Lecture 25

jQuery

* Course logo spider web photograph from Morguefile openstock photograph by Gabor Karpati, Hungary.
Why jQuery

- Some aspects of JavaScript grow tiresome to us programmers.
- For starters ....
  - Querying the DOM for objects
  - Connecting events to call backs
  - Applying functions to collections
  - Asynchronous client-server interaction
What is jQuery?

- Too big a question for one slide, but
- In practice it acts much like a language extension
  - But not strictly a good characterization
- Hence, first step is to connect ...
  - A new syntax to ...
  - A new set of behaviors
Starting by Example

- Hello World in jQuery (2014)

```html
<head>
  <meta http-equiv="Content-Type" content="text/html; charset=UTF-8" />
  <title>Lecture 19 - Example 1</title>
  <script src="http://ajax.googleapis.com/ajax/libs/jquery/1.11.0/jquery.min.js"></script>
</head>
<body>
  <div id="contents">
    <p>
      This is about the simplest jQuery example possible. View the source to see what is going on.
    </p>
    <p id="message">Go Away!</p>
    <script>
      $("#message").text("Hello World");
    </script>
  </div>
  <!-- end of the page contents -->
</body>
</html>
```
Even before we touch jQuery, we need to talk briefly about http and https.
Getting Adjusted to SSL

There are 3 URL forms in this context.

1. Start with http:// - this failed!
2. Start with https:// - this will work
3. Start with // - this is non committal

Which is best? (think about it ...)

For example01 they are:

```html
<script src="http://ajax.googleapis.com/ajax/libs/jquery/1.11.0/jquery.min.js">
</script>

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.0/jquery.min.js">
</script>

<script src="/ajax.googleapis.com/ajax/libs/jquery/1.11.0/jquery.min.js">
</script>
```
Back to jQuery - Selectors

- Here is way to think about syntax
  - $( selector ). action
- Think of selector as DOM query.
- Large set of actions/methods defined.

[jQuery API Documentation]

.text()  
Get the combined text contents of each element in the set of matched elements, including their descendants, or set the text contents of the matched elements.
The text method

```
.text()
```

Categories: Manipulation > DOM Insertion, Inside

Get the combined text contents of each element in the set of matched elements, including their descendants, or set the text contents of the matched elements.

**Contents:**

- .text()
  - .text()
Already Powerful – A Twofer

Pay attention to the fine print on text, it can operate on sets.

```html
4 <meta http-equiv="Content-Type" content="text/html; charset=UTF-8" />
5 <title>Lecture 26 - Example 2, jQuery Hello World</title>
6 <script src="/ajax.js"></script>
7 </head>
8 </body>
9 <div id="contents">

This is about the simplest jQuery example possible. View the source to see what is going on. Note the paragraph precedes the script, why?

Hello World

Hello World

</div>
11 <p>
12 This is about the simplest jQuery example possible. View the source to see what is going on. Note the paragraph precedes the script, why?
13 </p>
16 <p class="message">Seriously Folks</p>
17 <p class="message">Seriously Folks Again</p>
18 <script>
  $( " .message " ).text("Hello World");
19 </script>
20 </div>
```
The concise syntax has many virtues.

But, sometimes library conflicts arise over `$` and so, use `jQuery` instead.

This also is helpful in terms of understanding.

jQuery is a library and it defines a single very powerful function `jQuery`.
Dollar Free jQuery

- For compatibility with other libraries that may want prior claim on ‘$’

```html
<head>
<meta http-equiv="Content-Type"/>
<title>Lecture 19 - Example 3, Dollar Free jQuery</title>
</head>

<body>
  <div id="contents">
    <p>This is jQuery hellow world showing 'jQuery' function call made explicit.</p>
    <p id="message">Go Away!</p>
  </div>
  <script>
    jQuery( "#message" ).text("Hello World");
  </script>
</body>
```
Credit Where Credit ...

- w3schools jQuery tutorial is good.
Hide, Show & Buttons

Pay attention to ready function.

```javascript
$(document).ready(function() {
    $('#snoopy').click(function() {
        $('#snoopy').hide();
        $('#lassie').show();
    });
    $('#snoopy_button').click(function() {
        $('#snoopy').show();
        $('#lassie').hide();
    });
});
</script>

Everyone knows my favorite dog is Snoopy/Lassie.

Pick Snoopy  Pick Lassie