Dev8D 2012

Introduction to jQuery

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Prerequisites and assumptions

- A running computer

- Basic working knowledge of HTML, CSS and Javascript

- Firefox browser with Firebug

  – Any browser should work, but this combination is recommended

- Your favoured text editor

- A copy of sample files from GitHub:

  – https://github.com/Dev8D/Dev8D/tree/master/2012/jQuery

This session

- Starting from a very simple "Hello world" webpage, add successive jQuery-based capabilities to create a simple dynamic web page

- Estimated time 30 minutes

- Sample files are provided for each step, but you should feel free to experiment with the code as you build it, to get a good feel for what the code is actually doing, and how to bend it to *your* will

1. Hello World

```html
<html>

<head>
<script type="text/javascript"
        src="js/jquery-1.7.1.js"></script>
<script type="text/javascript">
  $(document).ready(function() {
    $('#name').text("World");
  });
</script>
</head>

<body>
  <h2>Hello <span id="name">?</span></h2>
</body>

</html>
```

Hello World

2. User Input

```
    :
<script type="text/javascript">
  $(document).ready(function() {
    $('#name').text("World");
    $('body button').click(function() {
      $('#name').text($('#yourname').val());
    });
  });
</script>
</head>

<body>
  <h2>Hello <span id="name">?</span></h2>
  Enter your name here: <input id="yourname"></input>
  <button>Update</button>
</body>
```
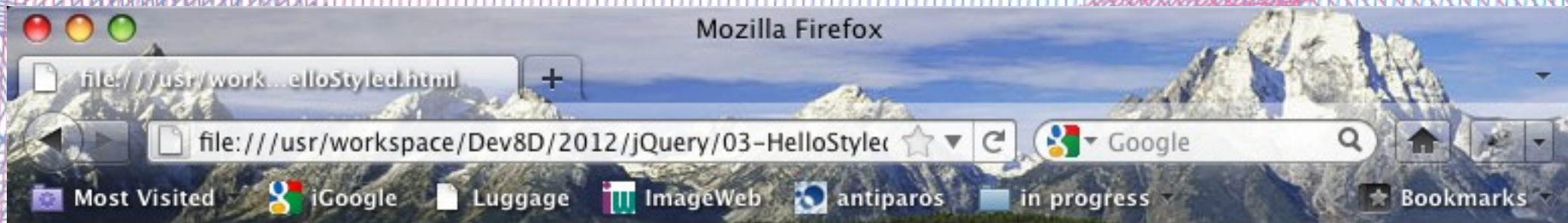
Hello Dev8D

Enter your name here: Dev8D   Update

3. Adding style

```
<script type="text/javascript">
  $(document).ready(function() {
    $('#name').text("World");
    $('body button').click(function() {
      $('#name').text($('#yourname').val());
      $('#name').css('color', 'red');
      $('#name').css(
        { 'font-family': 'cursive',
          'font-size': 'larger'});
    });
  });
</script>
```

file:///usr/work...elloStyled.html

file:///usr/workspace/Dev8D/2012/jQuery/03-HelloStyled

Google

Hello *Dev8D*

Enter your name here: [Dev8D] (Update)

4. Using functions and CSS

```
$('#flashfirst').click(flashFirstById);
$('#flashsecond').click(flashSecondById);
```

```
function flashFirstById() { flashYellow($('#first')); };
function flashSecondById() { flashPink($('#second')); };
function flashYellow(jqueryobject){
  jqueryobject.each( function(index, elem) {
     $(elem).toggleClass('highlightyellow');
   });
};
function flashPink(jqueryobject){
  jqueryobject.each( function(index, elem) {
     $(elem).toggleClass('highlightpink');
   });
};
```

```
<style>
  .highlightyellow { background-color:yellow; }
  .highlightpink { background-color:rgb(255,128,128); }
</style>
```

4. Using functions and CSS

```
<div>
<button id='flashfirst'>flash first</button>
<button id='flashsecond'>flash second</button>
</div>

<div>
  <ol>
    <li id="first">First
      <ul>
        <li>1 sub 1</li>
        <li>1 sub 2</li>
      </ul>
    </li>
    <li id="second">Second
      <ul>
        <li>2 sub 1</li>
        <li>2 sub 2</li>
      </ul>
    </li>
  </ol>
</div>
```

Hello World

Enter your name here: [   ] (Update)

(flash first) (flash second)

1. First
   - 1 sub 1
   - 1 sub 2
2. Second
   - 2 sub 1
   - 2 sub 2

5. Selectors

```
function flashFirstById()  { flash($('#first'), 'highlightyell
function flashSecondById() { flash($('#second'), 'highlightpin
function flashByName()      { flash($('button'), 'highlightgree
function flashByClass()     { flash($('.aaa'), 'highlightblue')
function flashByNesting() {
  flash($('ol li'), 'textred');
  flash($('ul li'), 'textgreen');
};
function flashByAttribute() {
  flash($('[test="select"]'), 'textgreen');
};
function flashByPos() {
  flash($('li').eq(3), 'textred');
  flash($('li').eq(4), 'textblue');
};

function flash(jqueryobject, cssclass) {
  jqueryobject.each( function(index, elem) {
    $(elem).toggleClass(cssclass);
  });
};
```

Hello World

Enter your name here: [   ] (Update)

(flash first) (flash second)
(select by name) (select by class) (select by nesting) (select by attribute) (select by position)

1. First
   - 1 sub 1
   - 1 sub 2
2. Second
   - 2 sub 1
   - 2 sub 2
3. Third
   - 3 sub 1
   - 3 sub 2

6. Modularization

```html
<head>
  <link rel="stylesheet" type="text/css"
        href="css/06-HelloModular.css" />
  <script type="text/javascript"
          src="js/jquery-1.7.1.js"></script>
  <script type="text/javascript">
    jQuery.noConflict();  // Don't define jQuery "$" variable
  </script>

  <script type="text/javascript"
          src="js/06-HelloModular.js/"></script>
  <script type="text/javascript">
    jQuery(document).ready(function() {
      Hello.registerHandlers()
    });
  </script>

</head>
```

6. Modularization

```javascript
if ( typeof(Hello) == "undefined" ) Hello = {};

(function ($) {

  Hello.registerHandlers = function () {
    $('#name').text("World");

  };


  Hello.flashFirstById = function () {
    Hello.flash($('#first'), 'highlightyellow');
  };


  Hello.flash = function (jqueryobject, cssclass) {
    jqueryobject.each( function(index, elem) {
      $(elem).toggleClass(cssclass);
    });
  };

}) (jQuery);
```

Namespace

6. Simple dynamic content

```html
<h2>
  Hello <span id="name">?</span> 
  <button id="showNameEntryBox">
    <span class="showhide">Show</span>
    entry form
  </button>
</h2>
```

```javascript
$("#NameEntryBox").hide();
$("#showNameEntryBox").click( function (event) {
  Hello.showHide(event, "#NameEntryBox")
});
```

```javascript
Hello.showHide = function(event, selector) {
  if ($(event.currentTarget).find(".showhide").text()
      == "Hide") {
    $(selector).hide();
    $(event.currentTarget).find(".showhide").text("Show");
  } else {
    $(selector).show();
    $(event.currentTarget).find(".showhide").text("Hide");
  };
};
```

Hello World   [Show entry form]

[Show selector buttons]

1. First
   - 1 sub 1
   - 1 sub 2
2. Second
   - 2 sub 1
   - 2 sub 2
3. Third
   - 3 sub 1
   - 3 sub 2

(End of session 1)