


CGT 353 Lecture 3

More jQuery

Ronald J. Glotzbach


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jQuery Basics

- jQuery is a form of JavaScript
- jQuery is a JavaScript library
- The JavaScript scripting language was actually used to write jQuery.
- jQuery is **not** a W3C standard

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jQuery Basics

- Remember:
 - In order for you to use jQuery, you must reference the jQuery library.
 - You can download the library, put it in your js folder and reference through the <script> element.

Example:

```
<script type="text/javascript" src="jquery-1.7.1.js"></script>
```


- You could also use the <script> element to reference a jQuery library hosted at Google.

Example:

```
<script type="text/javascript" src="http://ajax.googleapis.com/ajax/libs/jquery/1.7.1/jquery.min.js"></script>
```

- The browsers do **not** inherently know what jQuery calls are.


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jQuery Basics

- jQuery is used to select elements on the page.
- jQuery uses CSS selectors to select elements.
- jQuery uses XPath expressions to select elements.


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jQuery Basics

- jQuery calls could look like:
 - jQuery("div")
- But jQuery uses the \$ as a shortcut so that jQuery calls look like:
 - \$("div")

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jQuery Basics

- What does \$("p") select?
 - Does it select all p elements on the page?
 - Does it select only the first p element on the page?
- All p elements on the page.

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jQuery Basics

- Client Scripting vs Server Scripting
 - Client scripting takes place after the web page has been delivered to the browser.
 - JavaScript is a client scripting language
 - Server scripting takes place on the server before the web page is delivered to the client browser
 - PHP is a server scripting language
- jQuery is a client scripting language

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jQuery Basics

- jQuery can be mixed with other 'technologies'
 - You can mix jQuery with JavaScript
 - You can mix jQuery with Ajax
 - You can mix jQuery with JSON
- All of these are just different forms of JavaScript

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jQuery html()

- Setting the value, innerHTML, of elements.
- html() is used to set the innerHTML of an HTML element.
 - `$("div").html("puts me in the div");`
 - `$("p").html("this is the paragraph content");`

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jQuery html()

- You can also use it to retrieve the contents of an element
 - `$("div").html()`
 - Returns the value of the **first** div
 - `$("p").html()`
 - Returns the value of the **first** p
- html() works with HTML documents, but does not work with XML documents

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jQuery Basics

- What is happening here?
 - `$("div").css("background-color", "blue");`
 - Is it setting the first div to have a background color of blue?
 - Is it setting all div elements to have a background color of blue?
- All div elements.

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jQuery Basics

- Setting Styles
 - `$("div").css("background-color", "blue");`
 - Use the css() method to set CSS styles using jQuery

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jQuery Basics

- Toggle classes
 - If you want to toggle a class, let's say on every click, effectively adding the class, then removing it, then adding it, ...etc
 - `$("#div#myToggle").click(function(){
 $("#p").toggleClass("boldIt");
});`
 - When clicking on the div with id="myToggle", it will alternately add and remove the boldIt class from all paragraphs

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jQuery Basics

- Setting width and height
 - `$("#div").height(125);`
 - Sets the height of all div elements to 125 pixels
 - `$("#div").width(350);`
 - Sets the width of all div elements to 350 pixels

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jQuery Basics

- What is happening here?
 - `$("#div.pageNav")`
 - Is it selecting the first div with id="pageNav"?
 - Is it selecting all div with class="pageNav"?
 - Is it selecting the first div with class="pageNav"?
 - Is it selecting all div with id="pageNav"?
 - It is selecting all div elements with **class**="pageNav"

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jQuery Basics

- What is happening here?
 - `$("#div#pageNav")`
 - Is it selecting the first div with id="pageNav"?
 - Is it selecting all div with class="pageNav"?
 - Is it selecting the first div with class="pageNav"?
 - Is it selecting all div with id="pageNav"?
 - It is selecting all div elements with **id**="pageNav"

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jQuery hide()

- Again, a useful function.
 - `hide()` will hide an element
 - You can use "slow" or "fast" to tell it how quickly to hide the element.
 - Simply using `hide()` without specifying slow or fast will hide the element immediately.

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jQuery Basics

- Many times, you want something to happen when the browser first loads.
- Remember,
 - `$(document).ready()`
 - is used to prevent code from running until the pages has finished loading.
- It replaces the old JavaScript call:
 - `window.onload()`

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jQuery Basics

- What does \$. mean?
 - When you see \$.ajax() for example, you should read it as: jquery.ajax()
 - It means, in this example above, use jQuery to make an Ajax request

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jQuery Ajax

- Introduction to \$.ajax()
 - jQuery.ajax() is used to perform an Ajax call.
 - We'll look at this more later.
 - ajaxComplete
 - What to do when an Ajax request completes
 - ajaxError
 - What to do when there's an error

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jQuery Ajax

- ajaxSend()
 - Function to run before sending request
- ajaxStart()
 - Function to run when request first begins
- ajaxStop()
 - Function to run when all requests complete
- ajaxSuccess()
 - Function to run when request completes successfully

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