



# MIDTERM LIGHTNING ROUND



A background image of Mount Fuji, a snow-capped mountain, centered behind the text. The sky is a gradient of pink and purple, suggesting a sunset or sunrise. The mountain's peak is visible above the text.

# BASIC ANIMATION

# Animating with CSS Transitions



We've seen that one way to interactively toggle CSS properties is to use the `:hover` selector...

# Animating with CSS Transitions



One of the simplest and most effective ways to “add” animation to your site is using CSS Transitions.

# Animating with CSS Transitions



CSS Transitions let you set a transition time and style for any or (almost) all properties.

Let's look at one:



# Animating with CSS Transitions

A background image of Mount Fuji, a large snow-capped mountain, centered in the frame. The sky is a gradient of soft pink and purple, suggesting a sunset or sunrise. The mountain's slopes are covered in snow, with some darker patches visible. The overall mood is serene and calm.

```
div {  
  width: 50vw;  
  transition: width 2s;  
}
```

# Animating with CSS Transitions

A background image of Mount Fuji, a snow-capped mountain, centered in the frame. The sky is a gradient of soft pink and purple, suggesting a sunset or sunrise. The mountain's peak is partially obscured by a layer of white clouds at its base.

```
div {  
  width: 50vw;  
  transition: width 2s;  
}
```



# Animating with CSS Transitions

```
transition: width 2s;
```

This will apply a 2 second linear transition whenever *something* (css :hover, a Media Query breakpoint, a Javascript function, etc...) changes the value of `width`.

# Animating with CSS Transitions

```
transition: all 2s;
```

You can also transition `all` properties.

# Animating with CSS Transitions

```
transition: width 2s, height 4s;
```

If you want to animate multiple properties of an element, you can chain them with a comma like this.

# Animating with CSS Transitions



Advanced use of CSS Transition allows you to set a delay time for the animation to kick in, and the animation “easing” curve that is used.

( <https://easings.net/en> )

# Animating with CSS Transitions

```
div {  
  transition-property: width;  
  transition-duration: 2s;  
  transition-timing-function: linear;  
  transition-delay: 1s;  
}
```

👉 This

Is the same as this 👉

```
div {  
  transition: width 2s linear 1s;  
}
```

A photograph of Mount Fuji, a snow-capped volcano, centered in the background. The sky is a gradient of soft pink and purple, suggesting a sunset or sunrise. The foreground is a deep, dark blue. The text "DEMO TIME!" is overlaid in the center in a large, white, bold, sans-serif font.

**DEMO TIME!**





# MOBILE, RESPONSIVE WEB

# Media Queries for Mobile / Desktop



We learned about viewport relative units, as a tool you can use when creating a responsive design system that takes display size into account...

# Media Queries for Mobile / Desktop

The *main* component of making a responsive website is Media Queries.

# Media Queries for Mobile / Desktop



Media queries let you create alternate CSS rules based on properties of the browser, type of display, and more...

# Media Queries for Mobile / Desktop



Most useful for us, and what we will focus on, is creating Media Queries based on a *maximum* or *minimum* display width in pixels.

# Media Queries for Mobile / Desktop



When creating a site with media queries, you need to decide what screen size the “default” CSS is intended for: mobile or desktop...



# Media Queries for Mobile / Desktop

A photograph of Mount Fuji, a large snow-capped mountain, centered in the frame. The sky is a gradient of soft pink and purple, suggesting a sunset or sunrise. The mountain's slopes are covered in snow, with some darker patches visible. The overall mood is serene and majestic.

This is part of what “mobile first” web design means.

# Media Queries for Mobile / Desktop



You can think of media queries as bits of logic to determine what CSS gets applied.

# Media Queries for Mobile / Desktop

Let's look at a media query

# Media Queries for Mobile / Desktop

A background image of Mount Fuji, a snow-capped mountain, centered behind the text. The sky is a gradient of pink and purple, suggesting a sunset or sunrise.

```
@media only screen and (min-width : 768px) {  
  .headerItem {  
    grid-column-end: span 8;  
  }  
}
```

# Media Queries for Mobile / Desktop

```
@media only screen and (min-width : 768px) {  
  .headerItem {  
    grid-column-end: span 8;  
  }  
}
```

The Media Query 🖱️

# Media Queries for Mobile / Desktop

```
@media only screen and (min-width : 768px) {  
  .headerItem {  
    grid-column-end: span 8;  
  }  
}
```

The CSS to be applied at 768px or greater 🖱️



# Media Queries for Mobile / Desktop



We will start by just making one breakpoint to separate Mobile and Desktop styles, but Media Queries are generally used to create multiple breakpoints for your site to adapt to:

# Media Queries for Mobile / Desktop

A background image of Mount Fuji, a large snow-capped mountain, partially obscured by a layer of clouds. The sky is a soft gradient of pink and purple, suggesting a sunset or sunrise. The mountain's peak is visible above the clouds, and its slopes are covered in snow.

```
/* Extra Small Devices, Phones */  
@media only screen and (min-width : 480px) {  
}  
  
/* Small Devices, Tablets */  
@media only screen and (min-width : 768px) {  
}  
  
/* Medium Devices, Desktops */  
@media only screen and (min-width : 992px) {  
}  
  
/* Large Devices, Wide Screens */  
@media only screen and (min-width : 1200px) {  
}
```

# Animating with CSS Transitions

A background image of Mount Fuji, a snow-capped mountain, centered in the frame. The sky is a gradient of soft pink and purple, suggesting a sunset or sunrise. The mountain's slopes are covered in snow, with some darker patches visible. The overall mood is serene and calm.

```
div {  
  width: 50vw;  
  transition: width 2s;  
}
```

A photograph of Mount Fuji, a snow-capped mountain, centered in the background. The sky is a gradient of soft pink and purple, suggesting a sunset or sunrise. The foreground is a dark, solid blue. Overlaid on the center of the image is the text "DEMO TIME!" in a large, white, bold, sans-serif font.

**DEMO TIME!**

# Media Queries for Mobile / Desktop



You can imagine there are many ways to approach breakpoints, depending on what CSS systems you've used to structure your layout.



**HOMEWORK**



## Homework

Use Media Queries to responsively apply an alternate “mobile” style to (at least) one page from your midterm site.

If you find it makes more sense to “rewrite” the page from scratch to create both styles, feel free to do so.