JQUERY

WELCOME BACK!

GOALS FOR THIS UNIT

1. Review
2. Intro to jQuery
3. Selectors
4. Actions

REVIEW

INTRO TO JQUERY

WHAT IS IT?

jQuery is an extremely popular JavaScript library (read: huge collection of functions) that makes writing JavaScript easier and faster.

HIGHLIGHTS

jQuery is:

- small
- fast
- feature-rich
- cross-browser
- extensively documented
- extremely popular

SITE PERFORMANCE

We care that jQuery is kept lean and mean because it's going to make a smaller (negative) impact on our sites' performance.

DON'T REINVENT THE WHEEL

jQuery makes the common tasks many web developers have to accomplish available out of the box.

- fade elements in and out
- add/remove elements
- handle events
- change attribute/property values
- animation

CROSS-BROWSER

jQuery uses automatic feature detection to shield the developer from the many inconsistencies in the way different browsers approach tasks.
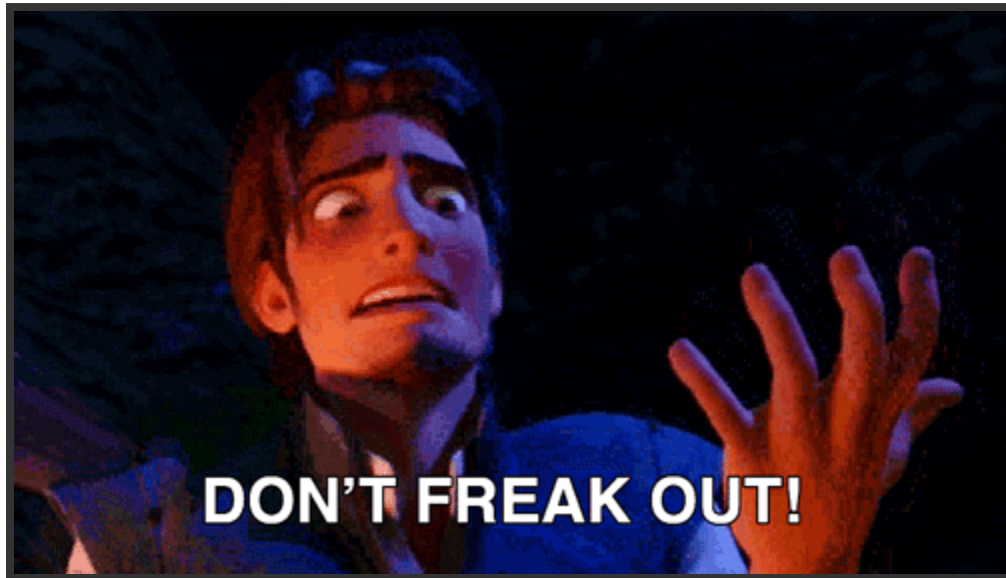
SOLID DOCS

A huge plus of using jQuery is that it has very thorough, clear documentation.

COMMUNITY

The enduring popularity of jQuery means that it has an enormous following and tons of people and online resources to learn from. If you run into a problem or question, chances are that someone has already found a solution and written in down on the internet.

jQuery is still just JavaScript!

INCLUDING JQUERY

There are a couple of ways that we can include jQuery in our projects:

- Download the library and store it locally in your project folder
- Link to a live version of the library via CDN

PROS AND CONS

download	CDN
stable	*can* change
bloats your site	makes a call every time you refresh

DOWNLOADING JQUERY

1. Go to jquery.com/download
2. Click the link Download the uncompressed, development jQuery 1.11.3. This takes you to a raw text file.
3. Select File > Save Page as… > save As 'jquery-1.11.3.js' somewhere useful
4. Place the saved file into a 'lib' folder in your site project

Or just link to a hosted CDN in a script tag on your page. Both script tags link to a working jQuery file.

```html
<script src="lib/jquery-1.11.3.js"></script>
<script src="http://code.jquery.com/jquery-1.11.3.min.js"></script>
```

JQUERY SELECTORS

Anything look familiar?

```javascript
var divs = $("div");
// All divs on the page

var happyThing = $("#happy");
// Element with id "happy"

var rounds = $(".roundedCorner");
// Elements with class "roundedCorner"
```

That's right! jQuery allows us to use the same selectors we've already used in our CSS. Selecting elements this way is faster, more accurate, and requires less code than other methods.

JQUERY FILTERS

jQuery even adds CSS-like filters to make selecting elements even easier.
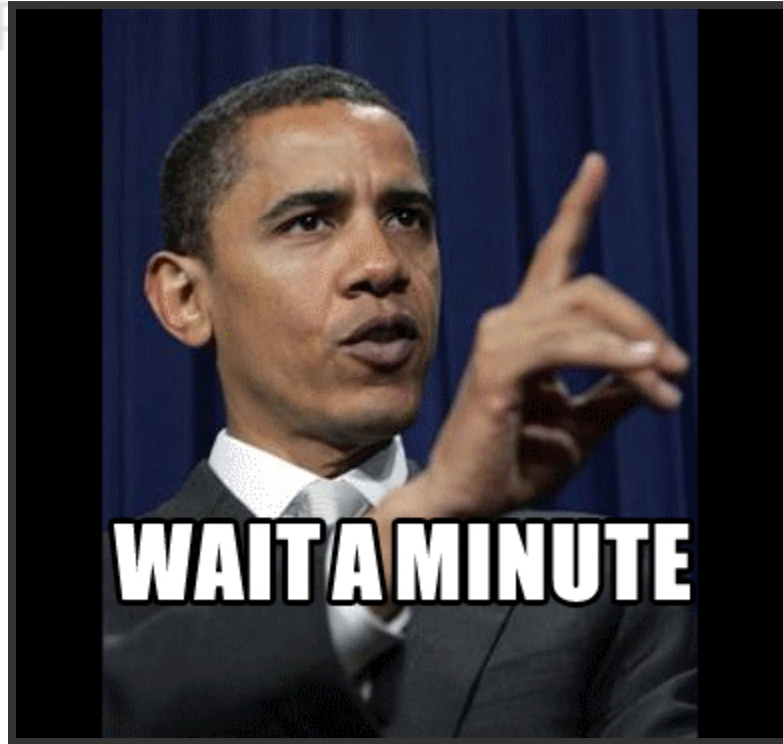
This code would select all `li` elements, then *filter* that list using the psuedo-selector `:even` which would return every other

```
$( "li" ).filter( ":even" );
// This is a jQuery equivalent to --
$( "li" ).filter( ":nth-child(even)" );
```

STORING JQUERY OBJECTS

jQuery objects are typically stored in variables. Variables containing jQuery objects conventionally begin with $ to make it clear that they're *jQuery* objects rather than DOM elements.

```javascript
$('img').fadeTo('slow', 0.5);

var $img = $('img');
$img.fadeTo('slow', 0.5);
```

What was that dollar sign thingy?!

$()

$() is a tiny piece of jQuery magic (read: function) that turns whatever is inside the parentheses into a jQuery object.

GET READY!

`.ready()` is a jQuery method which tells a script to wait to execute until an HTML document has loaded.

```
$(document).ready(function() {
  $('#header').slideDown('slow');
});
```

JQUERY ACTIONS

jQuery has tons of actions that can be performed on any element. All of these are functions (or methods).

```
$(selector).action();
```

jQuery makes it simple to accomplish a huge number of common tasks, such as updating elements' attributes or CSS (and pretty much anything else).

```
var img = $('#myPicture');
img.attr('src');
img.attr('src', 'http://myPictureLivesHere.com');

img.css('width');
img.css('width', '200px');
```

CHAINING

We can use dot notation to run several methods on the same selector.

```
$('.hideBox').hide().delay(1200).fadeIn(800);
```

HOMEWORK

From JavaScript & jQuery:

- Chapter 7: 307-358

LAB 9

WHACKY NAVIGATION

WHACKY NAVIGATION

Practice using jQuery methods on your personal site's navigation.

- Your navigation should be in the form of an unordered list.
- Style the list items so that they have a width of at least 200px and a height of at least 50px.
- Each `< li >` should fade to 0.25 opacity when the user hovers over it, and return to full opacity when they remove the cursor.
- Each `< li >` should change background colors when clicked on.
- When the user clicks on a `< li >`, the word 'Clicked!' should appear inside it.

PRE-GAME

FIGURE IT OUT

Create a class that specifies both the appearance and position of a given element. Toggle this class when matched elements are clicked on.