CGT 353 Lecture 3

More jQuery

Ronald J. Glotzbach

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

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.

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.

jQuery Basics

- jQuery calls could look like:
  - jQuery("div")

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

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.

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

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

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");

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

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.

jQuery Basics

- Setting Styles
  - $("div").css("background-color", "blue");

  - Use the css() method to set CSS styles using jQuery

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

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

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"

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"

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.

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()

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

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

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