WEB DESIGN DECAL

LECTURE 9

Introduction to jQuery

Use jQuery to add interactivity to your website

Eric Liang

jQuery - not that new!

A JavaScript program that makes JavaScript easier to use.

Just embrace a different syntax, and suddenly manipulating the DOM, handling events, and doing animations is much easier.

Works across all modern browsers. It's just JavaScript!

Review - Syntax

Javascript is very finicky! Be careful when writing code

🙅 🙅

```
if (loggedIn) {
  // stuff here
else {

}
```

missing }

```
function greet() {
  alert("Hello!");
}

greet;
```

calling a function - ( )

Review - Syntax

Javascript is very finicky! Be careful when writing code

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```
if (loggedIn) {
  // stuff here
} else {

}
```

👍

```
function greet() {
  alert("Hello!");
}

greet();
```

Review - Syntax

Keep your code organized with proper indents

```
var jquery = function () {
// mobile nav toggle
$('.mobile-nav-toggle').click(function() {
if ($('.mobile-nav').hasClass('mobile-nav-show')) {
$('.mobile-nav').removeClass('mobile-nav-show');
} else {
$('.mobile-nav').addClass('mobile-nav-show');
}
});
};

$(document).ready(jquery);
```

Review - Syntax

Keep your code organized with proper indents

👍

```
var jquery = function () {
  // mobile nav toggle
  $('.mobile-nav-toggle').click(function() {
    if ($('.mobile-nav').hasClass('mobile-nav-show')) {
      $('.mobile-nav').removeClass('mobile-nav-show');
    } else {
      $('.mobile-nav').addClass('mobile-nav-show');
    }
  });
};

$(document).ready(jquery);
```

Review - Syntax

Keep your code organized with proper indents and line breaks

😱

```
document.getElementsByTagName("body")[0].addEventListener('click', function() { alert("hello!") });
```

Review - Syntax

Keep your code organized with proper indents and line breaks

😁

```
document.getElementsByTagName("body")[0]
    .addEventListener('click', function() {
      alert("hello!")
    });
```

Review - Syntax

Store values and functions in variables to clarify code (if it helps!)

```javascript
var body =
document.getElementsByTagName("body")[0];

body.addEventListener('click', function() {
    alert("hello!")
    });
```

Review - Syntax

Store values and functions in variables to clarify code (if it helps!)

```
var body =
document.getElementsByTagName("body")[0];

body.addEventListener('click', greet());

function greet() {
  alert("hello!");
}
```

Review - Syntax

By the way, don't worry if you don't know what these methods do. These are merely to serve as an example. We'll be learning jQuery, which replaces these with easier syntax.

```javascript
document.getElementsByTagName("body")[0]
    .addEventListener('click', function() {
        alert("hello!")
    });
```

jQuery - setup instructions

Can use the online hosted copy:

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

Or you can use a local copy (load time negligible):

```
<script src="assets/js/jquery-1.11.3.min.js">
</script>
```
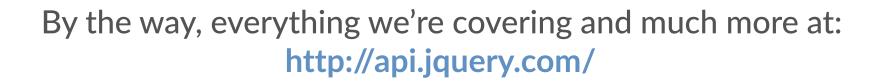
Include this in your `<head>` tag, along with your CSS and font files, as per usual.
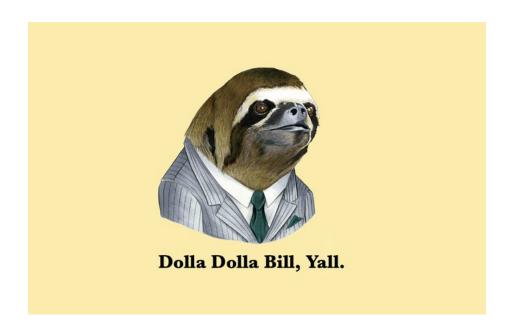
jQuery - setup instructions

Don't make this rookie mistake!

```
<head>
  <script src="script.js"></script>
  <script src="jquery-1.11.3.min.js"></script>
</head>


<head>
  <script src="jquery-1.11.3.min.js"></script>
  <script src="script.js"></script>
</head>
```

Your jQuery code needs to know what jQuery is, so it must come after your link to it.

By the way, everything we're covering and much more at:
http://api.jquery.com/

jQuery - referencing

Every time you reference jQuery, use this magical sign:

$

Dolla Dolla Bill, Yall.

jQuery - selectors

Every jQuery file starts this way:

```
document.ready(function() {

    // all your jQuery code goes in here!

});
```

Translating this to English:

"Lets wait until the document is finished loading, then we're going to execute all this code in the function body."

jQuery - selectors

Like CSS, we have to target particular elements somehow.

Syntax:
```
$("selector");
```

Replace "selector" with the CSS selector in quotes:

```
$("#id");
$(".class");
$("div");
```

jQuery - selectors

Nothing changes in terms of selecting elements from CSS!

CSS

```
p { }
#container { }
.articles { }
```

jQuery

```
$("p");
$("#container");
$(".articles");
```

jQuery - Methods for getting content

Methods are called with dot notation. Here are 3 methods that can be used to **get** content:

`.text()` - grabs all text inside an element
`.html()` - grabs all the HTML of an element
`.val()` - grabs the value of an input element

jQuery - Methods for getting content

```html
<div class="box">
  <h1 class="title">Hello World!</h1>
</div>
```

```
$(".box").text();    -> Hello World!

$(".box").html();    -> <h1 class="title">
                          Hello World!
                        </h1>
```

jQuery - Methods for getting content

```
<input type="text" id="name">
```

Eric Liang

`$("#name").val();    -> Eric Liang`

Any questions?

jQuery - Methods for setting content

How's **setting** content any different?

It's not! Use the same methods.

Setting content

```
$(".box").text("This is how we do it!");
$(".email").val("Your email here");
```

jQuery - getting vs. setting

Getting content

```
$(".box").text();
$(".email").val();
```

Setting content

```
$(".box").text("This is how we do it!");
$(".email").val("Your email here");
```

↑

provide an argument

Visual effects in jQuery

jQuery - `.hide()`

Extremely useful and common

Essentially just adds the CSS property `display: none` to the selected element

```
$(".show-popup").click(function() {
  $(".popup").hide();
});
```

jQuery - `.show()`

Same thing, but just removes the CSS property `display: none` from the selected element

```
$(".show-popup").click(function() {
  $(".popup").show();
});
```

jQuery - .fadeIn() / .fadeOut()

Specify how long it takes to fade in as an argument
Time is in milliseconds, so 1000 is 1 second

```
$(".show-popup").click(function() {
  $(".popup").fadeIn(1000);
});


$(".hide-popup").click(function() {
  $(".popup").fadeOut(1000);
});
```

jQuery - `.css()`

This method allows you to inject a CSS property and value to the selected element

```
$("#tumblr").click(function() {
  $("body").css("background", "#35465C");
});
```

jQuery - `.addClass()` / `.removeClass()`

Likewise, we can add whole classes to elements
This is actually the best practice for most animations

```
$("#tumblr").addClass("exampleClass");
```

Note that there's no period!
It's unnecessary, since we're only using classes.

jQuery - .hasClass()

This is a method that returns a boolean value if the name of the class is already present!

```
$("#tumblr").hasClass("exampleClass");

// will be true or false
```

Event listening in jQuery

jQuery - Event Listeners

What is an event?

    Click

    Key Presses

    Scrolling

    Hovering

    etc.

Event listeners "listen" for an event and react to them.

jQuery - .click()

When someone clicks on the selected element, run some function.

```
$(".awesome-button").click(function() {
  alert("You're awesome!");
});
```

jQuery - .hover()

When someone hovers on the selected element, run some function.

```
$(".box").hover(function() {
    alert("You're awesome!");
});
```

This is much more flexible than the CSS :hover!

jQuery - `.scroll()`

Does things every time the user scrolls, as name suggests.

```
$("window").scroll(function() {
  $("#monster").css("display", "block")
               .fadeOut(1000);
});
```

(This is indented weirdly to make it easier to read)

Any last questions?