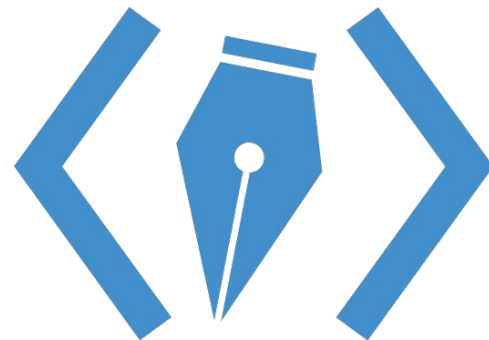


Week 07

Responsive Layouts



Overview of strategies

Media queries

Overview of strategies

Media queries

Today's Example (from week 3!):

<https://jsbin.com/pulakewosu/edit?html,css,output>

Berkeley Food Guide

[Home](#)

[Restaurants](#)

[Coffee Shops](#)

This site features food places in Berkeley that WDD students recommend!

Restaurants

UC Berkeley has a large variety of restaurants nearby. Check out favorites on southside, northside, and downtown.

Coffee Shops

There are also several coffee shops and cafés that have outlets and free wifi, ideal for studying!

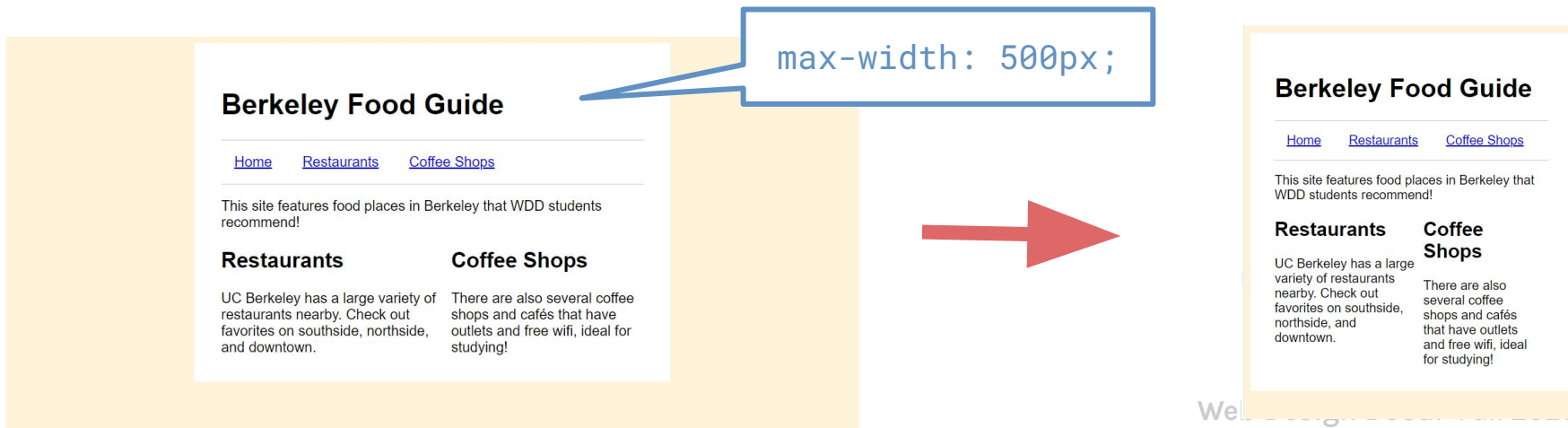
Strategy 1: Use percents

- Use percents as your units so that sizes and spacing are proportional to the screen size
- Only works to an extent:



Strategy 2: Use `max-width`

- The element will be as wide as it can be.
- Pretty nice for simple results:



Problem!

Berkeley Food Guide

[Home](#) [Restaurants](#)

[Coffee Shops](#)

This site features food places in Berkeley that WDD students recommend!

Restaurants Coffee Shops

UC Berkeley has a large variety of restaurants nearby.

There are also

Berkeley Food Guide

[Home](#) [Restaurants](#)

[Coffee Shops](#)

This site features food places in Berkeley that WDD students recommend!

Restaurants

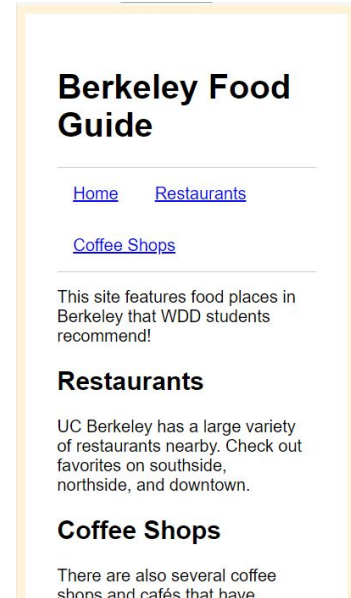
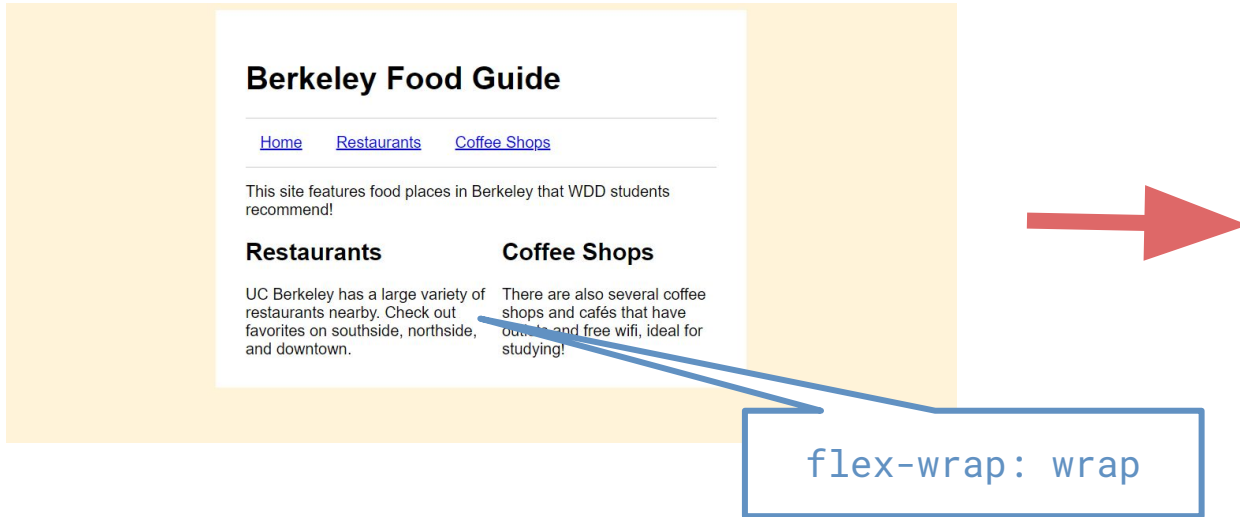
UC Berkeley has a large variety of restaurants nearby. Check out favorites on southside, northside, and downtown.

Coffee Shops

There are also several coffee shops and cafés that have

Strategy 3: Use flex-wrap

- Depending on the width of the items in a flexbox, they will wrap to the next line instead of getting squished together.
- Helps decrease number of items per row in a layout:



Strategy 4: Media Queries

- Basic idea: write CSS for different screen sizes!
- We define **breakpoints** to specify the screen widths that will use different CSS
 - Can be anything, but usually broadly differentiates between phones, tablets, and laptops



0-480

Smaller smartphones



481-768

Tablets & larger smartphones



769-1279

Laptops, larger tablets in landscape, and small desktops



1280+

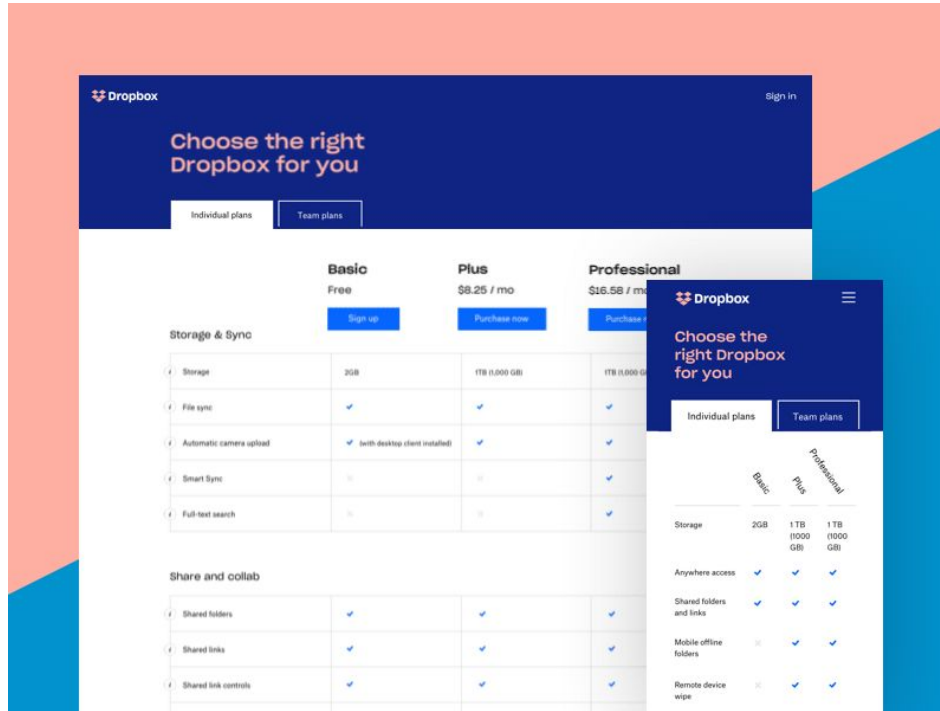
Larger desktops and monitors

Image source: BitDegree

<https://www.bitdegree.org/learn/css-width>

Overview of strategies

Media queries



We can design how
the document is
presented
across different
medias

Is it extra to talk about **medias** for a web page?
Since it is *just* a web page *for screens...* or really?

screen

for computer screens

print

for printed documents

speech

for speech synthesizers

... and more

But first! Some HTML...

Include this in the HTML head:

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

Where to place media queries?

Inside our CSS files!

Note the special syntax!
Similar to keyframe
animations, it's a bit
different from what we're
used to.

```
html {  
    font-size: 16px;  
}  
  
@media (max-width: 600px) {  
    html {  
        font-size: 14px;  
    }  
}
```

@media is a special directive in CSS that matches media queries

Web Design DeCal Fall 2020

Just CSS with extra steps

```
@media (max-width: 375px) {  
  html {  
    background: red;  
  }  
}
```

“For screens that have a width < 375 pixels, use these CSS properties in addition to the ones above.”

Say you would like to match all computer screens no larger than 600px?

`screen` and `(max-width: 600px)`

Make it longer by adding more... and

To match all screens between 200px and 400px in width?

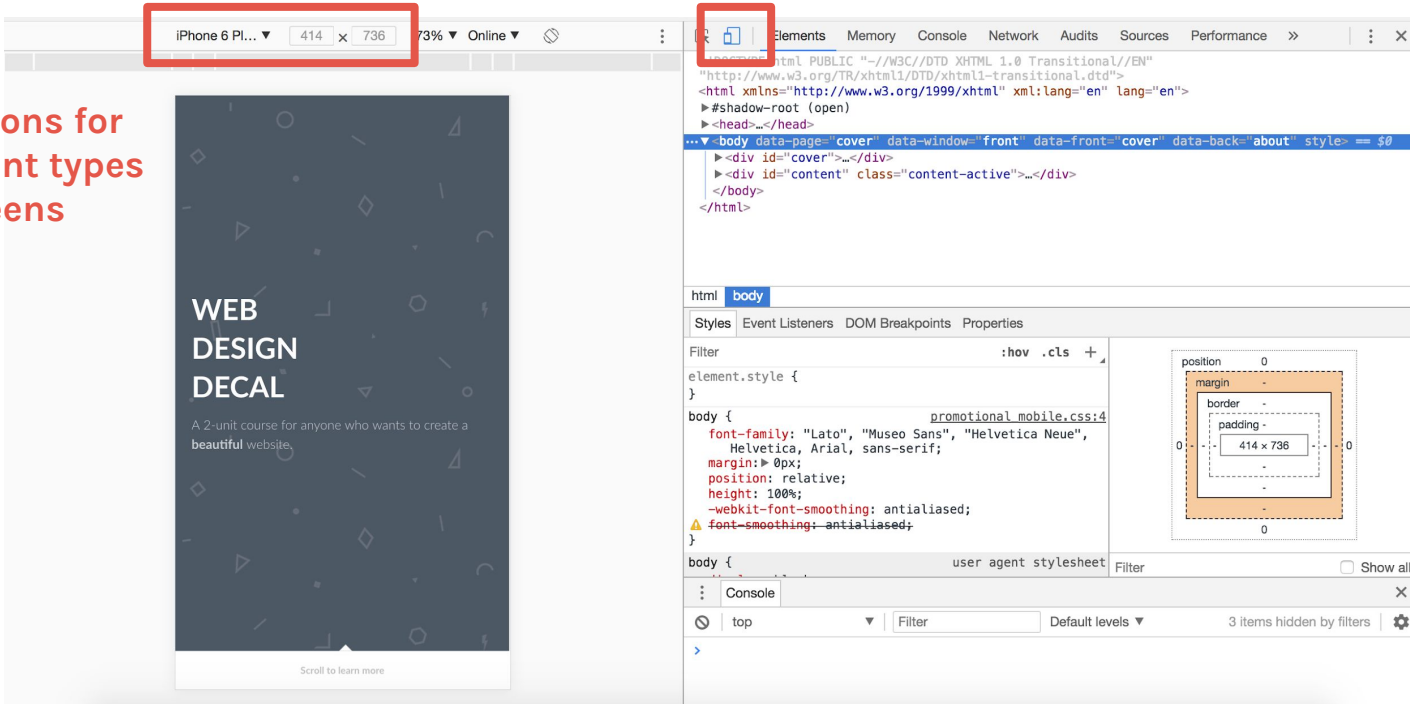
`screen and (min-width: 200px) and (max-width: 400px)`

Demo

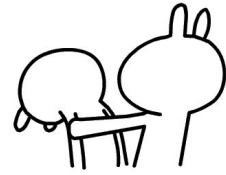
tinyurl.com/wdd-mqu

1. Click here

2. Options for different types of screens



Why web inspector is so great -- see what your website looks like on different devices.



Questions?