

*A quick cheat sheet to explain what clients really mean when providing feedback.*

#### STUFF CLIENTS SAY

*"Make it look more luxurious..."*

=

W I D E . T H I N  
F O N T S I N C A P S  
W I T H A W H O L E L O T  
O F L E T T E R  
S P A C I N G

*"It's not popping for me..."*

=

**Brighter,  
Bolder Crap!**  
with shadows behind!

*"This logo just looks like a font..."*

=



add.random  
ABSTRACT SHAPES

*"I'll know what I want when I see it."*

=

*They won't.*

# CS1517: Web Technology

## Using jQuery and Bootstrap

# Last Week

- Javascript
  - Arrays, form validation, DOM
  - AJAX (XMLHttpRequest)
  - jQuery
    - `$(selector).action()`
    - Selectors
      - Element, attribute, CSS
    - Event handlers
    - Callback functions
    - AJAX, HTML manipulation

With jQuery, look at the following selector: `$("div.intro")`. What does it select?

- A. The first div element with `id="intro"`
- B. All div elements with `class="intro"`
- C. The first div element with `class="intro"`
- D. All div elements with `id="intro"`

# What we'll cover

- jQuery effects.
  - Sliding, fading, toggle
- Bootstrap Components

# Some Effects...

- `.animate()` – perform a custom animation
- `.fadeIn()` – Display the matched elements by fading them
- `.fadeOut()` – Hide the matched elements by fading
- `.hide()` – Hide the matched elements
- `.show()` – Display the matched elements
- `.slideDown()` – show the matched elements in a sliding motion
- `.slideUp()` – Hide the matched elements in a sliding motion
- `.toggle()` – Display or hide matched elements

# .slideDown() & .slideUp()

- .slideDown() method animates the height of the matched elements. This causes the lower parts of the page to slide down, making way for revealed elements. .slideUp() has the opposite effect.

- `.slideDown( [ duration ], [ callback ] )`
- `.slideUp( [ duration ], [ callback ] )`

```
<div id="clickme">  
  <p>Click here!</p>  
</div>
```

```
$( '#clickme' ).click(function() {  
  $( '#hiddenDiv' ).slideDown( 'slow' );  
});
```

```
<div id="hiddenDiv">  
  <p>Some text  
here</p>
```

# Making it a bit more complicated...

```
<style type="text/css">
#hiddenDiv {
    display:none;
}
</style>
```

```
<div id="clickme">
    <p>Click here!</p>
</div>
```

```
<div id="hiddenDiv">
    
</div>
```

```
$('#clickme').click(function() {
    if($('#hiddenDiv').is(':hidden')) {
        $('#hiddenDiv').slideDown('slow');
    } else {
        $('#hiddenDiv').slideUp('slow');
    }
});
```

Click here

Click here

Click here

Click here



Animation complete.



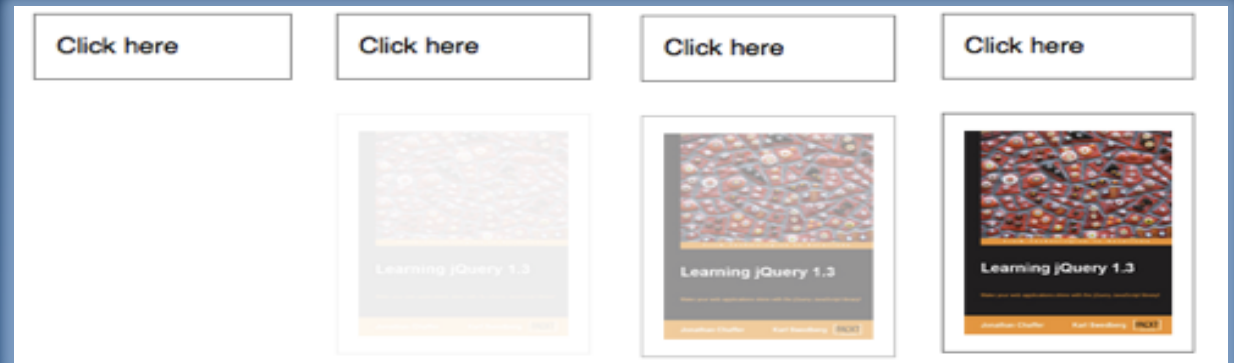
# Fade In and Out

```
<style type="text/css">
#hiddenDiv {
    display:none;
}
</style>
```

```
<div id="clickme">
    <p>Click here!</p>
</div>
```

```
<div id="hiddenDiv">
    <p>Some text here</p>
</div>
```

```
$( '#clickme' ).click(function() {
    $( '#hiddenDiv' ).fadeIn(300);
});
```



# .toggle()

- Has two uses:
  - Making an element visible or invisible immediately with no animation.
  - Making an element visible or invisible by simultaneously increasing/decreasing its width, height and opacity (transparency).
- If an element has a CSS of `display:none;` (i.e. invisible), it will be automatically be changed to `display:inline;` (i.e. visible).

# .toggle() Use 1 `$( 'target' ).toggle( )`

```
<html><head>
  <script
src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.0/jquery.min.js"
></script>
</head>
<body>
  <a href="#" id="button">Toggle</a>
  <p>Hello</p>
  <p style="display: none;">Good Bye</p>
  <script>
    $( "#button" ).click(function () {
      $( "p" ).toggle();
    });
  </script>
</body></html>
```

# .toggle() Use 2

```
$( 'target' ).toggle([duration],[callback]);
```

```
<div id="clickme">
```

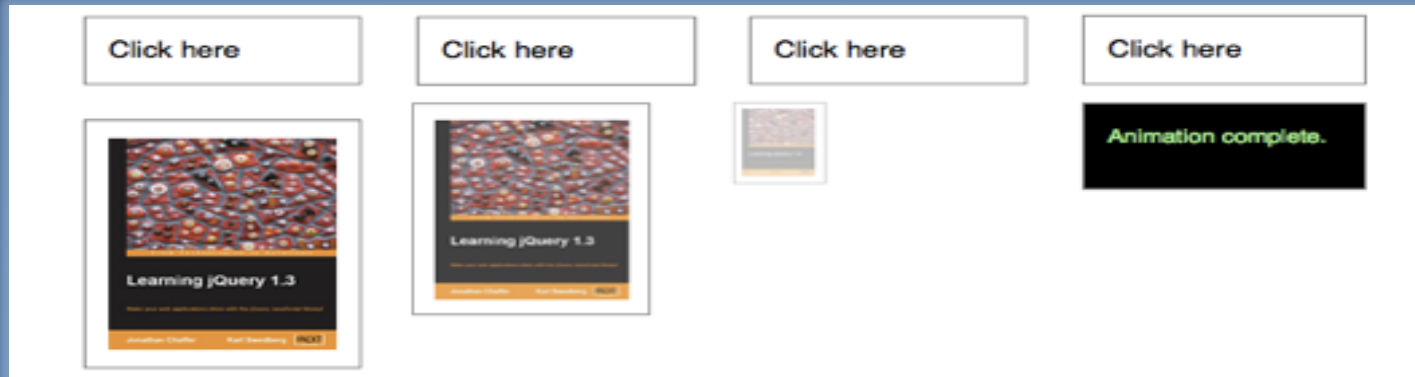
```
    Click here
```

```
</div>
```

```

```

```
$('#clickme').click(function() {  
    $('#book').toggle('slow', function() {  
        // Animation complete.  
    });  
});
```



# Question

Which of these effects will not display an element(s):

1. `show()`
2. `slideDown()`
3. `fadeOut()`
4. `makeVisible()`

# jQuery Events

- .click()
- .focus()
- .hover()
- .keydown()
- .keypress()
- .keyup()
- .mouseenter()
- .mouseleave()
- .mouseover()
- .select()
- .scroll()
- .submit()

...and more!

# Bootstrap Components and JavaScript

- A component library built on top of Bootstrap and jQuery
- Designed for highly interactive applications
- Various widgets, effects that are easy to use
- <http://getbootstrap.com/components/>
- <http://getbootstrap.com/javascript/>
- Must import bootstrap.min.js or relevant plugin js

# Modal box

- Overlays HTML element over a website
- Avoid use of pop-ups
- Show additional information without leaving the page
- Improves usability of site
- Common uses
  - Errors, warnings, collect data, confirm/prompt, help



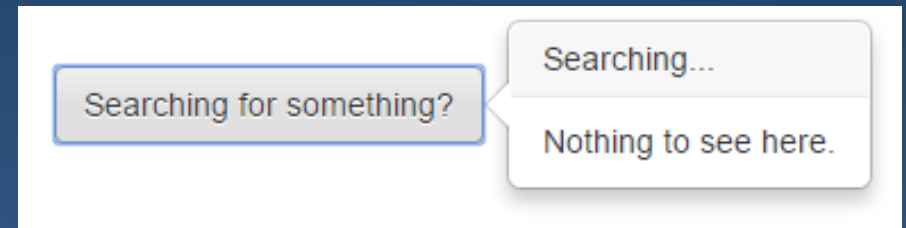
```
<a href="#" data-toggle="modal" data-target="#catModal">Show me some kittens!</a>
<!-- Modal -->
<div class="modal fade" id="catModal" tabindex="-1" role="dialog" aria-labelledby="catModalLabel">
  <div class="modal-dialog" role="document">
    <div class="modal-content">
      <div class="modal-header">
        <button type="button" class="close" data-dismiss="modal" aria-label="Close"><span aria-
hidden="true">&times;</span></button>
        <h4 class="modal-title" id="catModalLabel">Cats!!!!</h4>
      </div>
      <div class="modal-body">
        
      </div>
      <div class="modal-footer">
        <button type="button" class="btn btn-default" data-dismiss="modal">Close</button>
      </div>
    </div>
  </div>
</div>
```

# Popover

- Displays HTML to user without losing their place on the page
- Common uses
  - Important notifications, further information, help, snippets of content

```
<button id="popButton" type="button" class="btn btn-default" data-  
container="body" data-toggle="popover" data-placement="right"  
title="Searching..." data-content="Nothing to see here."> Searching  
for something? </button>
```

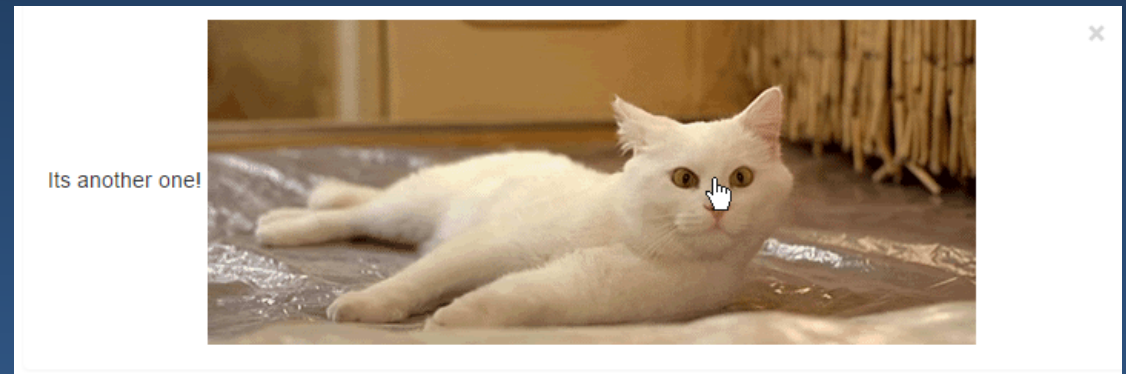
```
$(function () {  
    $('#popbutton').popover()  
})
```



# Alert

- Display a small message alerting the user to something
  - Danger or error
  - Success - submitting form
  - Information – “We use cookies”

```
<div class="alert alert-dismissible">  
Its another one!   
  <button type="button" class="close" data-dismiss="alert" aria-  
label="Close">  
    <span aria-hidden="true">&times;</span>  
  </button>  
</div>
```



# Tabs

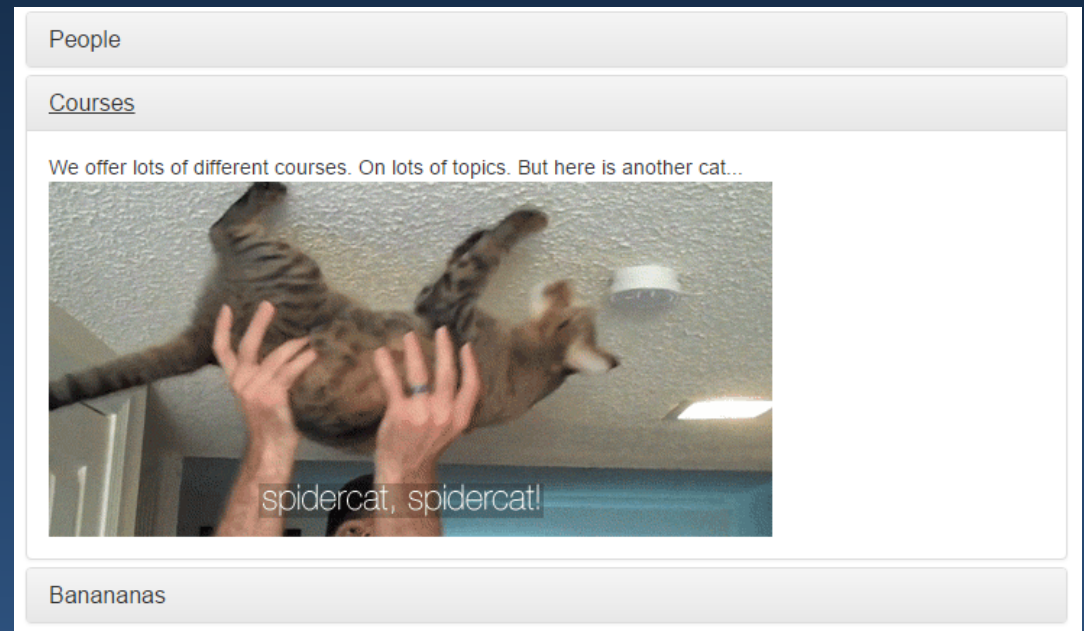
- Act as dividers for content just like tab dividers in real life
- Improve content organisation
  - Combined with AJAX
- Often used for navigation
- Inspiration see  
<http://tympanus.net/Development/TabStylesInspiration/>

```
<ul class="nav nav-tabs" role="tablist">
  <li role="presentation" class="active"><a href="#home" aria-
controls="home" role="tab" data-toggle="tab">Home</a></li>
  <li role="presentation"><a href="#profile" aria-
controls="profile" role="tab" data-toggle="tab">Profile</a></li>
  <li role="presentation"><a href="#messages" aria-
controls="messages" role="tab" data-toggle="tab">Messages</a></li>
  <li role="presentation"><a href="#settings" aria-
controls="settings" role="tab" data-toggle="tab">Settings</a></li>
</ul>

<!-- Tab panes -->
<div class="tab-content">
  <div role="tabpanel" class="tab-pane active" id="home">...</div>
  <div role="tabpanel" class="tab-pane" id="profile">...</div>
  <div role="tabpanel" class="tab-pane" id="messages">...</div>
  <div role="tabpanel" class="tab-pane" id="settings">...</div>
</div>
```

# Accordion

- Created using the collapse plugin and panel component
- Expanding menus, widgets, content areas, image galleries

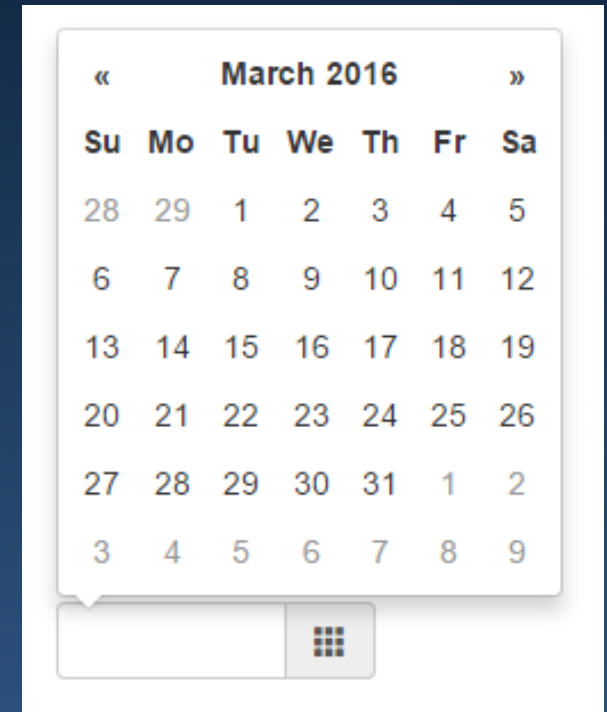


```
<div class="panel-group" id="accordion" role="tablist" aria-  
multiselectable="true">  
<div class="panel panel-default">  
  <div class="panel-heading" role="tab" id="headingOne">  
    <h4 class="panel-title">  
      <a role="button" data-toggle="collapse" data-parent="#accordion"  
href="#collapseOne" aria-expanded="true" aria-controls="collapseOne">  
        Courses  
      </a>  
    </h4>  
  </div>  
  <div id="collapseOne" class="panel-collapse collapse in" role="tabpanel"  
aria-labelledby="headingOne">  
    <div class="panel-body">  
      We have lots of courses on offer...  
    </div>  
  </div>  
</div> ... </div>
```



# Date Picker

- When asking users to fill in a date (for example, date of birth), it can cause problems if they are entering raw text.
  - Datepickers avoid that problem.
  - Standardises the input.
- Bootstrap-datepicker plugin
- <http://bootstrap-datepicker.readthedocs.org/en/latest/>



```
<link href="http://eternicode.github.io/bootstrap-datepicker/bootstrap-datepicker/css/datepicker3.css" rel="stylesheet">
```

```
....
```

```
<div class="input-group date" id="datePicker">  
  <input type="text" class="form-control"><span class="input-group-addon"><i  
class="glyphicon glyphicon-th"></i></span>  
</div>
```

```
...
```

```
<script src="http://eternicode.github.io/bootstrap-datepicker/bootstrap-datepicker/js/bootstrap-datepicker.js"></script>
```

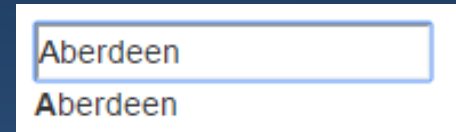
```
...
```

```
$('#datePicker').datepicker();
```

# Autocomplete

```
var cities = ["Aberdeen", "Dundee", "Edinburgh", "Glasgow",  
"Inverness", "Perth", "Stirling"];  
// constructs the suggestion engine  
var bloodhound = new Bloodhound({  
  datumTokenizer: Bloodhound.tokenizers.whitespace,  
  queryTokenizer: Bloodhound.tokenizers.whitespace,  
  // `cities` is an array of City names  
  local: cities  
});  
$('#suggestions .typeahead').typeahead({  
  hint: true, highlight: true, minLength: 1  
},  
{  
  name: 'cities', source: bloodhound  
});
```

```
<div id="suggestions">  
  <input class="typeahead" type="text"  
  placeholder="Cities of Scotland">  
</div>  
...  
<script  
src="https://twitter.github.io/typeahead.js/releases/latest/typeahead.bundle.min.js"></script>
```



Typeahead.js Bootstrap plugin  
<https://twitter.github.io/typeahead.js/>

# What we have covered

- jQuery effects.
  - Sliding, toggle, fading, ...
- Bootstrap Components and Javascript
- Next lecture
  - PHP
- Practical
  - Javascript forms, jQuery DOM and AJAX

# References

- <http://api.jquery.com/>
- <http://api.jquery.com/category/events/>
- <http://getbootstrap.com/components/>
- <http://getbootstrap.com/javascript/>
- <http://bootstrap-datepicker.readthedocs.org/en/latest/>
- <https://twitter.github.io/typeahead.js/>