>
- 3. If there is a navigation component, then <nav> comes next.

```
<html>
 <!-- READ BY THE BROWSER -->
 <head>
    <meta charset="utf-8">
   <meta name="viewport" content="width=width-device, initial-scale-1">
   <title>First webpage</title>
   <meta name="description" content="Page showing all the HTML I have learned.">
   <link rel="stylesheet" href="main.css">
 </head>
  <!-- SEEN BY THE READER -->
 <body>
    <header>
     <h1>Yoli Martinez's first web page.</h1>
     <h2>Page showing all the HTML I have learned.</h2>
    <nav>
     <u1>
       Home
       Blog
       Work Samples
     </nav>
    <article>
     <h3>Cranberry Spritzer Watermelon</h3>
     Sulgarian carrot strawberry mango smoothie mediterranean tomato and basil
blackberries cilantro lime vinaigrette.
     Butternut squash crispy iceberg lettuce jalapeño bruschetta
peppermint.
     <img src="photo.jpg" alt="A cat sleeping on some newspapers">
   </article>
    <footer>
     Copyright @2022
   </footer>
 </body>
</html>
```

- 1. <head> is always above <body> tags
- <header> is the first tag within <body>
- 3. If there is a navigation component, then <nav> comes next.
- 4. Inside of your article, follow the h tag order.

```
<html>
 <!-- READ BY THE BROWSER -->
 <head>
   <meta charset="utf-8">
   <meta name="viewport" content="width=width-device, initial-scale-1">
   <title>First webpage</title>
   <meta name="description" content="Page showing all the HTML I have learned.">
   <link rel="stylesheet" href="main.css">
 </head>
 <!-- SEEN BY THE READER -->
 <body>
   <header>
     <h1>Yoli Martinez's first web page.</h1>
     <h2>Page showing all the HTML I have learned.</h2>
   </header>
   <nav>
     <u1>
       Home
       Blog
       Work Samples
     <article>
     <h3>Cranberry Spritzer Watermelon</h3>
     Sulgarian carrot strawberry mango smoothie mediterranean tomato and basil
plackberries cilantro lime vinaigrette.
     Butternut squash crispy iceberg lettuce jalapeño bruschetta
peppermint.
     <img src="photo.jpg" alt="A cat sleeping on some newspapers">
   </article>
   <tooter>
     Copyright @2022
   </footer>
 </body>
</html>
```

- 1. <head> is always above <body> tags
- <header> is the first tag within <body>
- 3. If there is a navigation component, then <nav> comes next.
- 4. Inside of your article, follow the h tag order.
- <footer> will always close out your page.

```
<html>
 <!-- READ BY THE BROWSER -->
 <head>
   <meta charset="utf-8">
   <meta name="viewport" content="width=width-device, initial-scale-1">
   <title>First webpage</title>
   <meta name="description" content="Page showing all the HTML I have learned.">
   <link rel="stylesheet" href="main.css">
 </head>
 <!-- SEEN BY THE READER -->
 <body>
   <header>
     <h1>Yoli Martinez's first web page.</h1>
     <h2>Page showing all the HTML I have learned.</h2>
   </header>
   <nav>
     <u1>
       Home
       Blog
       Work Samples
     </nav>
   <article>
     <h3>Cranberry Spritzer Watermelon</h3>
     Sulgarian carrot strawberry mango smoothie mediterranean tomato and basil
blackberries cilantro lime vinaigrette.
     Butternut squash crispy iceberg lettuce jalapeño bruschetta
peppermint.
     <img src="photo.jpg" alt="A cat sleeping on some newspapers">
   </article>
   <footer>
     Copyright @2022
   </footer>
</html>
```

Resources

- Read more about HTML tags:

https://developer.mozilla.org/en-US/docs/Web/HTML/Element

https://www.w3schools.com/TAGS/default.ASP

https://developer.mozilla.org/en-US/docs/Learn/Accessibility/HTML

Dive into meta tags for social:

https://css-tricks.com/essential-meta-tags-social-media/

https://developer.mozilla.org/en-US/docs/Learn/HTML/Introduction to HTML/The head metadata in HTML

Typical mistake in your code:

1. Unclosed tags:

<h1>This is not closed<h1>

Typical mistake in your code:

- 1. Unclosed tags:
 - <h1>This is not closed<h1>
- 2. Unclosed quotation marks:
 - Berkeley

Typical mistake in your code:

- 1. Unclosed tags:
 - <h1>This is not closed<h1>
- 2. Unclosed quotation marks:
 - a href="www.berkeley.edu">Berkeley.edu
- 3. Using a combination of single and double quotes:
 - Berkeley

Remember, things break all the time.

Eventually your eye will get better at catching typos or unclosed tags. Sometimes it takes another set of eyes, and that's okay. Sublime and other text editors are pretty good at catching unclosed tags and pointing out mistakes.

Let's try to find the mistakes in the following...

```
<!DOCTYPE html>
<html>
      <head>
            <meta charset="utf-8'>
            <meta name="viewport" content= "width=width-device, initial-scale-1">
            <title>First Webpage<title>
            <meta "description" content="Page showing all the HTML I have learned.">
            <link rel="stylesheet" href="main.css">
      </head>
</html>
```

```
<!DOCTYPE html>
<html>
      <head>
            <meta charset="utf-8">
            <meta name="viewport" content= "width=width-device, initial-scale-1">
            <title>First Webpage</title>
            <meta name="description" content="Page showing all the HTML I have learned.">
            <link rel="stylesheet" href="main.css">
      </head>
</html>
```

```
<body>
 <header>
        <h1>Yoli Martinez</h2>
        <h2>Page showing all the HTML I have learned<h2>
 </header>
 <article>
        <h3>Links to my work</h3>
        <h4>BART increases fare</h4>
        <img src= "storyPhoto.jpg' alt= "Platform at 12th St. Station" >
        < A story about the 25% increase in fare for commuters. I interviewed a BART spokesperson and morning commuters in Oakland.</p>
        <a "https://oaklandnorth.net/2022/01/04/story-heading" >OaklandNorth, Jan., 2022</a>
 </article>
</body>
```

```
<body>
 <header>
        <h1>Yoli Martinez</h1>
        <h2>Page showing all the HTML I have learned</h2>
 </header>
 <article>
        <h3>Links to my work</h3>
        <h4>BART increases fare</h4>
        <img src= "storyPhoto.jpg" alt= "Platform at 12th St. Station" />
        < A story about the 25% increase in fare for commuters. I interviewed a BART spokesperson and morning commuters in Oakland.</p>
        <a href="https://oaklandnorth.net/2022/01/04/story-heading">OaklandNorth, Jan., 2022</a>
 </article>
</body>
```



Note to
lecturers:
pause Zoom
recording

Note to lecturers: resume Zoom recording

Sorry all, this can sound boring, but IT IS SO IMPORTANT.

So many things can go wrong, disappear, unlink or appear broken if your file folders are not set up properly.

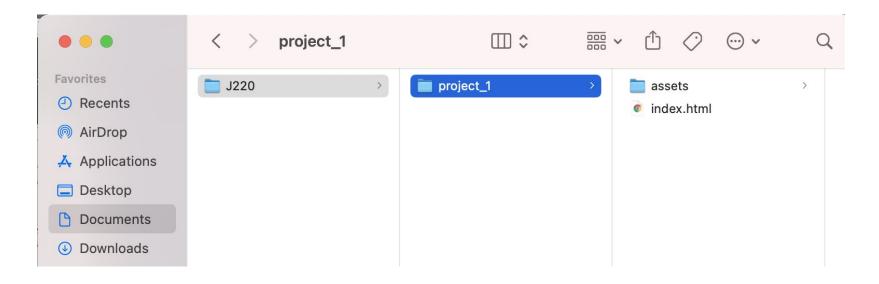
So here are some basic rules for this class:

 For this class, create a "J220" folder in your main "Documents" folder. Never, never, never, never just save html and css files onto your desktop/download/easily misplaced folder.

Inside of you "J220" folder, create a new folder, called "project_1"

Create another folder in your "project_1" folder called "assets." This is where you will save all your images.

This is what your files should look like



So now let's take a look at our tag again

So now let's take a look at our tag again

The "src" attribute let's the browser know where to find the image.

In HTML, you use periods and slashes to let the browser know how to navigate through your file structure.

What this gets interpreted as is:

"./" - in this directory

What this gets interpreted as is:

"./" - in this directory

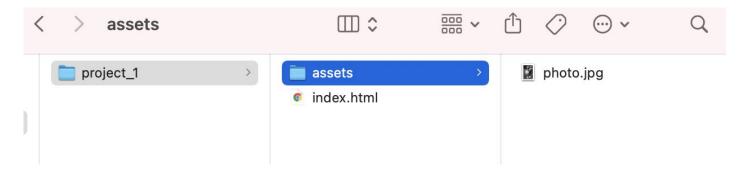
"assets/" - in folder with this name

What this gets interpreted as is:

"./" - in this directory

"assets/" - in folder with this name

You'll find a file with this name.



This matter because you can end up with a web page with photos, audio or video. And you'd want to organize each of those asset types into their own folder.

In-class assignment

Create a simple portfolio using the template here:

https://docs.google.com/document/d/1OFcofDrlWkJUf8monvQEUX 2RRxzKFTcn o1rVm5IRDs/edit (will drop this link into our Slack channel)

You can work on building the HTML with the rest of time in class.

Homework

Reading

Assignment #2 on bCourses (write the HTML for your simple portfolio)