



## WEEK 5

Learn to implement jQuery widgets/effects such as date pickers, progress bars, accordions, easing, etc by adding them to a project.

Explore the market of non-jQuery libraries that do the same functions.

Understand the page load cost and legacy support associated to these other libraries.

Learn important evaluation processes and debug tools.



# JavaScript Fundamentals Review

- Variables
- Function calls
- Passing parameters
- Associative Arrays
  - Key: Value pairs
- Traversing the DOM
- Attaching library to your html
- jQuery Namespace

```
<script>  
$( "#accordion" ).accordion({active:false,collapsible:true});  
//I like them all to be closed on load so I use these options  
</script>
```

JavaScript  
Selector

JavaScript  
Method

Passing  
Key:value



# Exercise- jQueryUI

- Experiment with different widgets
  - <http://jqueryui.com/>
- Include the jquery UI code
- Include the function call
- Tie it to the HTML by the id
- Always beware of versioning and multiple calls to jquery
- Build it first as a unit test then incorporate it into your project
  - <http://jqueryui.com/download/>
- Advanced – explore the size of the different download choices
  - Do you need it all?
  - What is the size difference?

## jQuery UI Unit Test

This is a unit test of the jQuery accordion widget demonstrating the call to the css and js files and the funtion call.

### Accordion

► Breakfast

► Lunch

► Dinner

```
<!doctype html>
<html lang="us">
<head>
  <meta charset="utf-8">
  <title>jQuery UI Example Page</title>
  <link href="jquery-ui-1.11.4.custom/jquery-ui.css" rel="stylesheet">
  <style>
    body{
      font: 62.5% "Trebuchet MS", sans-serif;
      margin: 50px;
    }
  </style>
</head>
<body>
<h1>jQuery UI Unit Test</h1>
<div class="ui-widget">
  <p>This is a unit test of the jQuery accordion widget demonstrating the call to the
  css and js files and the funtion call.</p>
</div>
<!-- Accordion -->
<h2 class="demoHeaders">Accordion</h2>
<div id="accordion">
  <h3>Breakfast</h3>
  <div>Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet. Lorem ipsum dolor sit
  amet.</div>
  <h3>Lunch</h3>
  <div>Phasellus mattis tincidunt nibh.</div>
  <h3>Dinner</h3>
  <div>Nam dui erat, auctor a, dignissim quis.</div>
</div>

<script src="jquery-ui-1.11.4.custom/external/jquery/jquery.js"></script>
<script src="jquery-ui-1.11.4.custom/jquery-ui.js"></script>
<script>
  $( "#accordion" ).accordion({active:false,collapsible:true});
  //I like them all to be closed on load so I use these options
</script>
</body>
</html>
```



# Lots of great plugins for Bootstrap

- [http://bootstrapious.com/p/list-of-the-best-bootstrap-plugins-in-2016?utm\\_medium=social&utm\\_source=plus.google.com&utm\\_campaign=bootstrap30k](http://bootstrapious.com/p/list-of-the-best-bootstrap-plugins-in-2016?utm_medium=social&utm_source=plus.google.com&utm_campaign=bootstrap30k)
- Group exercise, explore plugins



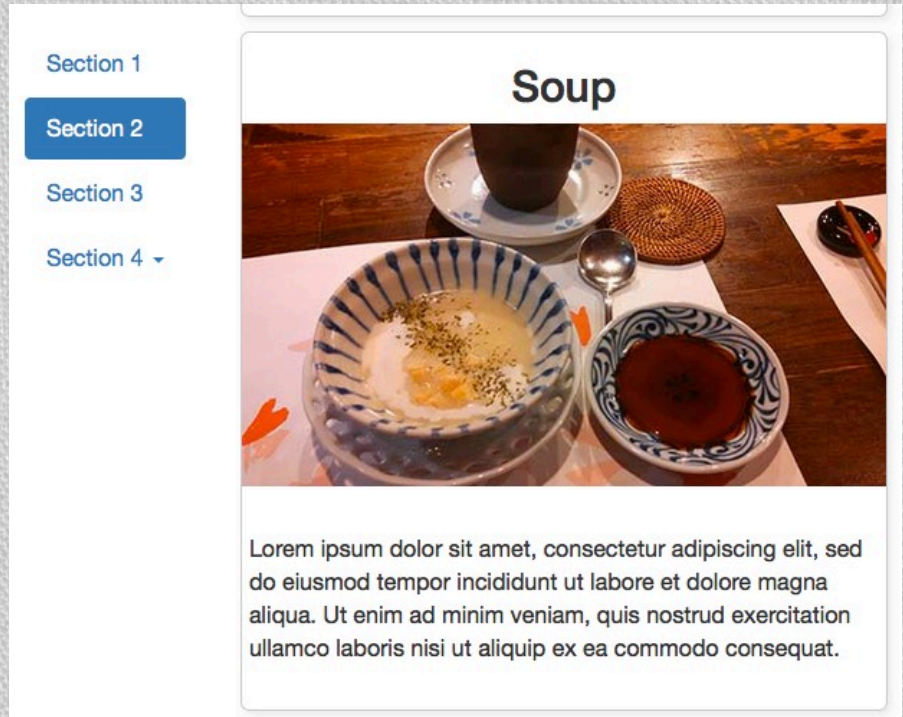
# Scrollspy – Single Page Sites

- Identify the active menu item on a single page site
  - Simplest description here
    - [http://www.w3schools.com/bootstrap/tryit.asp?filename=trybs\\_scrollspy2&stacked=h](http://www.w3schools.com/bootstrap/tryit.asp?filename=trybs_scrollspy2&stacked=h)
- And another list of jQuery patterns

<http://www.jqueryscript.net/tags.php/>

[Scroll](#)

- Try it and customize it





# My Scrollspy Customization

- They always need a little adjustment
- Make it your own
- Started with W3Schools example
- Beware of using height!
- Note this pulls from cdn
- Note my image width challenge
  - Size your images appropriately.

```
<html lang="en">
<head>
  <title>Scrollspy Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet"
href="http://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css">
  <script
src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.2/jquery.min.js"></script>
  <script
src="http://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/js/bootstrap.min.js"></script>
  <style>
    body {
      position: relative;
      font-size: 16px;
    }
    ul.nav-pills {
      top: 20px;
      position: fixed;
    }
    div.col-sm-9 div {
      /*Never set a height in css
      height: 250px;
      font-size: 28px;*/
      -moz-box-shadow: 3px 3px 4px #eee;
      -webkit-box-shadow: 3px 3px 4px #eee;
      box-shadow: 3px 3px 4px #eee;
      -ms-filter: "progid:DXImageTransform.Microsoft.Shadow(Strength=4, Direction=135,
Color='#eee')";
      filter: progid:DXImageTransform.Microsoft.Shadow(Strength=4, Direction=135,
Color='#eee');
      border: 1px solid #ccc;
      -webkit-border-radius: 6px;
      -moz-border-radius: 6px;
      border-radius: 6px;
      margin-bottom: 10px;
    }
    div.col-sm-9 div p {
      /*accommodates my images*/
      max-width: 500px;
      margin: 2em auto;
      padding: 0 5px 0 5px;
    }
    @media screen and (max-width: 810px) {
      #section1, #section2, #section3, #section41, #section42 {
        margin-left: 150px;
      }
    }
  </style>
```



# Bootstrap Date Picker Widget


- Bootstrap does not have a native Date Picker
- Libraries Available
  - [cdnjs.cloudflare.com](http://cdnjs.cloudflare.com) for this example
- Tutorial
  - <http://formvalidation.io/examples/bootstrap-datepicker/>

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**First Name**

**Email address**

**Date**




★ Basic responsive example with images.

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« **May 2016** »

Su	Mo	Tu	We	Th	Fr	Sa
24	25	26	27	28	29	30
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4



★ Basic responsive example with images.



# Date Picker cont'd

```
<div class="col-xs-12 col-sm-3">
<form id="eventForm" action="" method="POST">
  <div class="form-group">
    <label for="firstName">First Name</label>
    <input type="text" class="form-control" id="firstName" name="firstName" placeholder="First Name">
  </div>
  <div class="form-group">
    <label for="exampleInputEmail1">Email address</label>
    <input type="email" class="form-control" id="exampleInputEmail1" placeholder="Email">
  </div>
  <div class="form-group">
    <label for="datePicker">Date</label>

    <div class="input-group input-append date" id="datePicker">
      <input type="text" class="form-control" name="date" >
      <span class="input-group-addon add-on"><span class="glyphicon glyphicon-calendar"></span></span>
    </div>
  </div>
  <div class="form-group">
    <button type="submit" class="btn btn-default">Submit</button>
  </div>
</form>
```

```
<link rel="stylesheet" href="//cdnjs.cloudflare.com/ajax/libs/bootstrap-datepicker/1.3.0/css/datepicker.min.css" >
<link rel="stylesheet" href="//cdnjs.cloudflare.com/ajax/libs/bootstrap-datepicker/1.3.0/css/datepicker3.min.css" >

<script src="//cdnjs.cloudflare.com/ajax/libs/bootstrap-datepicker/1.3.0/js/bootstrap-datepicker.min.js"></script>
<script>
$(document).ready(function() {
  $('#datePicker')
    .datepicker({
      format: 'mm/dd/yyyy'
    })
    .on('changeDate', function(e) {
      // Revalidate the date field
      // $('#eventForm').formValidation('revalidateField', 'date');
      //nice idea for advanced
    });
});
</script>
```



# FYI only - Compare Foundation 6 Plugins

- Foundation includes a set of plugins
  - Form validation
    - <http://foundation.zurb.com/sites/docs/abide.html>
  - Column alignment
  - CSS helper
  - Sticky header and footer
- And a set of libraries
  - Motion UI
    - <http://foundation.zurb.com/sites/docs/motion-ui.html>
  - Panini\*
  - Style Sherpa\*

\* Templating tools used with compiled CSS



# Assignment

- Finish up the classwork
- Read ahead on Material Design
  - <http://materializecss.com/about.html>
- And Material Design Light, some nice layouts in this
  - <https://medium.com/google-developers/introducing-material-design-lite-3ce67098c031#.x7p4yk4hr>
- Surf the web for usage data on jQueryMobile
  - This is an experiment, let's see if your data matches mine...