Lecture 5

jQuery UI

This is fairly short lecture because you do have a lot of reading and viewing to do. We don't have time to cover all of the features you can tap into with the jQuery UI, so I want to touch on some of the extremely cool components you can use with jQuery to pique your curiosity.

Downloading jQuery UI library

- http://jqueryui.com

- Download entire library or customize

The jQueryUI site refers to each of these features as widgets. Just like the jQuery file, you call the jQueryUI file in your HTML.

Accordion

- Arranges content into sections
- Sections can expand and collapse with mouse click
- Styling is done with CSS
- The only script code you need is:

```
<script>
  $(function() {
  $( "#accordion" ).accordion();
    });
</script>
```

Under the Examples link in the module, I've created some demos of each of these, so take a look at them and do a View Source to see the code.

One thing with Accordion, though, is that you can only have one section open at a time. When you click on a link, the section opens. Then when you click on the next section, the first section closes. If you want to have more than one section open at once, you'll need to use something else, such as the toggle method.

Autocomplete

- Gives user suggestions when typing in terms into input field
- Terms = JavaScript array
- The script code you need is:

```
<script>
$(function() {
 var availableTerms = [
        "Term1",
        "Term2",
        "Term3"
 ];
 $( "#terms" ).autocomplete({
        source: availableTerms
 });
});
</script>
```

Autocomplete makes it possible to make suggestions when a user is inputting text. This is similar to what Google does now. When you start to type in your search terms, suggestions appear in a dropdown.

This one does have extra code, and that's your array. You declare your var with a specific name, and that name also needs to go in the source: line. Here, the word terms is the id for the input field, and availableTerms is the name of the array where all of the terms are placed.

You can see how powerful this one is if you think about inputting terms that the user will see. You could direct them to pages that you want them to go to by adding those into the autocomplete, or keeping others out.

Button

- Adds style to standard input buttons, radio buttons and checkboxes
- Great for "prettying up" your Submit or Reset buttons on forms
- The only script code you need is:

```
<script>
  $(function() {
   $( "button, input:submit, a", ".demo" ).button();
   $( "a", ".demo" ).click(function() { return false; });
  });
</script>
```

Datepicker

- Lets user choose date from dropdown calendar
- Form input field
- The only script code you need is:

```
<script>
  $(function() {
   $( "#datepicker" ).datepicker();
  });
</script>
```

Datepicker uses a standard form input field. When the user clicks on it, a calendar drops down or to the side for them to be able to choose the exact date. Datepicker lets you customize how the calendar looks, a range of dates available, and even the language of the calendar.

Dialog

- Sets a dialog window to "pop up"
- Default has title bar, message area and close "X" icon

```
<script>
$(function() {
   $( "#dialog" ).dialog();
});
</script>
```

You set the title inside the top bar with a title attribute. With the dialog, you have the option of animating it or having a modal window, which is a window that pops up and the user cannot interact with the rest of the page until the box is closed.

Progressbar

- Shows the status of a specified process
- Only use when system can accurately update process
- The only script code you need is:

```
<script>
  $(function() {
        $( "#progressbar" ).progressbar({
            value: 37
        });
    });
</script>
```

Value is what you want the progress bar to start at, or initialize to. You have the option to have a set progressbar, or even one that is animated. To do that, you'll set a background image of an animated gif.

Slider

- Slider bar that has handle and can be moved with mouse or arrow keys
- Multiple options available!
- The only script code you need is:

```
<script>
 $(function() {
         $( "#slider" ).slider();
     });
</script>
```

With the slider, you can create a colorpicker slider, multiple slides, such as with volume controls, a slider scrollbar, and even a vertical slider. The default is horizontal, by the way.

Spinner

- Allows user to input number, then toggle the value up or down with up/down arrows

- The only script code you need is:

```
<script>
 $(function() {
   var spinner = $( "#spinner" ).spinner();
  });
</script>
```

The spinner has several options that deal with currency, decimal points, map latitude and longitude, and time.

Tabs

- Arranges content into sections
- Sections can expand and collapse with mouse click
- Styling is done with CSS
- The only script code you need is:

```
<script>
  $(function() {
  $( "#tabs" ).tabs();
    });
</script>
```

The default for Tabs is to have the user click to change the tabs, but you can make it to when the user just hovers over the link. You also can create tabs dynamically, or even make the tabs draggable so the user can move, or sort, them the way they want. That functionality makes use of the sortable method.

Tooltip

- Allows for customized tooltips
- When user hovers over element, tooltip pops up
- The only script code you need is:

```
<script>
$(function() {
        $( document ).tooltip();
    });
</script>
```

The tooltip area can be customized using CSS.

Now, a caveat with these UI features. As you can see, the code is the easy part. It's the styling that will take time. You need to make sure you leave time for styling. It may look like a breeze but it's not.

"Lightbox"

- Lightbox (uppercase) = script on Prototype framework to display images

- lightbox (lowercase) = script on any JavaScript framework to display images and other content

- jQuery lightbox plugins:
  - ColorBox
  - ThickBox

Some of you may have heard of lightbox, and there is a little confusion around it. There's a script called LightBox that's on the Prototype framework, not jQuery. But the term lightbox is much like the terms band-aids or kleenex. That was the original name and its what everyone knows it as. Lightbox the brand is still around, but there have been scripts created that work in the other frameworks, including jQuery. A "lightbox" is a script that allows you display large images using various modal dialogues. Lightbox plugins for jQuery include Colorbox and Thickbox.

Colorbox is very customizable, which makes it flexible for just about any kind of gallery. Just like the UI components, Colorbox styling is controlled by CSS. I have a link to an example of Colorbox in the Examples section in the module.

Assignment and reading for Module 5

- Reading/viewing:
  - Lynda.com HTML5: First Look chapter 6 (the 3 canvas-related videos)
  - Lynda.com HTML5: Graphics and Animation with Canvas 1-8
  - Lynda.com jQuery Essential Training chapters 5-7
  - Additional Materials for Module 5

- Assignment #6