LET'S GET EVERYTHING SET UP!

1. In Schoology, go to: **Courses(in the top menu) > FEWD CHI 1: Section 1**
2. Then go to the **Class Materials** folder — it's the pink one!
3. Navigate to the **Week 10 (It's the yellow folder) > Lesson 17 folder**
4. There you'll find all the materials for today's class
5. Download starter_code_lesson_17.zip
6. Move it from your Downloads folder to your Desktop
7. Double-click on starter_code_lesson_17.zip to unzip it
8. After you've unzipped, delete the original .zip to avoid confusion and make sure you don't unzip it again later!!!

GENERAL ASSEMBLY

ANIMATION

Sarah Holden

LEARNING OBJECTIVES

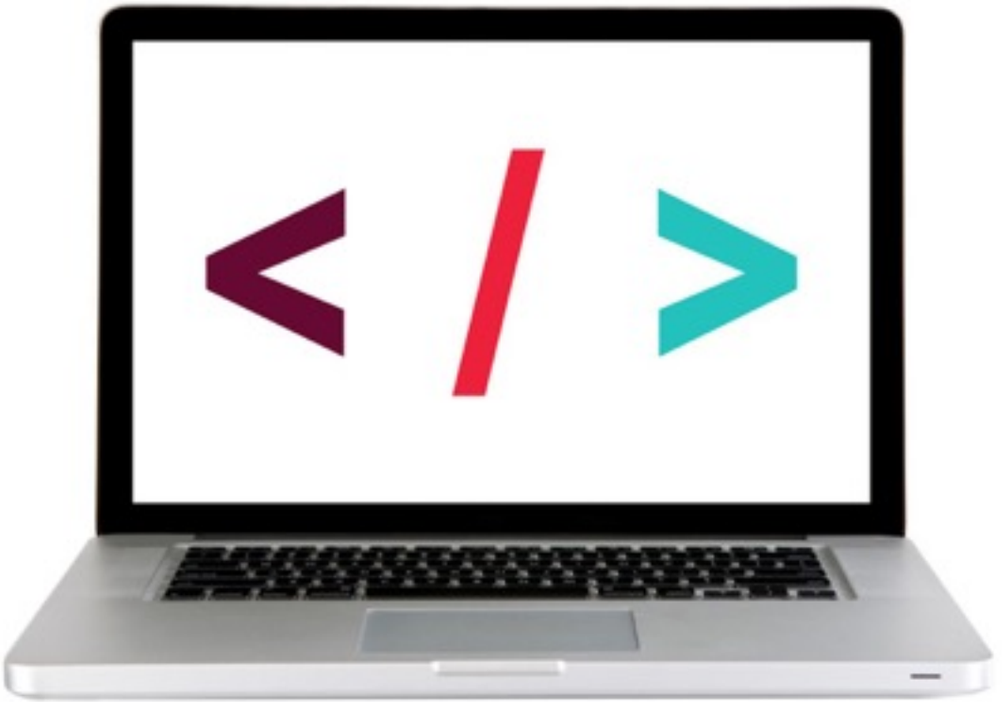
- Be able to explain why CSS animations are preferred over jQuery animate.
- Familiarity with how animations and transitions can be used in CSS
- Understand how animation can still be controlled using JS

AGENDA

- jQuery Animate
- Transitions
- Transformations
- Animations
- Lab

JQUERY ANIMATE

LET'S TAKE A CLOSER LOOK



Syntax: jQuery Docs - Animate

CODE ALONG

TRANSITIONS

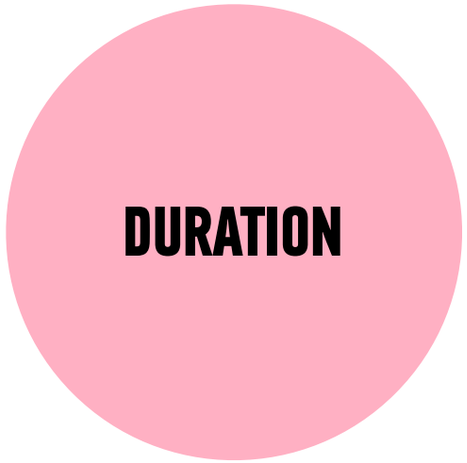
TRANSITIONS

- Provide a way to control animation speed when changing properties
- Instead of having property changes take effect immediately, you can have them take place over a period of time.

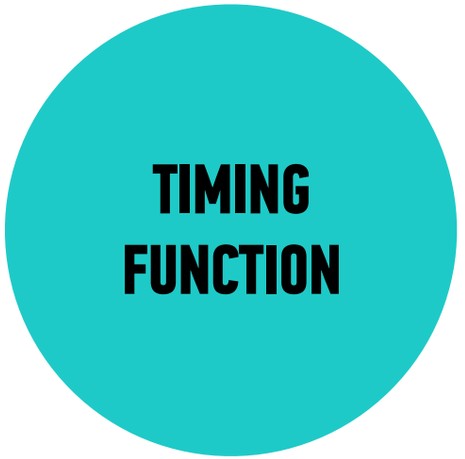
```
.example {
  transition: [transition-property] [transition-duration] [transition-timing-function] [transition-delay];
}
```

TRANSITIONS

Which properties to animate



How long the transition will last



How the transition will run

When the animation will start

TRANSITIONS - TRANSITION-PROPERTY

PROPERTIES TO ANIMATE

- Can specify a specific property to transition or "all" to transition all properties
- *Default:* all

```
div {
 transition: opacity 0.5s;
}
```

```
div {
 transition: all 0.5s;
}
```

```
div {
 transition: height 0.5s;
}
```

```
.example {
 transition: [transition-property] [transition-duration] [timing-function] [transition-delay];
}
```

TRANSITIONS - TRANSITION-DURATION

DURATION

- A time value, defined in seconds or milliseconds

```
div {
 transition: all 0.5s;
}
```

```
div {
 transition: all 350ms;
}
```

```
div {
 transition: all 3s;
}
```

```
.example {
 transition: [transition-property] [transition-duration] [timing-function] [transition-delay];
}
```

TRANSITIONS

TIMING FUNCTION

- Describes how a transition will proceed over its duration, allowing a transition to change speed during its course.
- Timing functions: ease, linear, ease-in, ease-out, ease-in-out

```
div {
 transition: opacity 0.5s ease;
}
```

```
div {
 transition: opacity 0.5s ease-in-out;
}
```

```
.example {
 transition: [transition-property] [transition-duration] [timing-function] [transition-delay];
}
```

TRANSITIONS

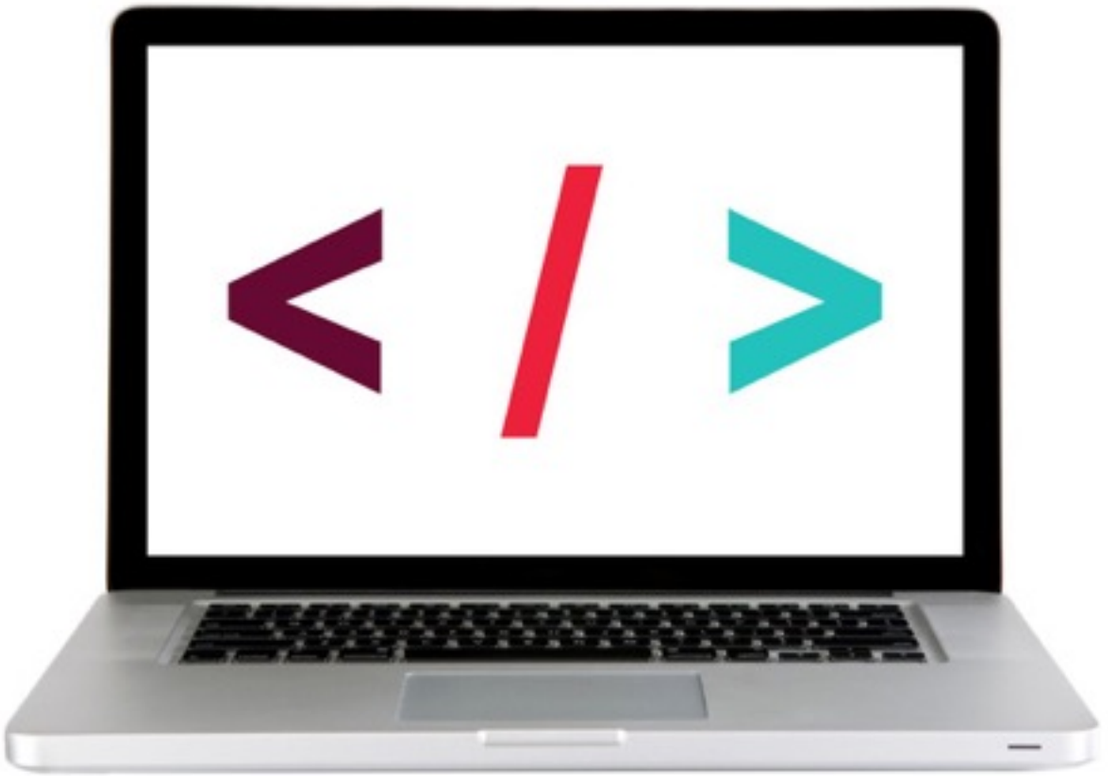
DELAY

- Length of time before the transition starts

```
div {
 transition: background-color 0.5s ease 2s;
}
```

```
.example {
 transition: [transition-property] [transition-duration] [timing-function] [transition-delay];
}
```

LET'S TAKE A CLOSER LOOK — IMAGE SLIDER



CODE ALONG — IMAGE GALLERY WITH OVERLAYS

MORE FUN WITH TRANSITIONS — CODROPS

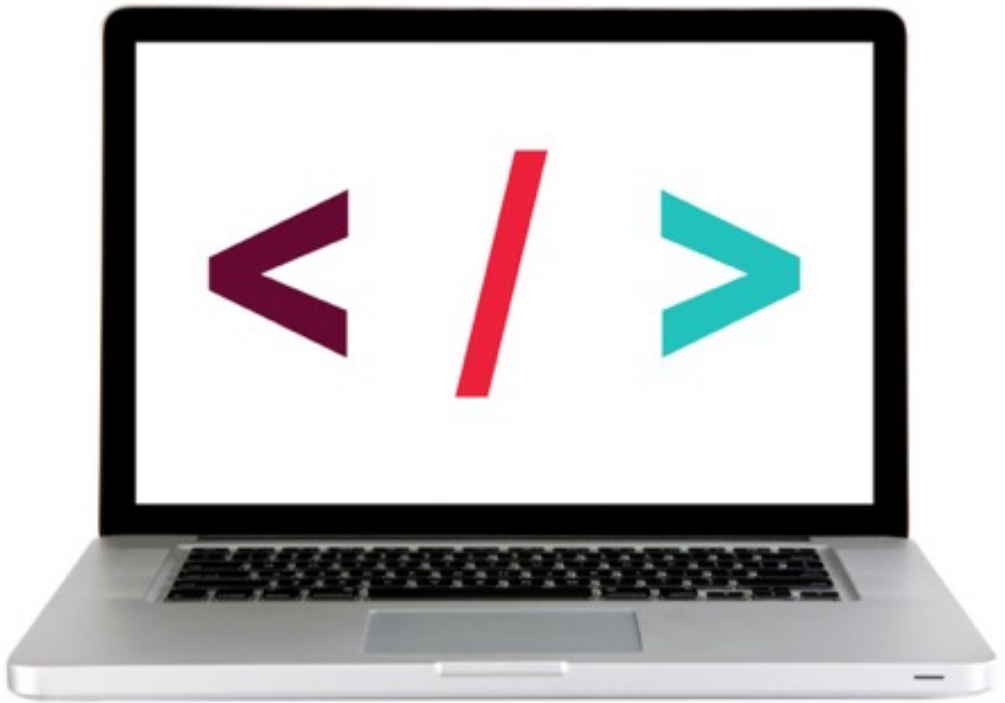
Fun CSS button styles: Creative buttons

Icon hover effects: Icon Hover Effects

Modal dialogue effects (advanced): Dialogue Effects

TRANSFORMATIONS

LET'S TAKE A CLOSER LOOK — TRANSFORM



Syntax: W3 Schools

Example: Codepen

LAB — HAMBURGER ICON

ANIMATIONS

KEYFRAME ANIMATIONS

- Keyframe animations allow developers to create smooth, maintainable animations that perform well and don't require tons of scripting

KEYFRAME ANIMATIONS — SYNTAX

1. Define custom animation

```
@-webkit-keyframes NAME-YOUR-ANIMATION {
 0%   { opacity: 0; }
 100% { opacity: 1; }
}
@keyframes NAME-YOUR-ANIMATION {
 0%   { opacity: 0; }
 100% { opacity: 1; }
}
```

2. Assign using the animation property

```
#box {
 -webkit-animation: NAME-YOUR-ANIMATION 5s infinite;
 animation:         NAME-YOUR-ANIMATION 5s infinite;
}
```

A simple tool to make sure you're including all the necessary browser prefixes: [pleeease]

KEYFRAME ANIMATIONS — ANIMATION PROPERTY

Properties:

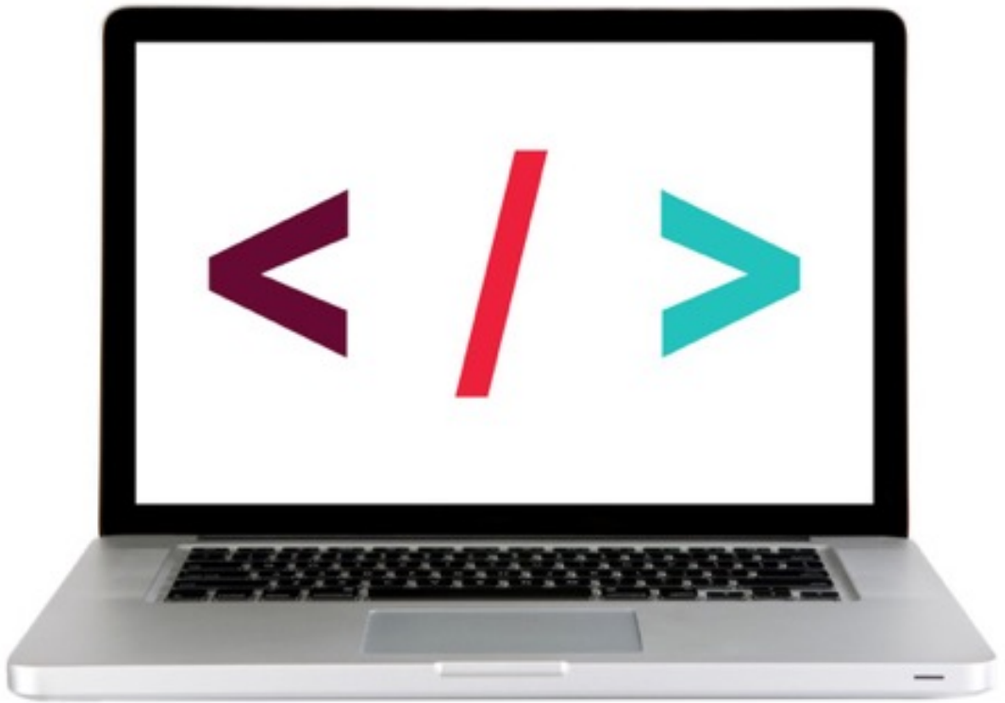
```
.box {
 animation-name: bounce;
 animation-duration: 4s;
 animation-timing-function: ease-out;
 animation-delay: 2s;
 animation-iteration-count: 10;
}
```

Shorthand:

```
.example {
  animation: name duration timing-function delay iteration-count;
}
```

```
.example {
  animation: bounce 4s ease-out 2s 10;
}
```

LET'S TAKE A CLOSER LOOK



[Codepen: Spinning Wheel]

LAB — LOADER

ANIMATION/TRANSITION END EVENTS

LAB

LAB

ACTIVITY

KEY OBJECTIVE

- Practice triggering CSS transitions with jQuery

TYPE OF EXERCISE

- Individual/Partner Lab

TIMING

10 min	1. Add base styles to the page
Until 8:50	2. Make sidebar interactive using jQuery and CSS transitions.

LEARNING OBJECTIVES

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HOMEWORK

HOMEWORK

FINAL PROJECT MILESTONES:

- Milestone 4 Final Project: Finish your final project! Presentations will be next Wednesday, March 25th at 6pm.

EXIT TICKETS