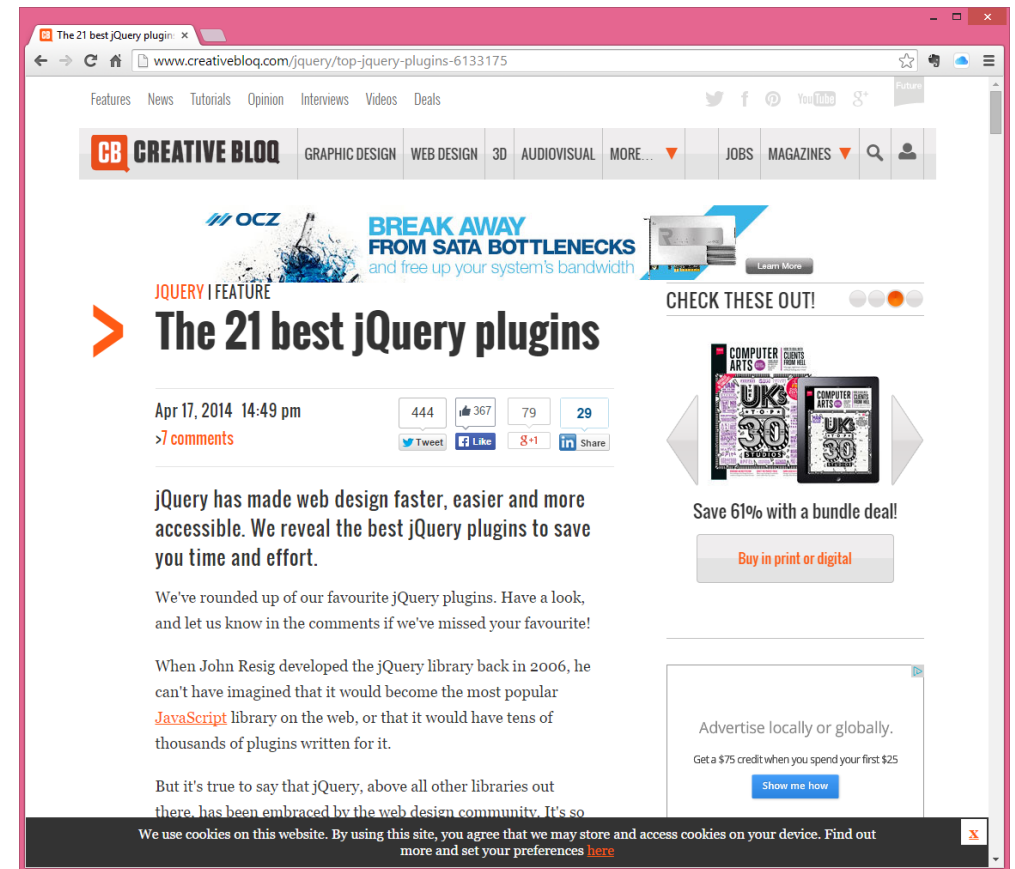# Web Behavior

JavaScript Plugins

Finding & Evaluating Plugins

- "Plugin" = an industry term
- The jQuery ecosystem
- Google it! It's been done
- Quality control
- jQuery plugin Programmers
  - Private use, or released into the wild
  - "Buyer" beware

Plugin parts

- Author of the plugin decides
- 3 - 5 parts (depending on the plugin)
- "Open source"
- 5 Parts
  1. Library script
  2. Plugin script
  - (3) CSS file (from plugin website)
  - (4) Initialization and options script (instructions from plugin website)
  - (5) Content, arranged in a specific way (instructions from plugin website)

Examples using: "jQuery UI" – a plugin

- "jQuery UI" - widget and interaction library
- Quality control - *very* good

Note: "jQuery UI" is *not* jQuery

1. Install jQuery

- jQuery website: **www.jquery.com**
- You can use the same jQuery library to power all jQuery behaviors
  - Important: only load this library once on the webpage, even if you are installing multiple plugins
- Download and insert:
  ```
  <script src="js/jquery.js"></script>
  ```

  or point to a CDN:
  ```
  <script src="http://code.jquery.com/jquery.js"></script>
  ```
- Insert the jQuery script near the bottom of the HTML document, above the closing </body> tag.
  - Remember: the jQuery script must be inserted above any other JavaScript that uses it

2. Install the plugin (jQuery UI)

- jQuery UI website: **www.jqueryui.com**
- You can use the same plugin to power all jQuery UI behaviors
  - Important: only load this library once on the webpage, even if you are planning to use multiple "widgets"
- Download and insert:
  ```
  <script src="js/jquery-ui.js"></script>
  ```

  or point to a CDN:
  ```
  <script src="http://code.jquery.com/ui/1.11.4/jquery-ui.js"></script>
  ```
- Insert the jQuery UI script near the bottom of the HTML document, *below* the jQuery script

3. Install the plugin's CSS (jQuery UI CSS)

- jQuery UI website: **www.jqueryui.com**
  - Find the generic CSS or a customized theme and download it
  - Note: You can use the same CSS to style all jQuery UI widgets

- Download and insert

```
<link rel="stylesheet" href="css/jquery-ui.css"></script>
```
...and download its associated images folder that goes in the CSS folder

or point to a CDN (if it exists):

```
<link rel="stylesheet" href="http://code.jquery.com/ui/1.11.4/themes/smoothness/jquery-ui.css">
```

- Insert the jQuery CSS link in the <head> of your HTML document

4a. Initialize the Script

- From the jQuery UI website, look-up what you need to use to initialize the particular widget you want to use.

- Inert the initialization string(s)
  Example…

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

  …below the jQuery and jQuery UI scripts

4b. Initialize the Script with Options

- Options go in an "array"
  - {

    ```
    property: value,
    property: value
    }
    ```

- From the jQuery UI website, look-up the customization options you want to use for each widget.

- Insert the customization options into the initialization strings, between curly braces, inside the parenthesis like this…

  ```
  <script>
  $( "#accordion" ).accordion({
        collapsible: true,
        heightStyle: "content"
  });
  </script>
  ```

- Notice that commas go after each option, but not after the last option

5. Arrange HTML Content in a Specific Way

- From the jQuery UI website, look-up the way content must be arranged in your HTML for each widget to work.

  Example (in HTML):

```
<div id="accordion">

    <h2>First header</h2>
    <div>First content panel</div>

    <h2>Second header</h2>
    <div>Second content panel</div>

</div>
```