J220
Coding for Journalists

LECTURERS
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Download lecture0328examples.zip (will drop link in Slack).

Take attendance in iClicker.com.

start Zoom recording + captions

Agenda

Announcements

Homework review: HTML/CSS

Intro to JavaScript

BREAK

In-class assignment

Homework and extra credit

Announcements

- Reminder of [in-class critique signups](). Critiques begin on April 11.

- **April 4 (next week):** Guest lecturer Katlyn Alo (Washington Post news engineer)

- **April 25:** Study Hall
  - [Survey for final lecture + food survey]()

Homework Review

Review

indenting

alt text

using multiple classes

Using italic styles

Using <a>

<div> with no attributes

Lecture 02-14: Slides 15 to 17

What questions do you have?

Review

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Lecture 01-24: Slides 56 to 61

Lecture 03-07: Slides 50 to 52

What questions do you have?

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- [Lecture 02-07](): Slide 58
  - Example: `lecture0207/intro_css.html`
- [Recording 2022-02-07]() at 1:10:35

What questions do you have?

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Don't use `<em>` and `<i>` indiscriminately just because they show up in browsers as italicized text.

- Use `<em>` when you want to emphasize words in text.

- Use `<i>` for foreign words (if you want), thoughts, or text that refers to the definition of a word.

- Use `<cite>` for titles of works like movies, shows, magazines, etc.

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1. I'm *really* hungry.
2. He was very charming and had a certain *je ne sais quoi*.
3. I thought to myself, *Something smells weird*.
4. Her boat was called the *Ocean Splendor*.
5. What is the definition of the word *semantic*?
6. Their article was published in *The New Yorker*.
7. I binge-watched the new season of *Bridgerton* over the weekend.

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<em> 1. I'm *really* hungry.

<i> 2. He was very charming and had a certain *je ne sais quoi*.

<i> 3. I thought to myself, *Something smells weird*.

<i> 4. Her boat was called the *Ocean Splendor*.

<i> 5. What is the definition of the word *semantic*?

<cite> 6. Their article was published in *The New Yorker*.

<cite> 7. I binge-watched the new season of *Bridgerton* over the weekend.

Review

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If you are just styling something with an italic font (like a headline), then do not use `<em>` or `<i>`. Instead, use CSS.

HTML

```html
<h3 class="related">Why changing the clock for daylight saving feels like jetlag</h3>
<p>Every spring, I feel like I'm in the wrong time zone...</p>
```

CSS

```css
.related {
  font-style: italic;
}
```

What questions do you have?

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indenting

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<div> with no attributes

You can use <a> around blocks of elements.

```html
<a href="https://journ220.github.io">
  <article>
    <h3>Journalism 220</h3>
    <p>The class website for J220.</p>
  </article>
</a>
```

Review

indenting

alt text

using multiple classes

Using italic styles

Using <a>

<div> with no attributes

You can use <a> around blocks of elements.

But there are some drawbacks to that method.

1. Screen readers will read all the text within the link.
2. You can't insert another link within the link.

If none of that is a problem, then you can wrap a block of elements with **<a>**!

What questions do you have?

Review

indenting

alt text

using multiple classes

Using italic styles

Using <a>

<div> with no attributes

Many of you are using `<div>` without any attributes, like so:

```html
<div>
  <header>
    <h1>March 28 lecture examples</h1>
  </header>
</div>
```

Don't do this!

Review

indenting

alt text

using multiple classes

Using italic styles

Using <a>

<div> with no attributes

You should use `<div>` with some kind of attribute, like `class` or `id` (among others).

```html
<div class="col-12">
  <header>
    <h1>March 28 lecture examples</h1>
  </header>
</div>
```

Review

indenting

alt text

using multiple classes

Using italic styles

Using <a>

<div> with no attributes

If you don't have an attribute, then you do not most likely do not need `<div>` at all — delete it.

```
<header>
    <h1>March 28 lecture examples</h1>
</header>
```

What questions
do you have?

Intro to JavaScript

JavaScript

placing `main.js` file

comments

`alert()`

select and change
an element

interactivity

debugging with
`console.log()`

element methods

Use JavaScript to implement
scrollytellers, provide interactivity on a
page, or otherwise make a website
dynamic.

Learning JavaScript is much harder than
learning HTML/CSS. All assignments will
be extra credit.

What questions do you have?

JavaScript

placing `main.js` file

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You can place `main.js` in your assets folder.

Include `main.js` in `index.html` by placing the following line in between the `<head>` tag or right before the closing `</body>`:

```
<script defer src="./assets/main.js"></script>
```

Open `lecture0328examples/`

What questions do you have?

JavaScript

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Use **two forward slashes** for a single-line comment or a **slash and asterisk combo** for multi-line comments.

```javascript
// Here's a comment. It will only work on one line.
// If you write a new line of text, that text
// will not be commented unless you start the new
// lines with two slashes.

/*
This is a comment with multiple line breaks.
See?
Everything within the slash-and-asterisk combo will be
commented out.
*/
```

JavaScript

placing `main.js` file
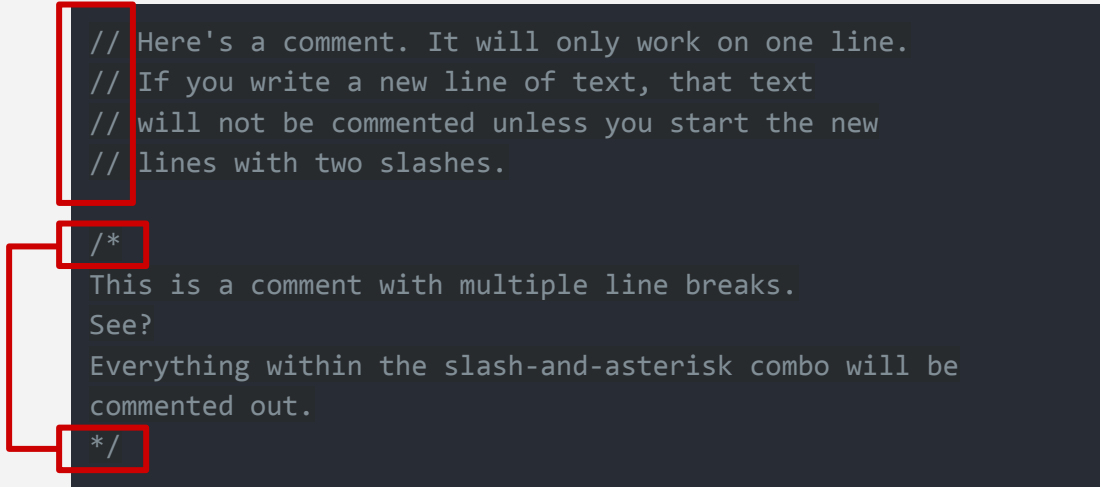
comments

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```

JavaScript

placing `main.js` file

comments
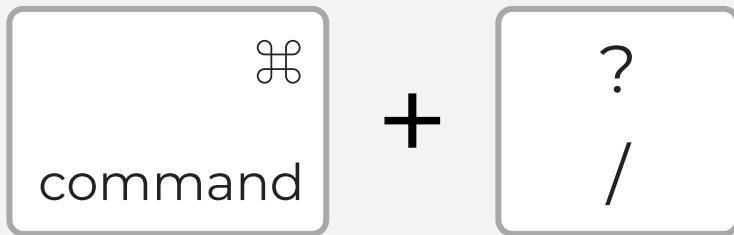
`alert()`

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Sublime Text tip: Use
⌘command – forward slash
to comment out code. You can also
select multiple lines of code and
comment them all out at once.

⌘
command
+
?
/

Try it out in `main.js`

What questions do you have?

JavaScript

placing `main.js` file

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`console.log()`

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Our first line of JavaScript!

Write the following in `main.js`:

```javascript
// Open a dialog box
alert("Hello, world!");
```

Open `main.js`

What questions do you have?

BREAK

Meet back in 15 minutes

Note to self: Pause Zoom recording

restart Zoom recording

JavaScript

placing `main.js` file

comments

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Knowing the difference between HTML tags, `class`, and `id` is very important in JavaScript.

Remember: use `class` when you want to apply a style to multiple elements. Use `id` when you want to style ONE element. Use tags when you want to style every element using that tag.

JavaScript

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Selecting an element by ID:

```
document.getElementById(id)
```

Change or access the element with the various methods listed here:
https://developer.mozilla.org/en-US/docs/Web/API/Document

Open `elementById` folder

What questions do you have?

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Use an event listener to make something happen when you interact with an element. Below, we "listen" for a "`click`" on an element with an ID of "`alert`":

```javascript
document.getElementById('alert').addEventListener('click',
function(event) {
  alert('Hello!');
});
```

We call the functions inside the event listeners "**event handlers**."

Open `addEventListener` folder

What questions do you have?

JavaScript

placing `main.js` file

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`alert()`

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interactivity

**debugging with
`console.log()`**

element methods

Try out the different lines of code and see
what happens:

```javascript
console.log(document.getElementById('alrt'));
console.log(document.getElementById('alert'));
console.log(document.getElementById('alert').clientWidth);
console.log(document.getElementById('alert').clientHeight);
```

Open `addEventListener` folder

JavaScript

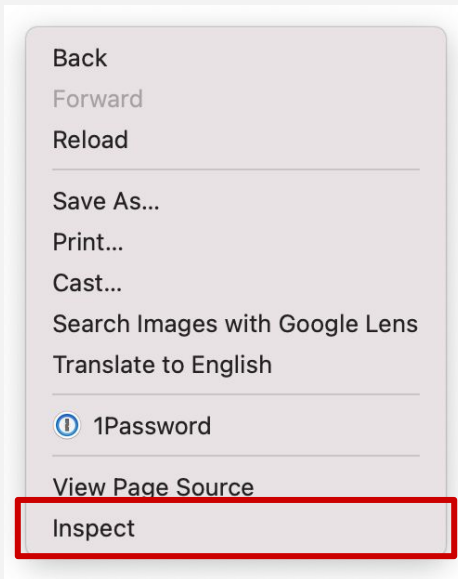placing `main.js` file

comments

`alert()`

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an element

interactivity

**debugging with
`console.log()`**

element methods

Right-click in your browser window and
select **Inspect**:


```
Back
Forward
Reload

Save As...
Print...
Cast...
Search Images with Google Lens
Translate to English

ⓘ 1Password

View Page Source
Inspect
```

JavaScript
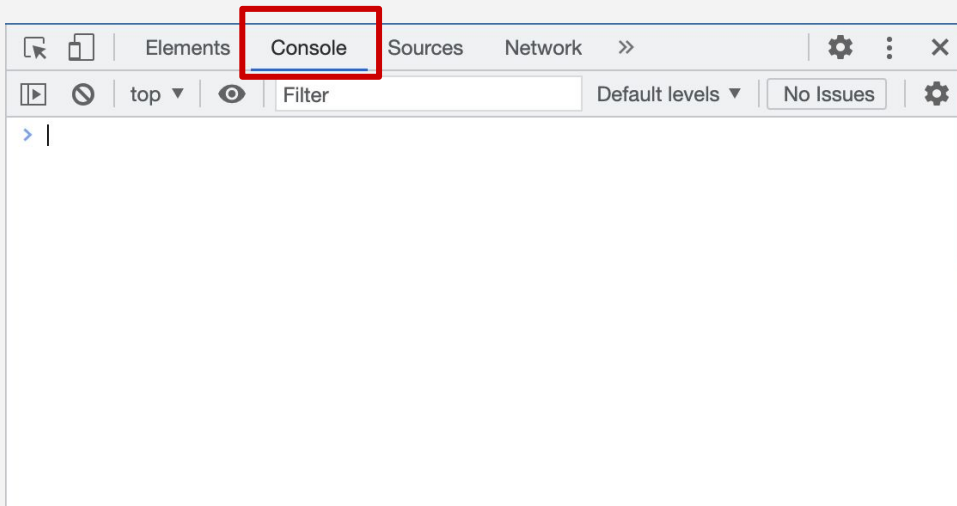
placing `main.js` file

comments

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In the resulting panel, click on the **Console** tab:

What questions do you have?

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All the methods you can use to access
and/or change elements are listed here:

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

Open links

JavaScript

placing `main.js` file

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Some recommendations for the in-class exercises:

```
element.body.style.backgroundColor
element.body.style.color
element.innerHTML
element.innerText
element.clientWidth
element.clientHeight
```

Homework and **Extra Credit**

Due April 3: Extra Credit Exercise #1 (JavaScript)

Due April 10: Assignment #8 (wireframes)

In-class exercises

You will set up your own folders with your own `index.html` and `main.js` files. Add one button and one image to index.html.

1. When you click on the button, the background color and font color of the page changes.
2. When you click on the image, output the image's width and height using `console.log()`.

Note to students: Please help close the windows on your way out

end Zoom recording