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# J220
# Coding for Journalists

LECTURER
Soo Oh

PROMPTS

Download
**lecture0318examples.zip** from
https://journ233.github.io

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# Zoom screenshare + start Zoom recording

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# Agenda

Announcements

Homework review + how much time

Responsive layouts and Media queries

In-class exercise

**BREAK**

HTML/CSS frameworks

Homework

PRELIMINARY SLIDES PRELIMINARY SLIDES PRELIMINARY SLIDES PRELIMINARY SLIDES PRELIMINARY SLIDES PRELIMINARY SLIDES PRELIMINARY SLIDES

# Announcements

Spring break! No class next week

Office hours

Anonymous midterm survey

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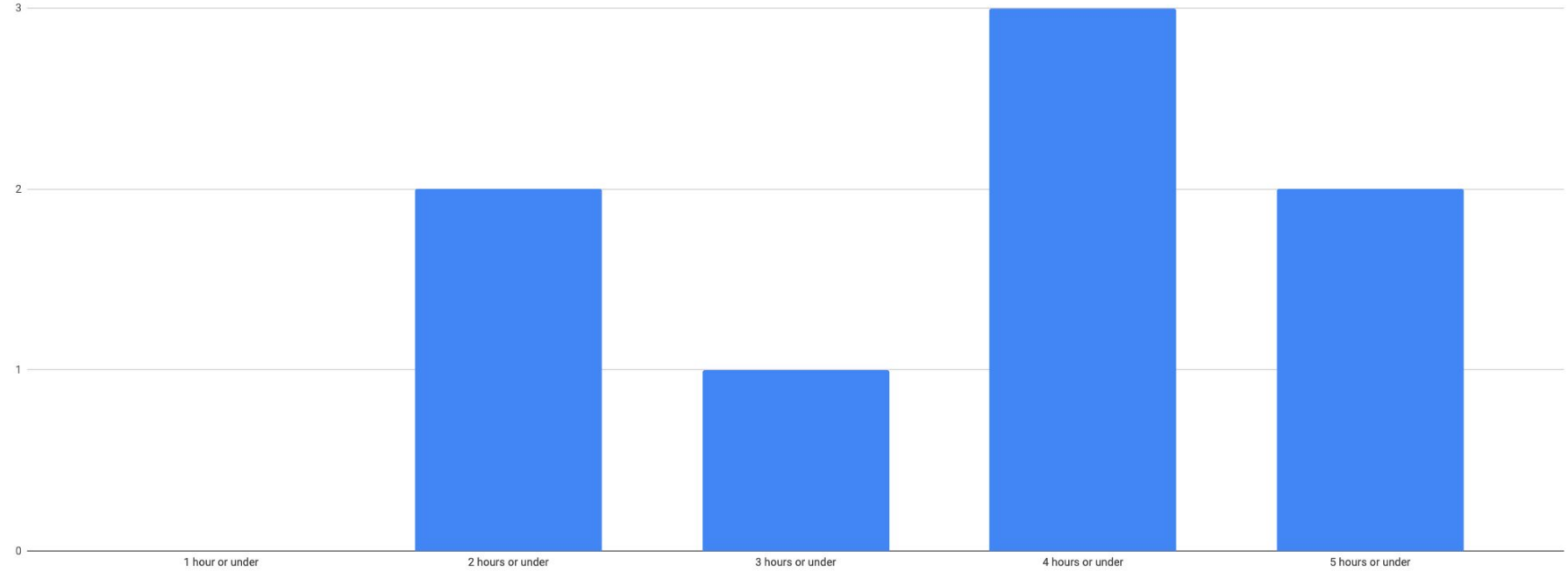
# How much time spent on J220

Week of 03-11: Number of students grouped by hours spent outside of lecture and office hours



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# Responsive layouts: Thinking inside the box(es)...

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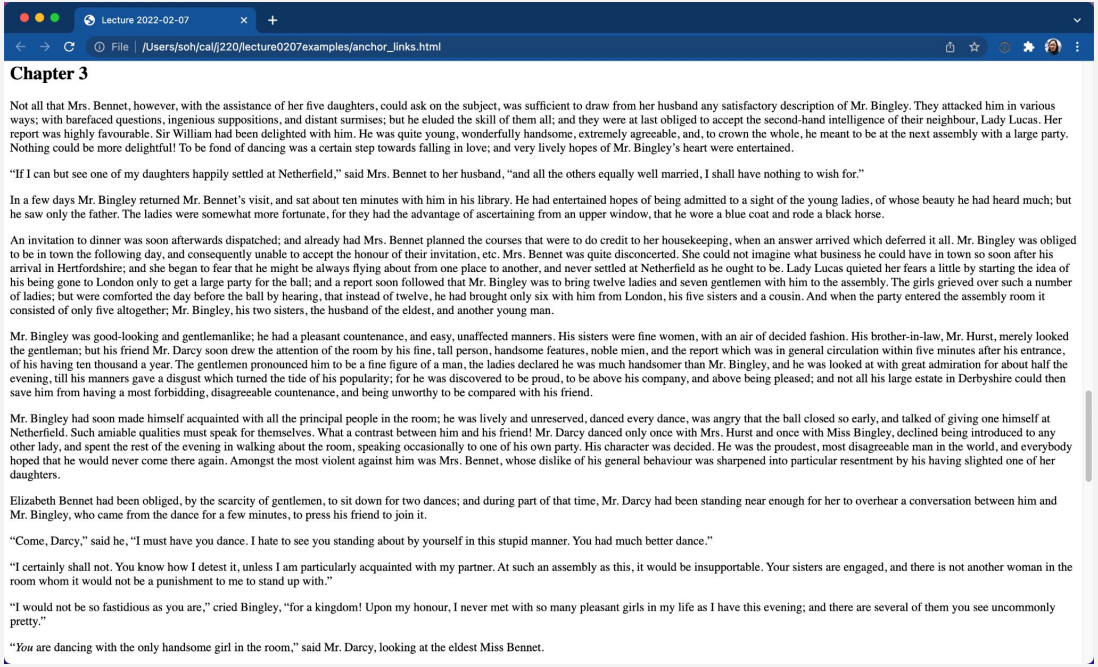
# Long text is hard to read




Screenshot of browser showing the text of Jane Austen's *Pride and Prejudice*.

The way the text extends from edge to edge of the browser makes it hard to read.

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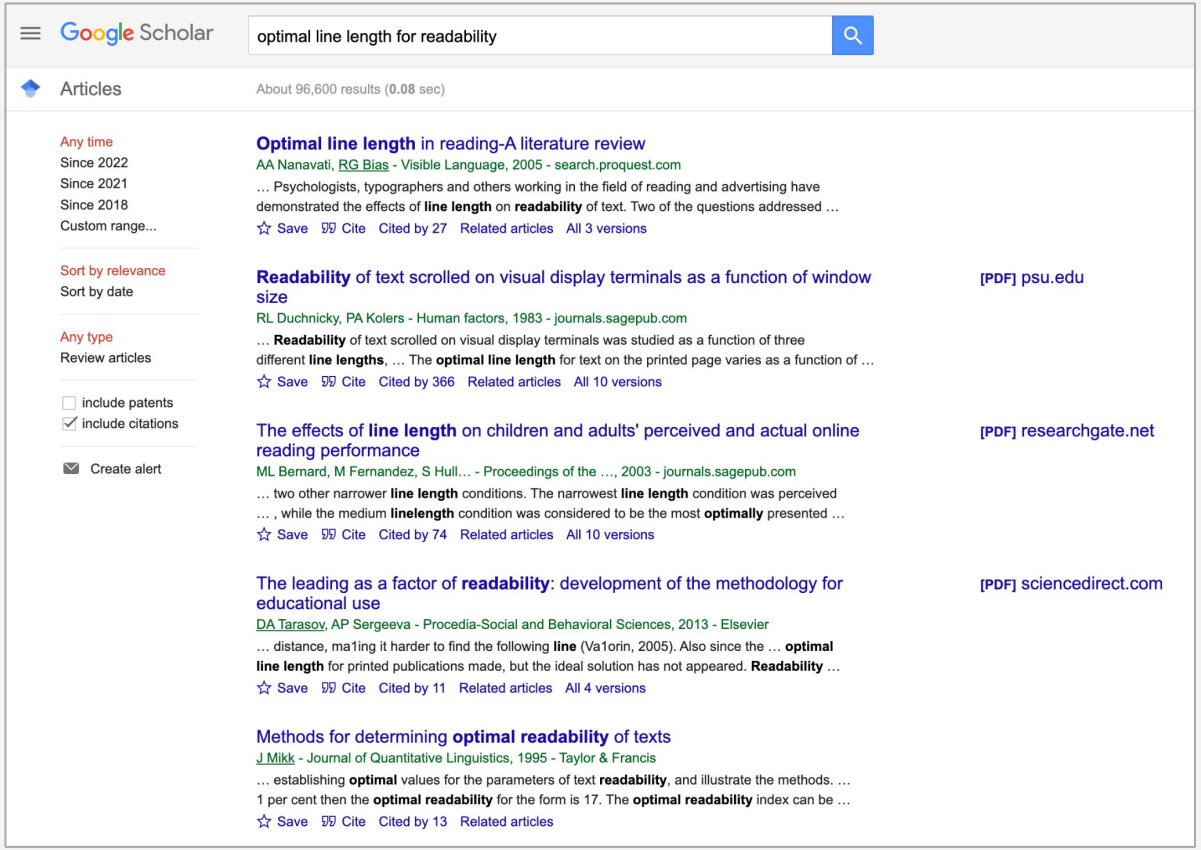


Screenshot of Google Scholar showing results for “optimal line length for readability”

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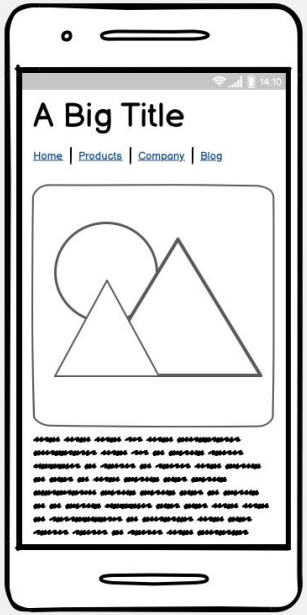

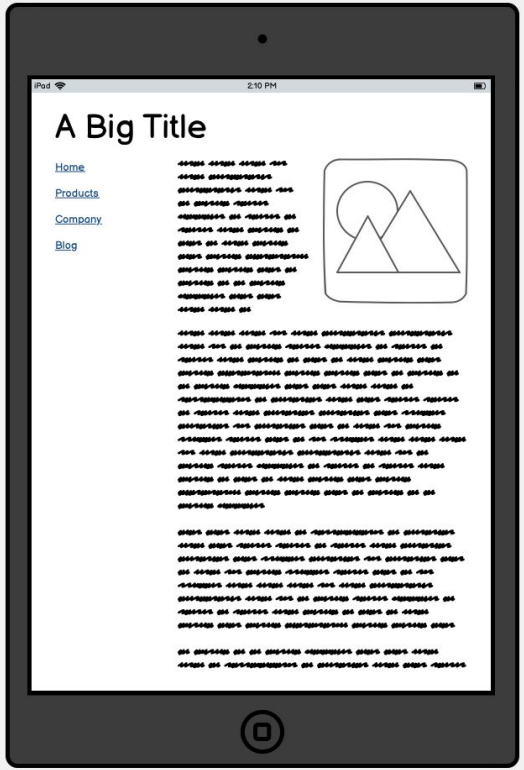

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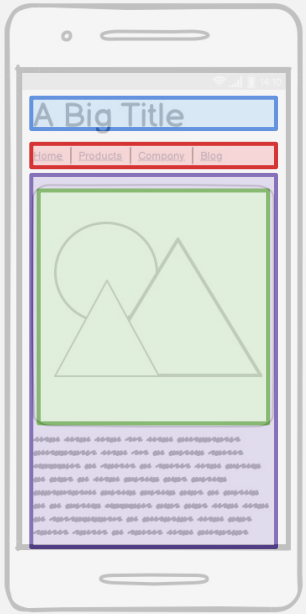

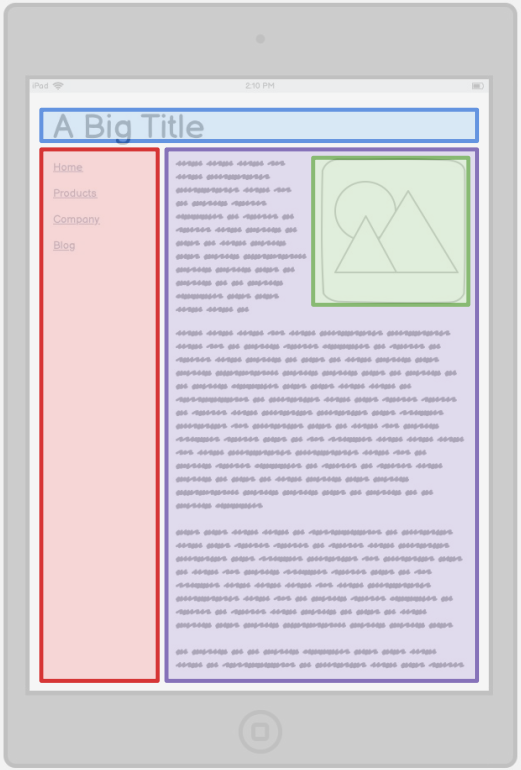

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# In-class activity I: Layouts

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# Media queries

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# media queries

syntax

principles

more complex queries

## What are media queries?

“Media queries allow you to apply CSS styles depending on a device's general type (such as print vs. screen) or other characteristics such as screen resolution or browser viewport width.”

Source

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# media queries

syntax

principles

more complex queries

```
h1 {
  font-size: 2rem;
}

@media (min-width: 600px) {
  h1 {
    font-size: 3rem;
  }
}
```

This is a very basic media query that changes the font-size on your site's headline based on your browser width.

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# media queries

syntax

principles

more complex queries

```
h1 {
  font-size: 2rem;
}

@media (min-width: 600px) {
  h1 {
    font-size: 3rem;
  }
}
```

This is a CSS **at-rule**. (It's just something to memorize.) Here, **`min-width`** defines the minimum width of the browser window. **Don't forget to use the parentheses!**

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# media queries

syntax

principles

more complex queries

```
h1 {
  font-size: 2rem;
}

@media (min-width: 600px) {
  h1 {
    font-size: 3rem;
  }
}
```

We define our **h1** font-size twice. First is our default value at **2rem**. Then, nested within the media query, is another value at **3rem**.

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# media queries

syntax

principles

more complex queries

```
h1 {
  font-size: 2rem;
}

@media (min-width: 600px) {
  h1 {
    font-size: 3rem;
  }
}
```

**What this all means:** The **<h1>** element will appear **2rem**, until the screen reaches a minimum width of **600 pixels**. At 600+ pixels, the font-size becomes **3rem**.

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# media queries

syntax

principles

more complex queries

```
h1 {
  font-size: 2em;
}

@media (min-width: 600px) {
  h1 {
    font-size: 3em;
  }
}
```

Just like **`min-width`**, there's also **`max-width`**. But **"mobile-first"** means that you're designing around **`min-width`**, not **`max-width`**.

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# media queries

syntax

principles

more complex queries

```
h1 {
  font-size: 2rem;
}

@media (min-width: 600px) {
  h1 {
    font-size: 3rem;
  }
}
```

**Open `media_queries.html`**

PRELIMINARY SLIDES PRELIMINARY SLIDES PRELIMINARY SLIDES PRELIMINARY SLIDES PRELIMINARY SLIDES PRELIMINARY SLIDES PRELIMINARY SLIDES

# media queries

syntax

principles

more complex queries

```
.medium-only {
  display: none;
  color: orange;
}

/* For browser windows between 600 and 1199 pixels
wide */
@media (min-width: 400px) and (max-width: 1199px) {
  .medium-only {
    display: block;
  }
}
```

The **parentheses** and **and** keyword are important!

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# media queries

syntax

principles

more complex queries

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.medium-only {
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/* For browser windows between 600 and 1199 pixels
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@media (min-width: 400px) and (max-width: 1199px) {
  .medium-only {
    display: block;
  }
}
```

**Open `media_queries_complex.html`**

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# What questions do you have?

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# Break

Meet back in 15 minutes.

**Note to lecturers:**
Pause recording and mute

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# HTML/CSS frameworks

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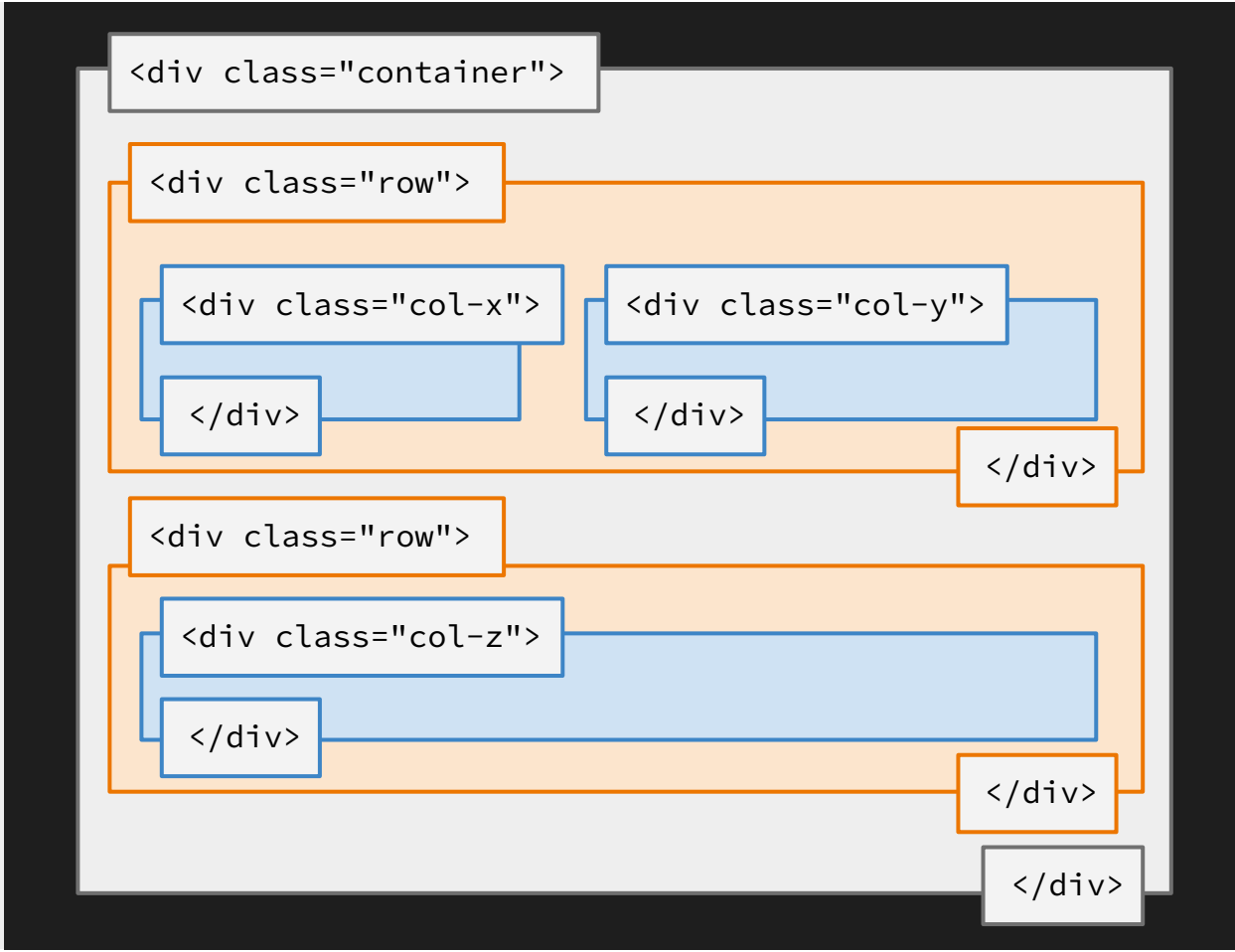
# How HTML/CSS frameworks work

They all basically work like this.



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# How HTML/CSS frameworks work

First, there's a big container. Usually it has some kind of **max-width** applied to it.

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# How HTML/CSS frameworks work

Within the container, you place rows to separate your content.

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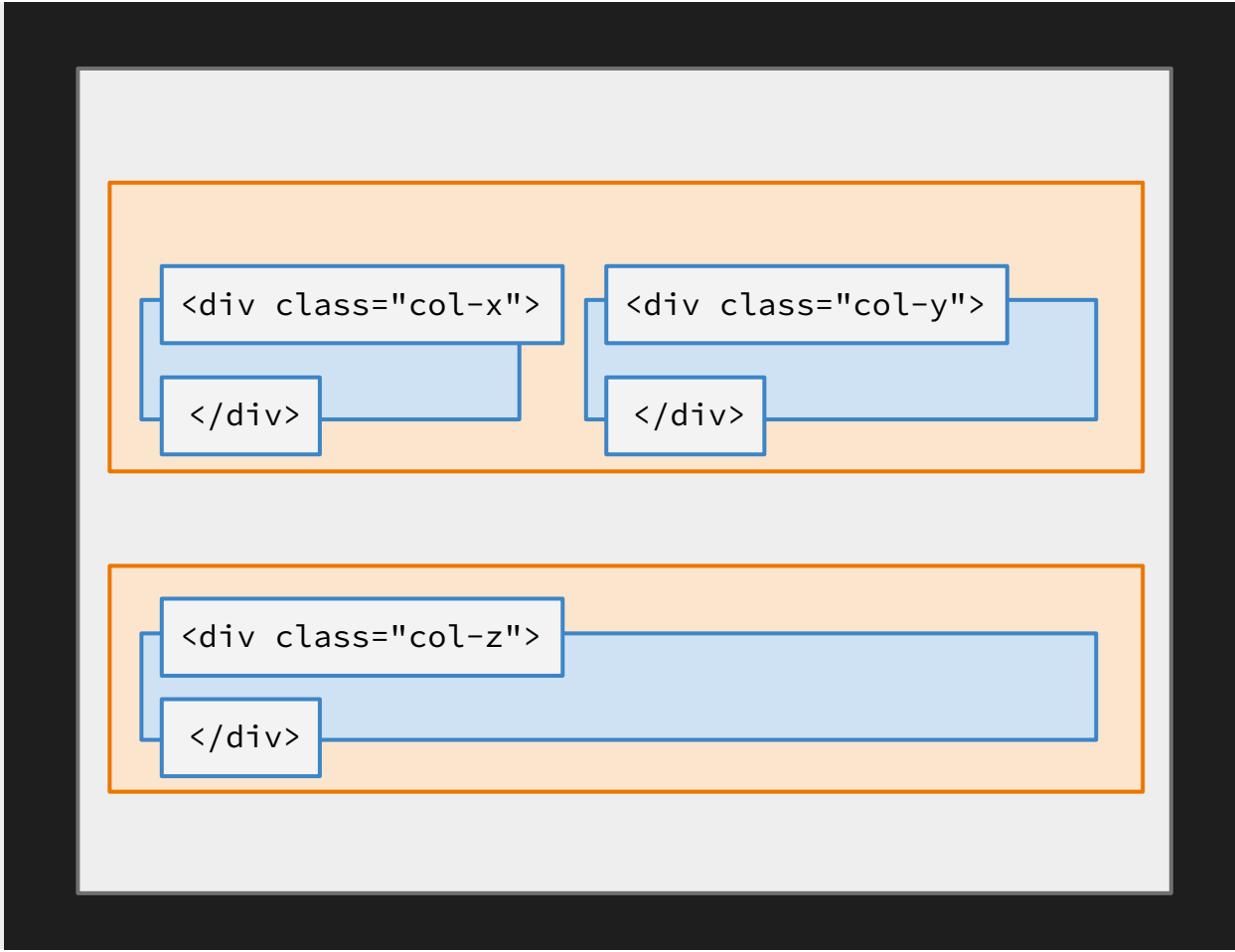
# How HTML/CSS frameworks work

Within each row, you place columns to further separate your content.



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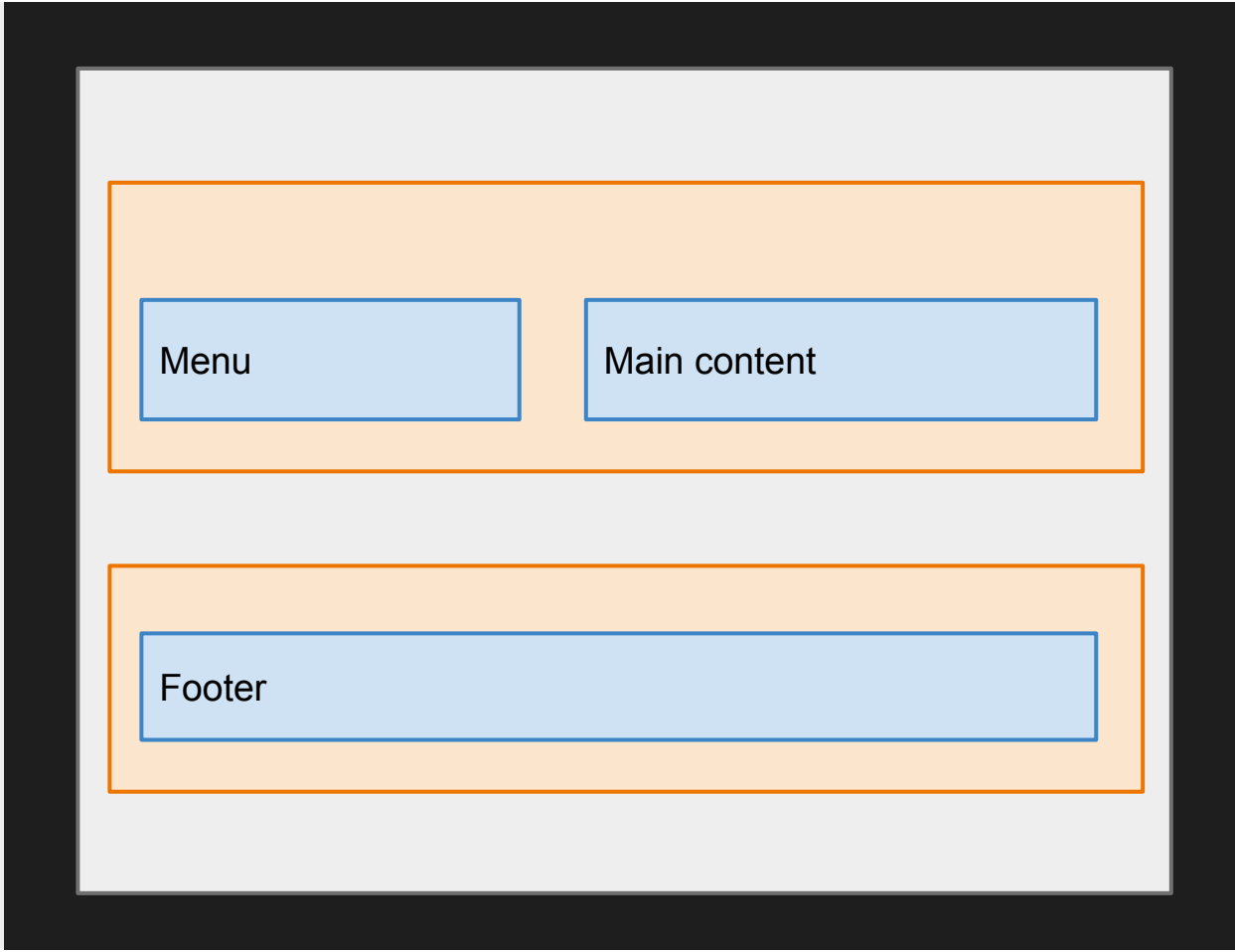
# How HTML/CSS frameworks work

On a bigger screen, the page could look something like this.



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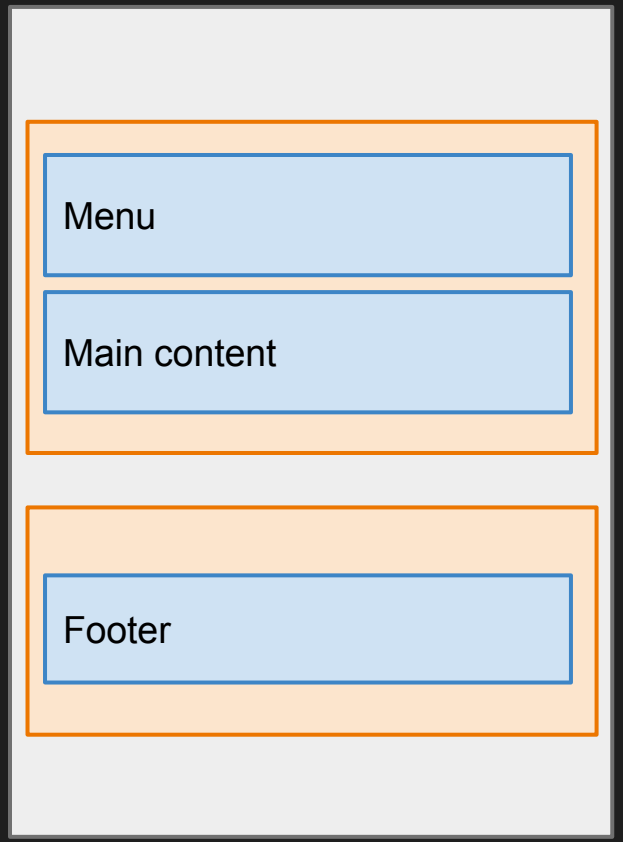
# How HTML/CSS frameworks work

On a smaller screen, the page could look something like this.



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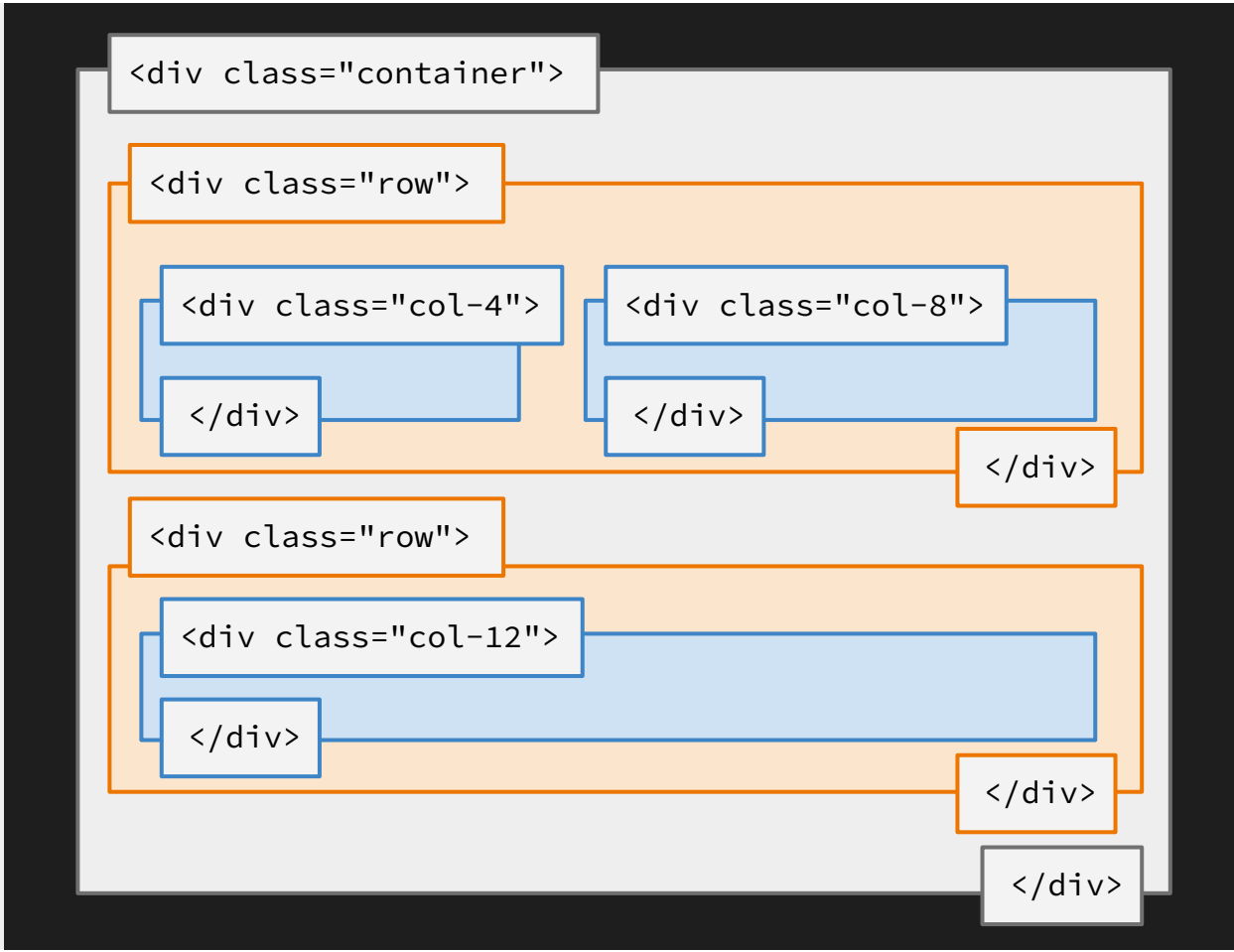
# How HTML/CSS frameworks work

Usually, frameworks come in 12-column layouts.

That means, the **columns** of each **row** need to add up to **12**.



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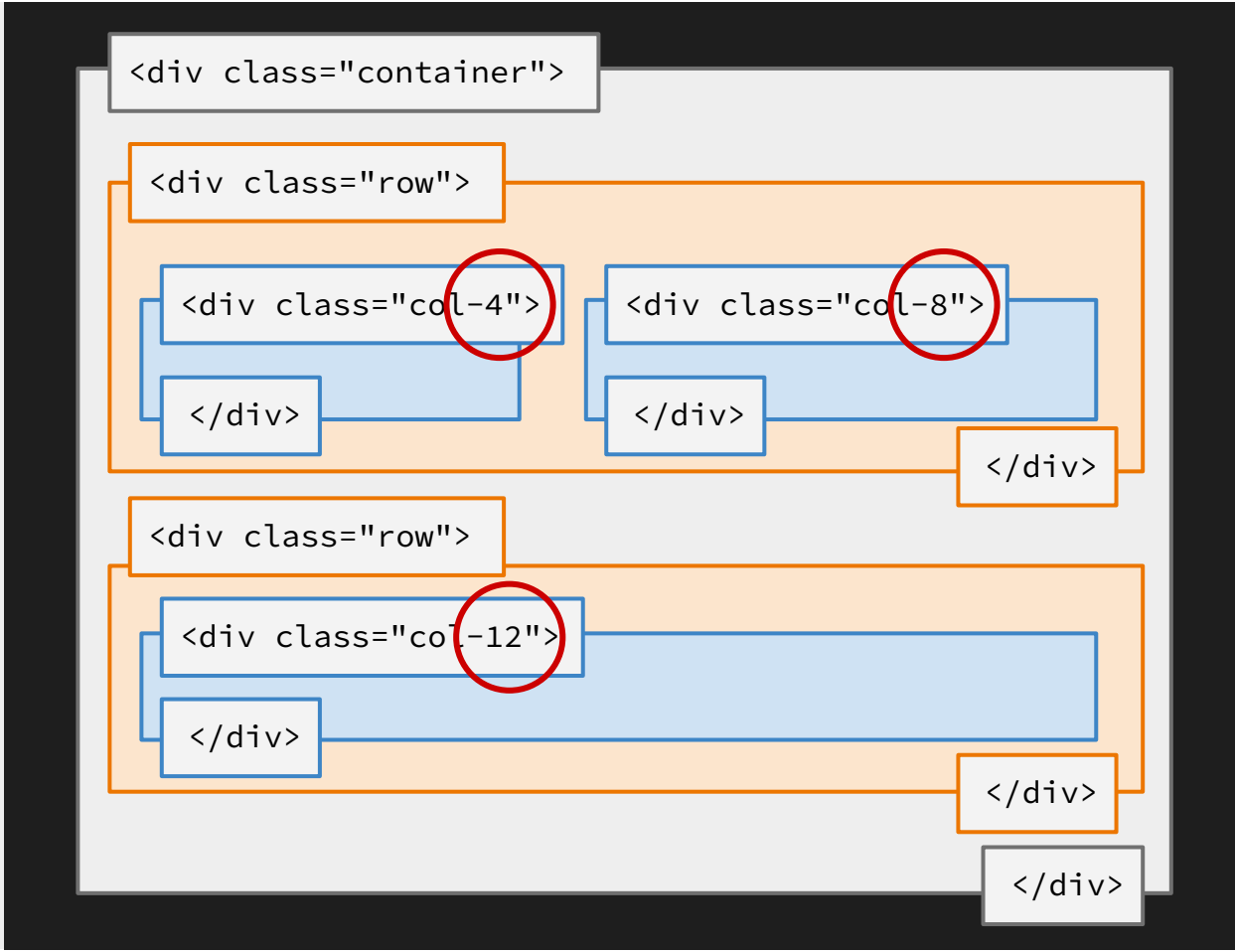

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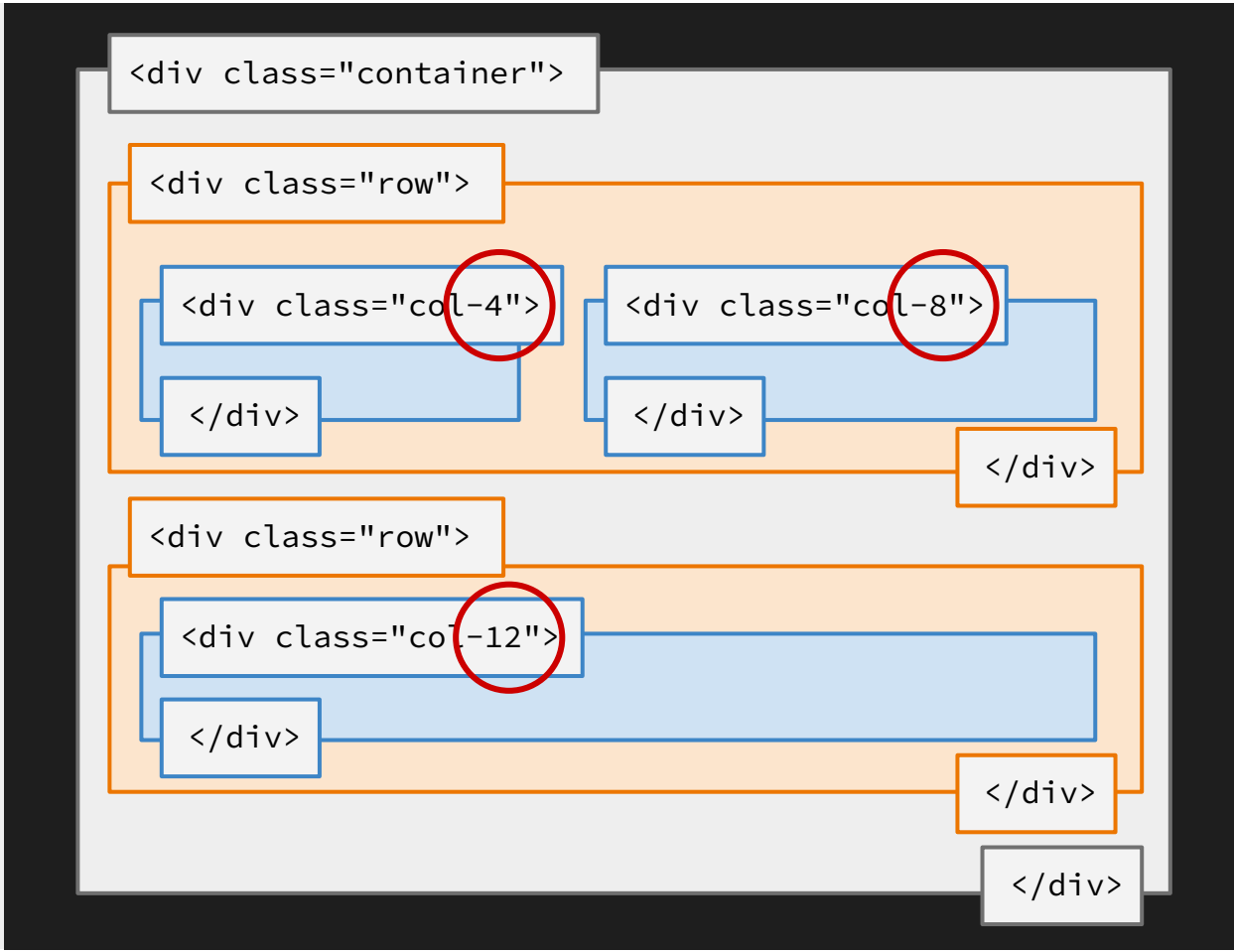

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# Some tips

By default, western browsers display elements from **left to right** and **top to bottom**, just like how one would read in English. (You can change this with CSS for different languages.)

It's easiest to structure and order your HTML that way, too. (But `float` can be tricky.)

**Open `frameworks.html`**

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# What questions do you have?

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# More to explore

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# More to explore

`position`

multiple-column layout

grid layout, flexbox

There are other types of block arrangements we won't cover in class.

You can explore these on your own.

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# More to explore

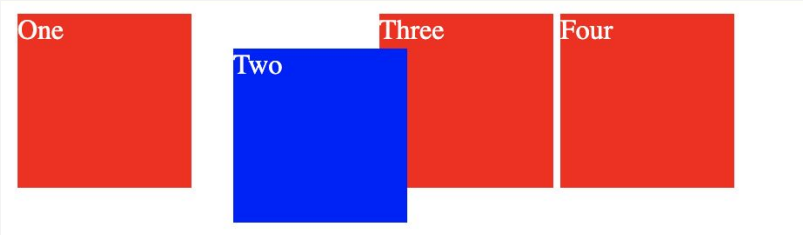
`position`

multiple-column layout

grid layout, flexbox

The CSS property **`position`** allows you to fine-tune exactly how elements are laid out on your web page.

Yo




**`media_queries.html`** from the examples.

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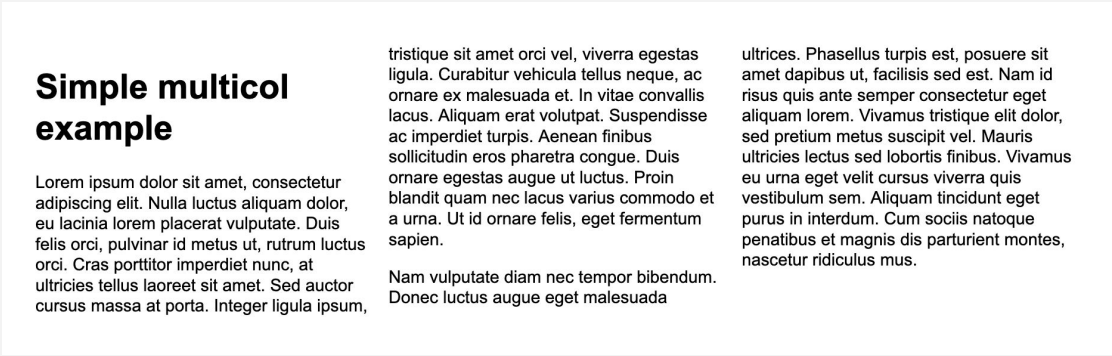
# More to explore

position

multiple-column layout

grid layout, flexbox

The multiple-column layout lets you style elements like a print newspaper.



**Simple multicol example**

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla luctus aliquam dolor, eu lacinia lorem placerat vulputate. Duis felis orci, pulvinar id metus ut, rutrum luctus orci. Cras porttitor imperdiet nunc, at ultricies tellus laoreet sit amet. Sed auctor cursus massa at porta. Integer ligula ipsum, tristique sit amet orci vel, viverra egestas ligula. Curabitur vehicula tellus neque, ac ornare ex malesuada et. In vitae convallis lacus. Aliquam erat volutpat. Suspendisse ac imperdiet turpis. Aenean finibus sollicitudin eros pharetra congue. Duis ornare egestas augue ut luctus. Proin blandit quam nec lacus varius commodo et a urna. Ut id ornare felis, eget fermentum sapien.

Nam vulputate diam nec tempor bibendum. Donec luctus augue eget malesuada ultrices. Phasellus turpis est, posuere sit amet dapibus ut, facilisis sed est. Nam id risus quis ante semper consectetur eget aliquam lorem. Vivamus tristique elit dolor, sed pretium metus suscipit vel. Mauris ultricies lectus sed lobortis finibus. Vivamus eu urna eget velit cursus viverra quis vestibulum sem. Aliquam tincidunt eget purus in interdum. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus.

This can be bad to use because readers aren't used to reading like this on a website!

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## More to explore

position

multiple-column layout

grid layout, flexbox

CSS grid layouts are similar to flexbox, but can be used in two dimensions. It's very similar to the HTML/CSS grid frameworks we discussed, except you don't need separate "row" elements.

**Be careful:** CSS Grid Layouts are a type of CSS method. But people also say "CSS grid layouts" when referring to styling a website in a grid format.

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# More to explore

position

multiple-column layout

grid layout, flexbox

Internet Explorer and some mobile browsers don't support **grid layouts** or **flexbox** very well.

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# Homework

https://journ220.github.io

**Previous final projects 2022**

- https://zhongleqi.github.io/leqizhong_final_reresubmit/home.html
- https://jiyuntsai.github.io/project-ousd-library-closure/
- https://juliametraux.github.io/vasculitis/
- https://madtaub.github.io/photography-portfolio/
- https://oliviazhaoxu.github.io/
- https://mengyuan616.github.io/jacksonville_story/
- https://zhiwae97.github.io/Nature_CA/
- https://bscannestra.github.io/final/

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# Homework

https://journ220.github.io

**Previous final projects 2023**

- https://the-nazmul.github.io/website/ejk/
- https://guptaa-saumya.github.io/
- https://ucbsoj.github.io/LaRussell/
- https://simmerdeepkaur.github.io/Intro_To_Coding_Final_Project/
- https://katherineli19.github.io/
- https://tarinimehta.github.io/amandajenkins.github.io/
- https://kateraphael.github.io/
- https://jere-o-rhodes.github.io/sf-elders/

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# start Zoom recording + captions

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# Homework

https://journ220.github.io

**Please help clean up:** close windows, return tables, etc.