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JavaScript history and intro

What is jQuery? (and why?)

How-to jQuery

Events

Effects

Plugins



WHAT IS **jQuery** ?

write less, do more.

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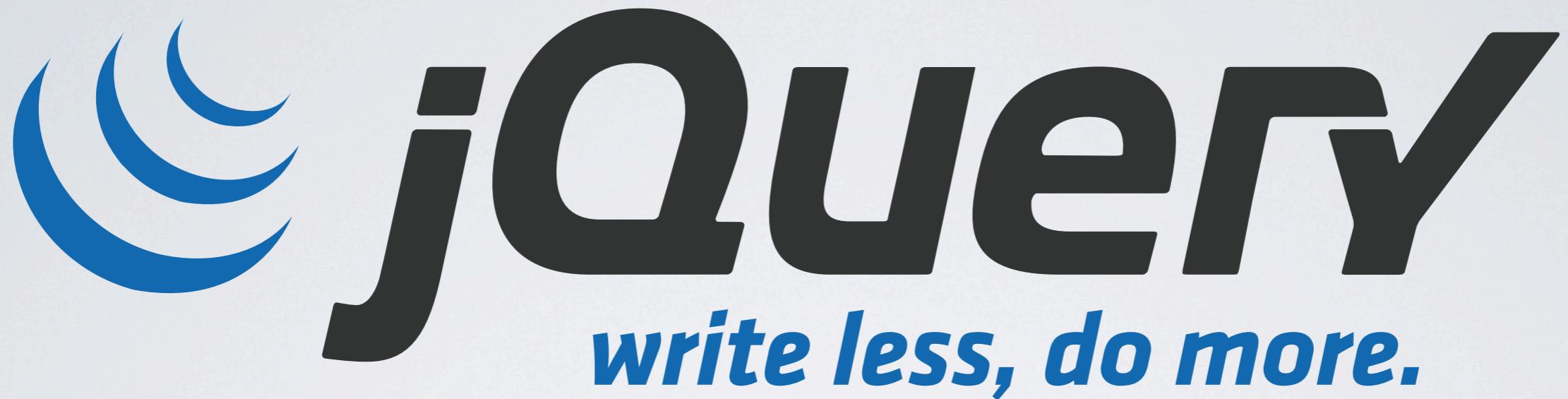


JAVASCRIPT!

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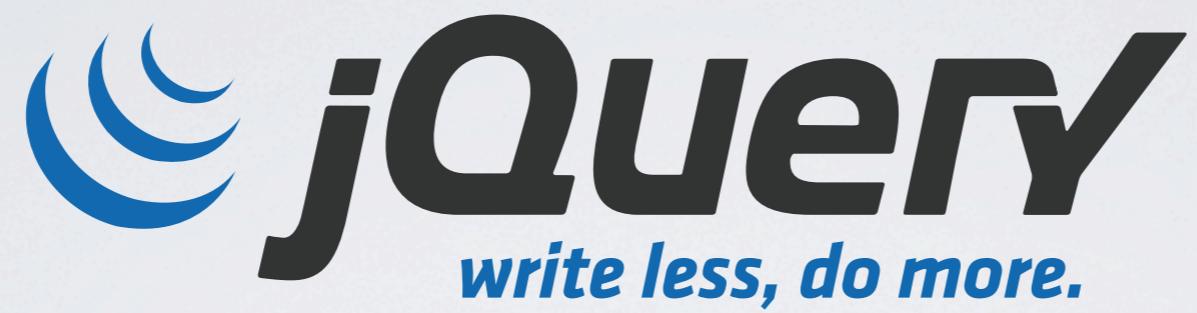


IS MADE FROM JAVASCRIPT

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IS A JAVASCRIPT LIBRARY

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WHAT IS JAVASCRIPT ?

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1997

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JULY 14



Welcome to Apple 1997

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Product Information

Customer Support

Technology & Research

Developer World

Groups & Interests

Resources Online

About Apple



Introducing CyberDrive

Register today for a free CD-ROM.

EMATE 300

Mobile,
Affordable,
& Smart



MOVIES
FROM MARS



QuickTime VR
Takes You Out
of this World

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Preorder Mac OS 8

Now you can [preorder Mac OS 8](#), described by Macworld as "the most comprehensive update to the Mac OS in years, sporting a bold new look, a speedier Finder, more shortcuts and integrated Internet functions."

Be the First to Know

Learn about new Macintosh software releases the moment they become available. Check [Hot Mac Products](#) to hear about programs like Speed Demon, ReBirth RB-338 and QuickCRC.

Want a PowerBook?

Qualify to win a [PowerBook 3400/200](#) by [entering](#) this month's Apple Registration Sweepstakes.

Newton Connects

Newton, Inc., will enhance network connectivity for Newton-based devices this fall via [Newton Internet Enabler 2.0](#). Ethernet capability can connect devices to Local Area

Apple Sites Worldwide

Switzerland

Taiwan

Turkey

UK & Ireland

United States

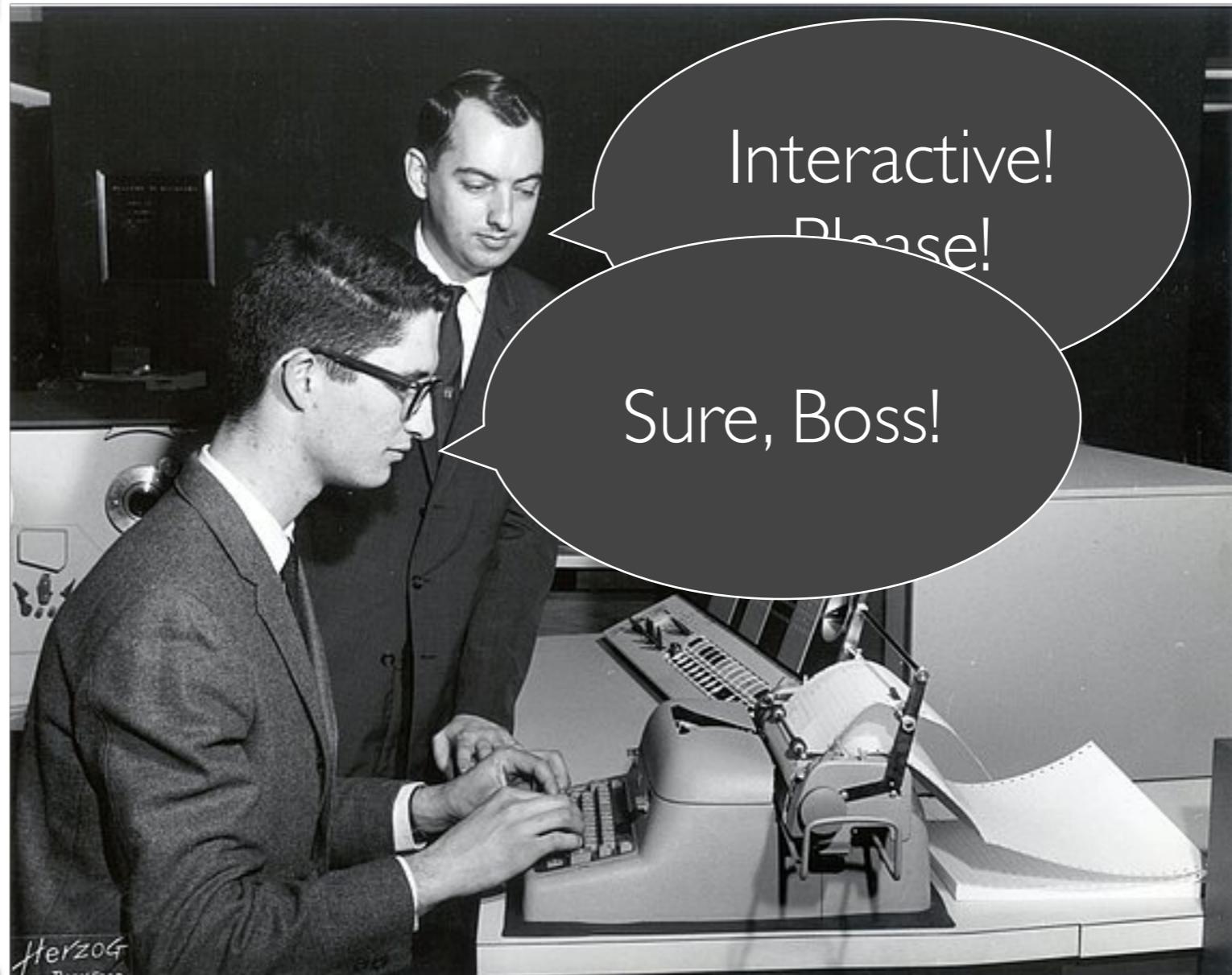
Go

Where to Buy

Register to Win

Software Updates

Home Page Archives



ECMA Script



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ECMA Script became
JavaScript

Thanks to Netscape



and the Java Applet

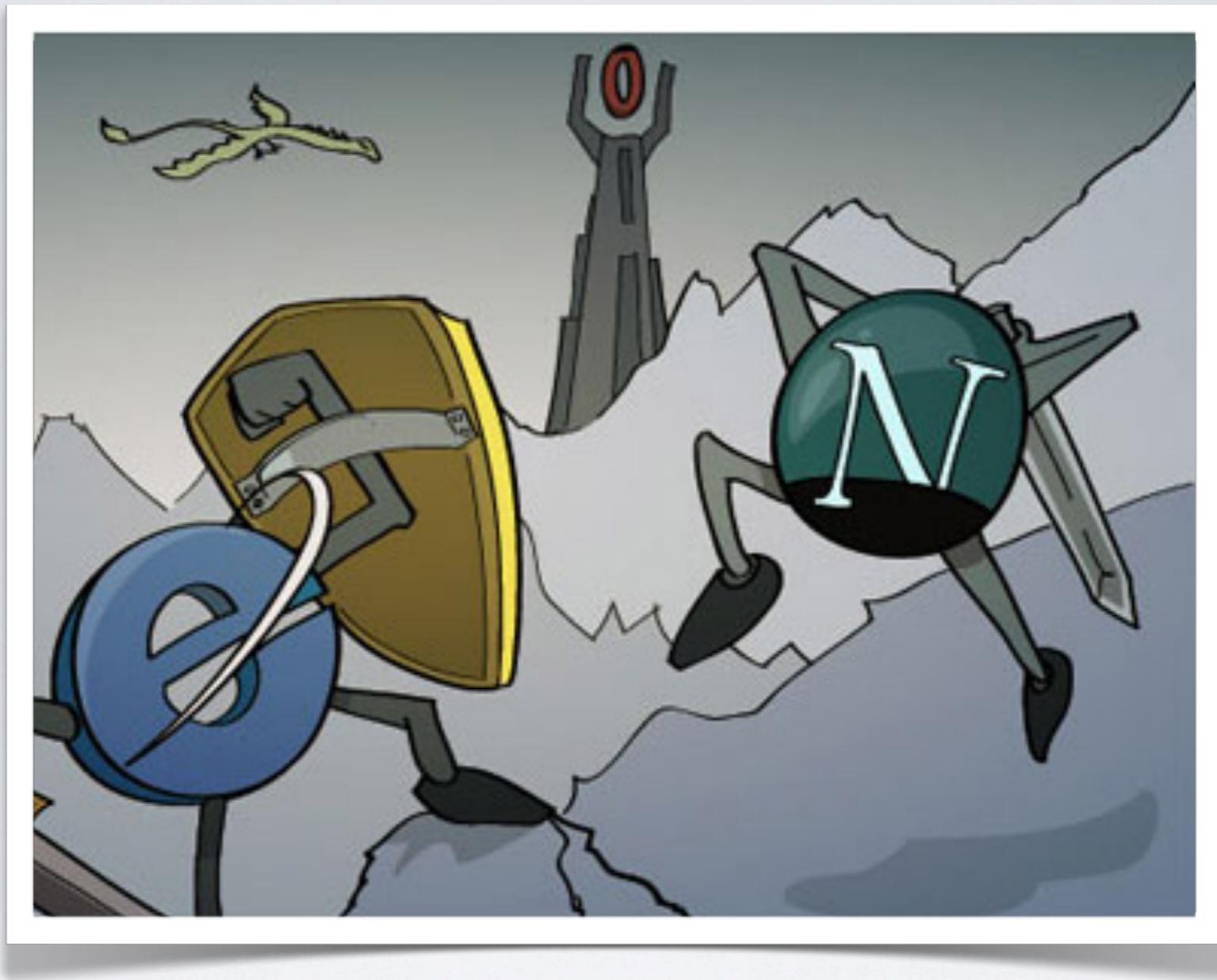


ECMA Script became

JavaScript

It has NOTHING to do with Java!





Mu^Ntsplætværdig ad VB JavaScript!

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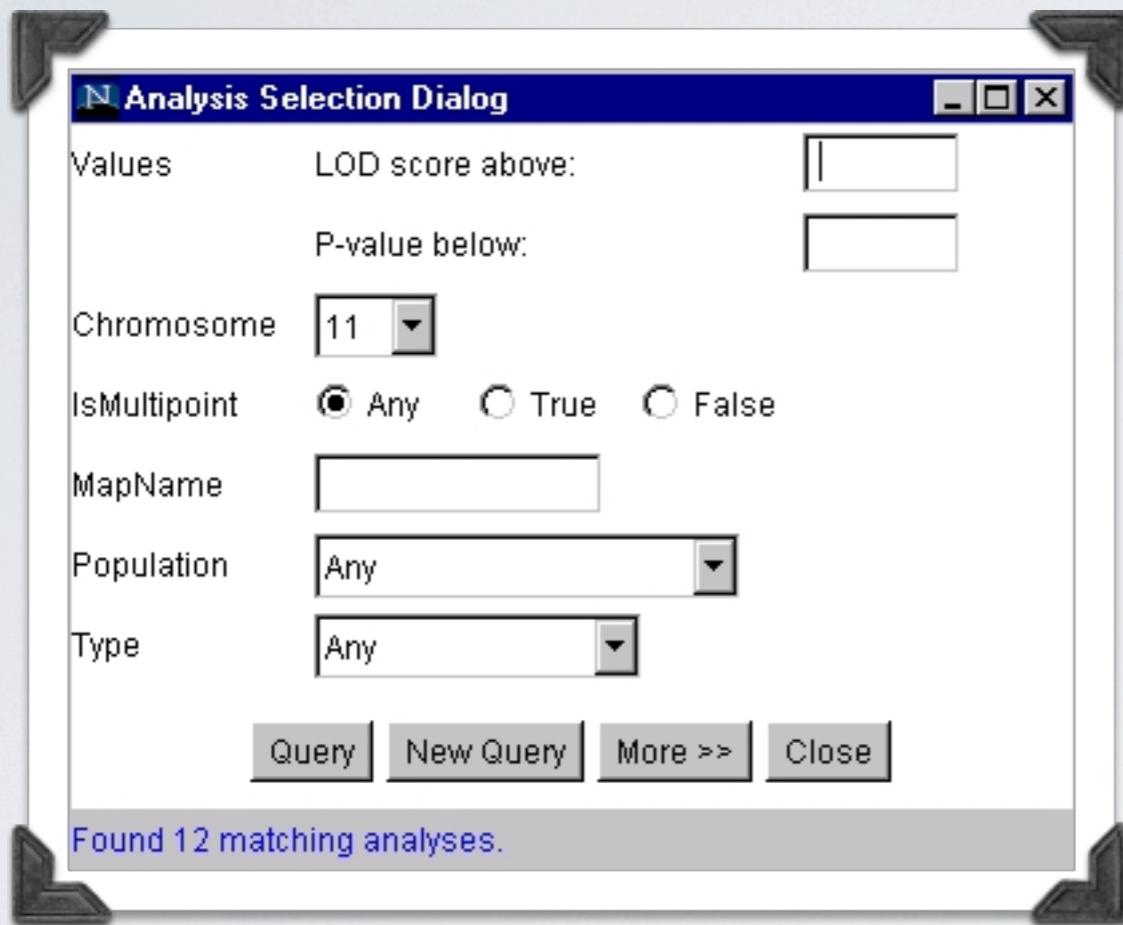
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And JavaScript had
even a year 2000 bug





Java Applet



Flash Player/Plugin

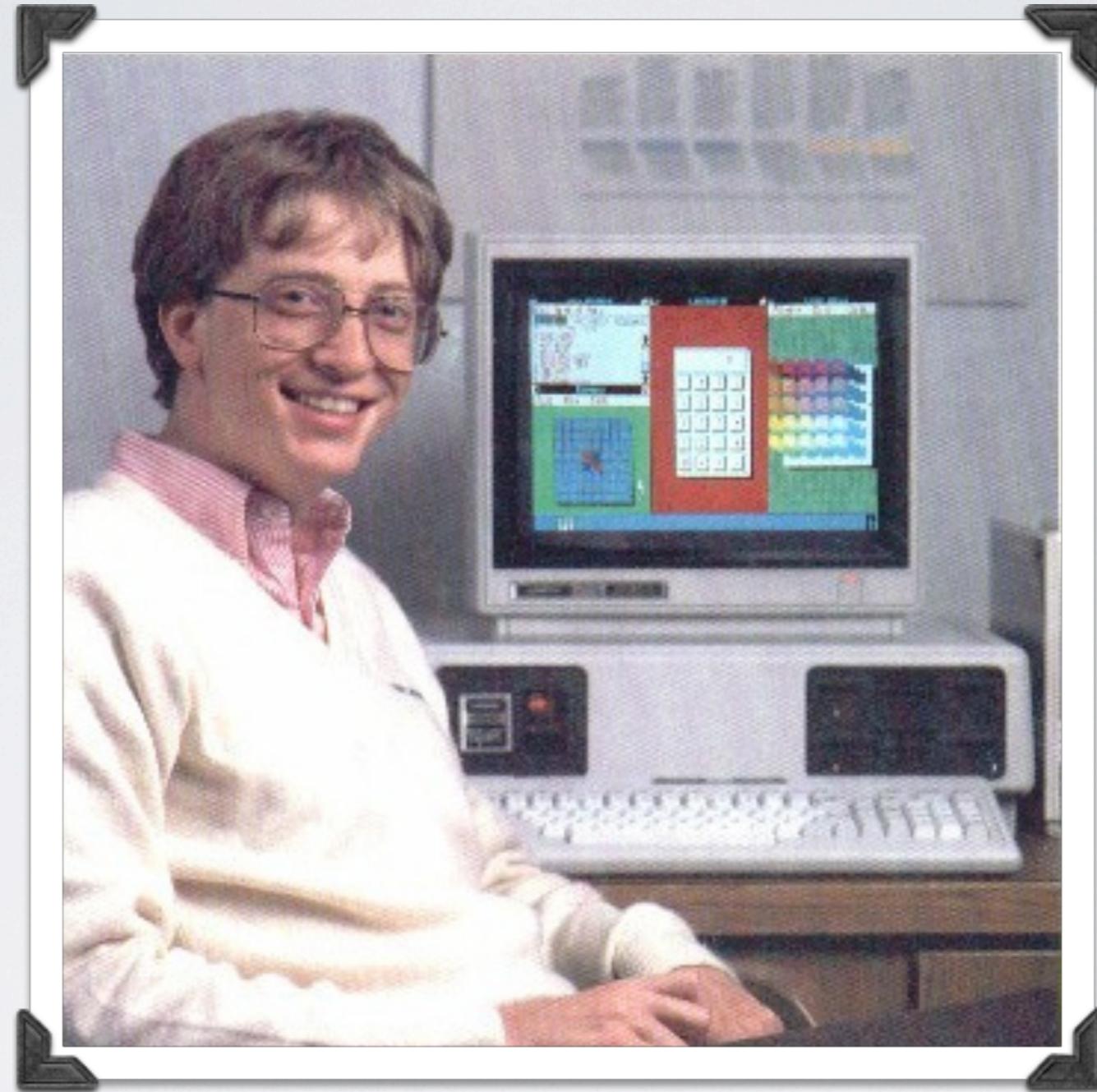




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XMLHttpRequest Object

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Asynchronous JavaScript XML

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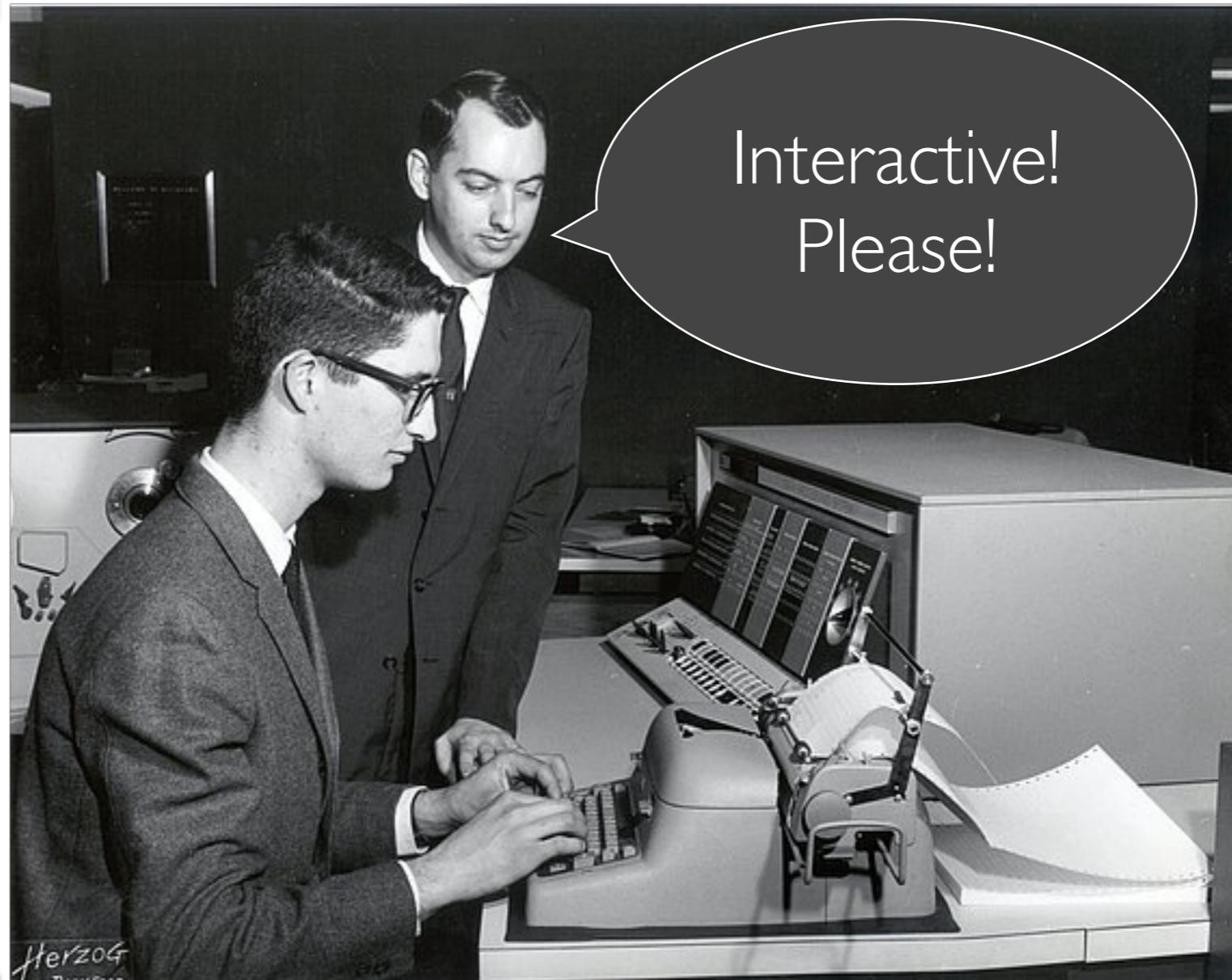


AJAX

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JAVASCRIPT INTRO

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The screenshot shows the Adobe Dreamweaver interface with the following details:

- Title Bar:** DW (Document) icon, window control buttons, Coder dropdown, and search bar.
- Left Sidebar:** CSS Styles and AP Elements tabs, Files tab selected, Local view dropdown, and Local Files tree view showing the site structure:
 - Site - itdays-spring2013 (Macintosh HD)
 - 00-javascript-intro
 - css
 - reset.css
 - style.css
 - js
 - script.js
 - index.html
 - 01-jquery-intro
- Central Area:** Source Code tab selected, showing the HTML code for index.html. The code includes:

```
1 <!doctype html>
2 <html>
3 <head>
4 <meta charset="UTF-8">
5 <link rel="stylesheet" href="css/reset.css" />
6 <link rel="stylesheet" href="css/style.css" />
7 <title>Intro JavaScript</title>
8
9 </head>
10 <body>
11 </body>
12 </html>
```
- Bottom Status Bar:** File activity complete, Log..., 2K / 1 sec, Unicode (UTF-8).

APPLY SOME JAVASCRIPT

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The screenshot shows the Adobe Dreamweaver interface. The title bar says "Dw". The top menu has "Coder" and a search bar. The left sidebar includes "CSS Styles" and "AP Elements" tabs, and a "Files" tab showing "itdays-spring..." and "Local view". The "Local Files" panel shows a site structure with a folder "Site - itdays-spring2013 (Macintosh)" containing "00-javascript-intro" (with "css" and "js" subfolders), "01-jquery-intro", and files "reset.css", "style.css", "script.js", and "index.html". The main workspace is titled "index.html" and contains tabs for "Source Code", "reset.css", "style.css", and "script.js". The "script.js" tab is active, displaying the following code:

```
1 function pageLoaded(){
2     console.log("I am loaded");
3 }
```

AND A BIT MORE...

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The screenshot shows the Adobe Dreamweaver interface with the following details:

- Title Bar:** Shows the application icon, window controls, and the word "Dw".
- Toolbar:** Includes icons for CSS Styles, AP Elements, Files, Assets, Snippets, and various file operations.
- Local Files:** A tree view showing the site structure:
 - Site - itdays-spring2013 (Macintosh HD)
 - 00-javascript-intro
 - css
 - reset.css
 - style.css
 - js
 - script.js
 - index.html
 - 01-jquery-intro
- Code Editor:** The main workspace displays the HTML code for index.html, which includes links to reset.css and style.css, and a script tag pointing to script.js.
- Bottom Status Bar:** Shows the date (09/03/13 13:58), log status, file size (2K), duration (1 sec), and encoding (Unicode (UTF-8)).

WHAT IS **jQuery** ?

write less, do more.

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John Resig, creator of jQuery

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JavaScript{ }

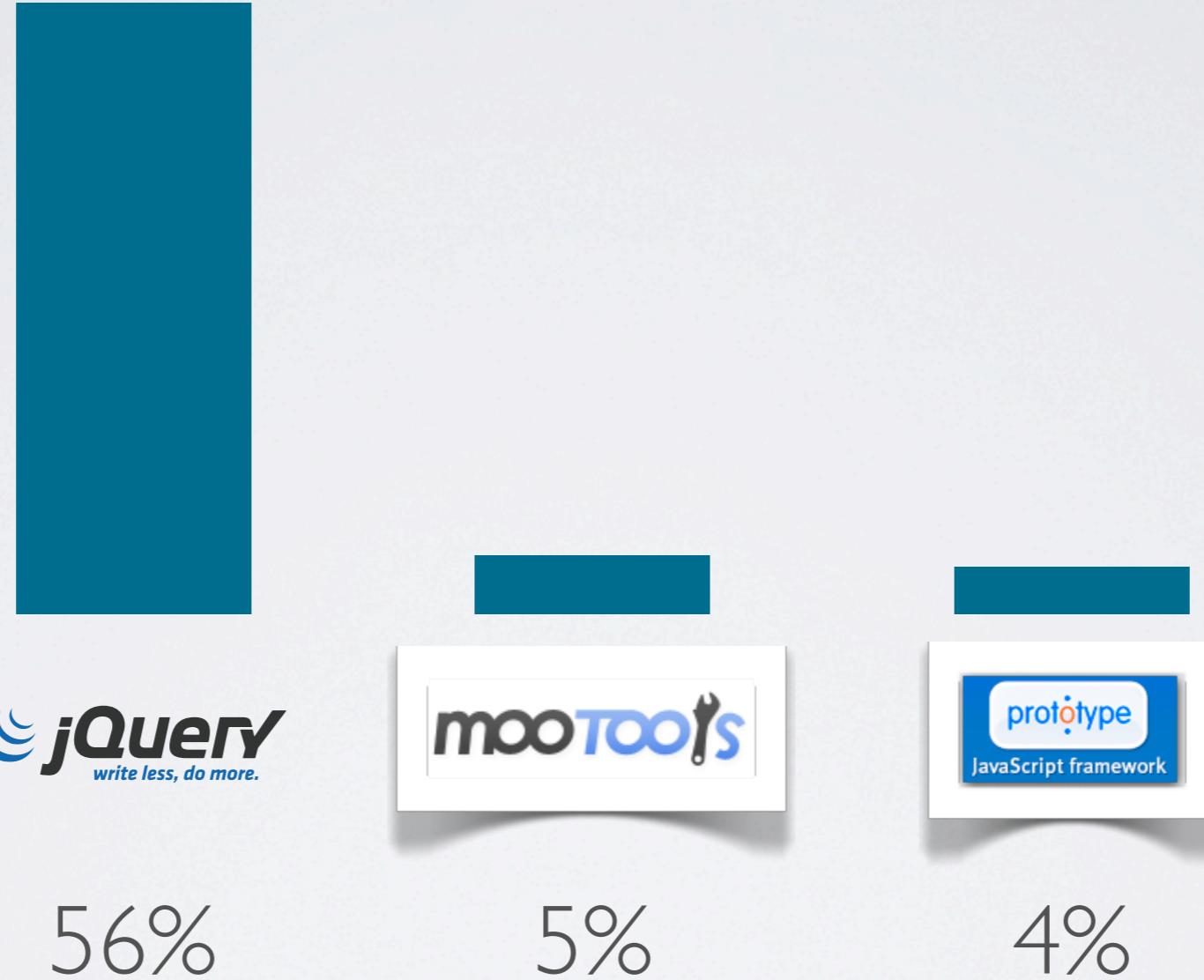


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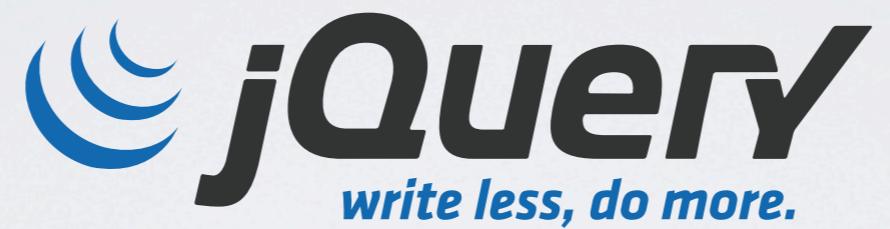
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[http://w3techs.com/technologies/history_overview/
javascript_library/all](http://w3techs.com/technologies/history_overview/javascript_library/all)



WHY



?



jQuery 1.x

IE 6+

and all the rest...

jQuery 2.x

IE 9+

and all the rest...

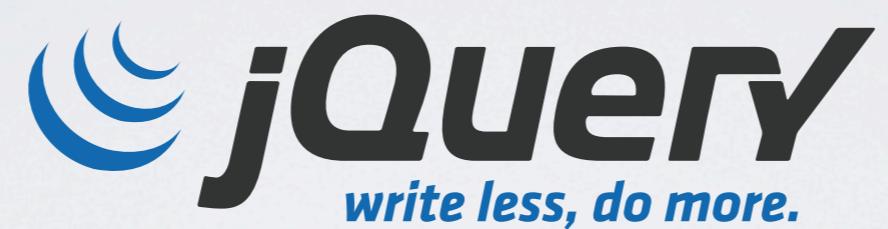




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WHY NOT



?





A skillful front-end developer...
A performance developer!



Knows when to
and
when not to



Know thy JavaScript

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JQUERY CODING

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- \$(document).ready
- Anonymous functions
- CSS Selectors
- Events
- Effects
- Plugins



FROM JAVASCRIPT TO JQUERY

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The screenshot shows the Adobe Dreamweaver interface with the following details:

- Title Bar:** DW (Document) icon, window control buttons, Coder dropdown, and a search bar.
- Left Sidebar:** CSS Styles and AP Elements tabs are selected. Below them, the Files tab is active, showing a local site structure:
 - Site - itdays-spring2013 (Macintosh HD)
 - 00-javascript-intro
 - 01-jquery-intro
 - css
 - js
 - jquery-1.9.1.js
 - jquery-1.9.1.min.js
 - script.js
 - index.html
- Central Area:** The "Source Code" tab is selected, displaying the HTML code for index.html. The code includes doctype, head, and body sections with jQuery and JavaScript logic.

```
<!doctype html>
<html>
<head>
<meta charset="UTF-8">
<link rel="stylesheet" href="css/reset.css" />
<link rel="stylesheet" href="css/style.css" />
<title>Intro JavaScript</title>
</head>
<body onLoad="pageLoaded()">
  <div id="box">
    Living in a box
  </div>
  <input type="text" id="theNewText" placeholder="Type text" />
  <button id="changeText">Change the text in the div</button>
  <script src="js/script.js"></script>
</body>
</html>
```
- Bottom Status Bar:** Title: Intro JavaScript | Log..., 3K / 1 sec, Unicode (UTF-8).

AND RESIZING THE BOX...



The screenshot shows the Adobe Dreamweaver interface with the following details:

- Title Bar:** DW (Document) icon, window control buttons, and a search bar labeled "Coder".
- Left Sidebar:** "Local Files" panel showing the site structure:
 - Site - itdays-spring2013 (Macintosh HD)
 - 00-javascript-intro
 - 01-jquery-intro
 - css
 - js
 - jquery-1.9.1.js
 - jquery-1.9.1.min.js
 - script.js
 - index.html
- Central Area:** "index.html" file open in the code editor. The tab bar shows "Source Code" is selected. The code in "script.js" is:

```
1 $(document).ready(function(e) {  
2     $("#changeText").on("click", function(){  
3         // this is an anonymous function  
4         var newText = $("#theNewText").val();  
5         $("#box").html(newText);  
6     });  
7});
```

- Bottom Status Bar:** "File activity complete." and "Log..." button.
- Bottom Right:** "3K / 1 sec Unicode (UTF-8)" status message.

COMPARISON

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```
1 function pageLoaded(){
2     document.getElementById("box").addEventListener("click", changeSize);
3     document.getElementById("changeText").addEventListener("click", changeTextInDiv);
4 }
5
6 function changeTextInDiv(e){
7     var newText = document.getElementById("theNewText").value;
8     document.getElementById("box").innerHTML = newText;
9 }
10
11 function changeSize(e){
12     var clickedElement = e.target;
13     clickedElement.style.width = clickedElement.offsetWidth + 50 + "px";
14     clickedElement.style.height = clickedElement.offsetHeight - 10 + "px";
15 }
```

```
1 $(document).ready(function(e) {
2     $("#changeText").on("click", function(){
3         var newText = $("#theNewText").val();
4         $("#box").html(newText);
5     });
6
7     $("#box").on("click", function(){
8         var w = $(this).width() + 50;
9         var h = $(this).height() - 10;
10        $(this).width(w).height(h);
11    });
12});
```

JavaScript

jQuery

document.getElementById("theid")

\$("#theid");

.addEventListener("click", fn)

.on("click", fn)

.innerHTML

.html()

.style.width
.offsetWidth

.width()

.value

.val()



SELECTORS

LIVE CODING

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All Selector (“*”)

Selects all elements.

Class Selector (“.class”)

Selects all elements with the given class.

Element Selector (“element”)

Selects all elements with the given tag name.

ID Selector (“#id”)

Selects a single element with the given id attribute.

Multiple Selector (“selector1, selector2, selectorN”)

Selects the combined results of all the specified selectors.

<http://api.jquery.com/category/selectors/basic-css-selectors/>

:first-child Selector

Selects all elements that are the first child of their parent.

:first-of-type Selector

Selects all elements that are the first among siblings of the same element name.

:last-child Selector

Selects all elements that are the last child of their parent.

:last-of-type Selector

Selects all elements that are the last among siblings of the same element name.

:nth-child() Selector

Selects all elements that are the nth-child of their parent.

<http://api.jquery.com/category/selectors/child-filter-selectors/>

Child Selector (“parent > child”)

Selects all direct child elements specified by “child” of elements specified by “parent”.

Descendant Selector (“ancestor descendant”)

Selects all elements that are descendants of a given ancestor.

Next Adjacent Selector (“prev + next”)

Selects all next elements matching “next” that are immediately preceded by a sibling “prev”.

Next Siblings Selector (“prev ~ siblings”)

Selects all sibling elements that follow after the “prev” element, have the same parent, and match the filtering “siblings” selector.

<http://api.jquery.com/category/selectors/hierarchy-selectors/>

EVENTS

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.click()

Bind an event handler to the “click” JavaScript event, or trigger that event on an element.

.dblclick()

Bind an event handler to the “dblclick” JavaScript event, or trigger that event on an element.

.focusin()

Also in: Events > Keyboard Events

Bind an event handler to the “focusin” event.

.focusout()

Also in: Events > Keyboard Events

Bind an event handler to the “focusout” JavaScript event.

.hover()

Bind one or two handlers to the matched elements, to be executed when the mouse pointer enters and leaves the elements.

.mousedown()

Bind an event handler to the “mousedown” JavaScript event, or trigger that event on an element.

inter

<http://api.jquery.com/category/events/mouse-events/>



.focusin()

Also in: Events > Mouse Events

Bind an event handler to the “focusin” event.

.focusout()

Also in: Events > Mouse Events

Bind an event handler to the “focusout” JavaScript event.

.keydown()

Bind an event handler to the “keydown” JavaScript event, or trigger that event on an element.

.keypress()

Bind an event handler to the “keypress” JavaScript event, or trigger that event on an element.

.keyup()

Bind an event handler to the “keyup” JavaScript event, or trigger that event on an element.

<http://api.jquery.com/category/events/keyboard-events/>

EFFECTS

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.hide()

Hide the matched elements.

.show()

Display the matched elements.

.toggle()

Display or hide the matched elements.

<http://api.jquery.com/category/effects/basics/>



```
1 <!doctype html>
2 <html>
3 <head>
4 <meta charset="UTF-8">
5 <link rel="stylesheet" href="css/reset.css" />
6 <link rel="stylesheet" href="css/style.css" />
7 <title>jQuery effects</title>
8
9 </head>
10
11 <body>
12   
13   <div id="text">
14     jQuery is a multi-browser JavaScript li
released in January 2006 at BarCamp NYC by Jo
Dave Methvin. Used by over 55% of the 10,000 most visited websites, jQuery is the most popular JavaScript library
in use today.
15     <p>
16       <a href="#" id="readmore">Read more</a>
17     </p>
18   </div>
19   <div id="extra">
20     jQuery is free, open source software, licensed under the MIT License. jQuery's syntax is designed to make
it easier to navigate a document, select DOM elements, create animations, handle events, and develop Ajax
applications. jQuery also provides capabilities for developers to create plug-ins on top of the JavaScript library.
This enables developers to create abstractions for low-level interaction and animation, advanced effects and
high-level, theme-able widgets. The modular approach to the jQuery library allows the creation of powerful dynamic
web pages and web applications.
21   </div>
22   <script src="js/jquery-1.9.1.min.js"></script>
23   <script src="js/script.js"></script>
24 </body>
25 </html>
```

```
1 body{
2   font-family:Helvetica, Arial, sans-serif;
3 }
4
5 #text, #extra{
6   margin: 20px 0;
7   width: 500px;
8 }
9
10 #extra{
11   display: none;
12 }
```

It was
I by



jQuery is a multi-browser JavaScript library designed to simplify the client-side scripting of HTML. It was released in January 2006 at BarCamp NYC by John Resig. It is currently developed by a team of developers led by Dave Methvin. Used by over 55% of the 10,000 most visited websites, jQuery is the most popular JavaScript library in use today.

[Read more](#)



Dw Coder

index.html

Source Code reset.css style.css jquery-1.9.1.min.js script.js

Code Split Design Live Title: jQuery effects

```
1 <!doctype html>
2 <html>
3 <head>
4 <meta charset="UTF-8">
5 <link rel="stylesheet" href="css/reset.css" />
6 <link rel="stylesheet" href="css/style.css" />
7 <title>jQuery effects</title>
8
9 </head>
10
11 <body>
12   
13   <div id="text">
14     jQuery is a multi-browser JavaScript library designed to simplify the client-side scripting of HTML. It was released in January 2006 at BarCamp NYC by John Resig. It is currently developed by a team of developers led by Dave Methvin. Used by over 55% of the 10,000 most visited websites, jQuery is the most popular JavaScript library in use today.
15     <p>
16       <a href="#" id="readmore">Read more</a>
17     </p>
18   </div>
19   <div id="extra">
20     jQuery is free, open source software, licensed under the MIT License. jQuery's syntax is designed to make it easier to navigate a document, select DOM elements, create animations, handle events, and develop Ajax applications. jQuery also provides capabilities for developers to create plug-ins on top of the JavaScript library. This enables developers to create abstractions for low-level interaction and animation, advanced effects and high-level, theme-able widgets. The modular approach to the jQuery library allows the creation of powerful dynamic web pages and web applications.
21   </div>
22   <script src="js/jquery-1.9.1.min.js"></script>
23   <script src="js/script.js"></script>
24 </body>
25 </html>
26
```

WHAT ABOUT
TOGGLE THE LINK TEXT?



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.fadeIn()

Display the matched elements by fading them to opaque.

.fadeOut()

Hide the matched elements by fading them to transparent.

.fadeTo()

Adjust the opacity of the matched elements.

.fadeToggle()

Also in: Effects

Display or hide the matched elements by animating their opacity.

<http://api.jquery.com/category/effects/fading/>



.slideDown()

Display the matched elements with a sliding motion.

.slideToggle()

Display or hide the matched elements with a sliding motion.

.slideUp()

Hide the matched elements with a sliding motion.

<http://api.jquery.com/category/effects/sliding/>



The screenshot shows the Adobe Dreamweaver interface with the following details:

- Title Bar:** Shows the application icon, window controls, and the word "Dw".
- Toolbar:** Includes icons for File, Edit, Insert, Select, and View.
- Menu Bar:** Shows "Coder" and a search bar.
- Project Explorer:** On the left, it lists files like "index.html", "reset.css", "style.css", "jquery-1.9.1.min.js", and "script.js".
- Code Editor:** The main area displays the following JavaScript code:

```
1 $(document).ready(function(e) {
2     $("#logo").on("click", function(e){
3         $("#text").hide();
4     });
5
6     $("#readmore").on("click", function(e){
7         // to stop the link from executing
8         e.preventDefault();
9         // store a reference to the link object
10        var $that = $(this);
11        $("#extra").toggle(
12            function(){
13                // change the text of the link ($that)
14                $($that).text(
15                    // check if the extra text is visible
16                    // #extra = this
17                    $(this).is(":visible") ? "Read less" : "Read more"
18                    // so if #extra is visible - show the text "Read less" in the link ($that)
19                    // else show the text "Read more" in the link
20                )
21            }
22        );
23    });
24});
```

The code uses jQuery to handle document ready, logo click, and readmore click events. It toggles the visibility of an element with ID "extra" and changes the text of the link with ID "readmore" based on its current visibility state.

AND THEN WHAT?

HOW DO WE MAKE IT SLIDE DOWN?



Dw Coder

index.html Source Code reset.css style.css jquery-1.9.1.min.js script.js*

Code Split Design Live

```
1 $(document).ready(function(e) {
2     $("#logo").on("click", function(e){
3         $("#text").hide();
4     });
5
6     /* $("#readmore").on("click", function(e){
7         // to stop the link from executing
8         e.preventDefault();
9         // store a reference to the link object
10        var $that = $(this);
11        $("#extra").toggle(
12            function(){
13                // change the text of the link ($that)
14                $($that).text(
15                    // check if the extra text is visible
16                    // #extra = this
17                    $(this).is(":visible") ? "Read less" : "Read more"
18                    // so if #extra is visible - show the text "Read less" in the link ($that)
19                    // else show the text "Read more" in the link
20                )
21            }
22        );
23    });
24 */
25     $("#readmore").on("click", function(e){
26         e.preventDefault();
27         |
28    });
29});
```

113K / 3 sec Unicode (UTF-8)

PLUGINS

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READY-MADE JQUERY SCRIPTS

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<head>

Plugin CSS

Your own CSS

</head>

<body>

<!-- your html goes here -->

jQuery

Plugin (.js)

Your own script (.js)



Slideshow

<http://www.slidesjs.com/>

Scrolling (parallax)

<http://prinzhorn.github.com/skrollr/examples/foldscroll.html>

[http://prinzhorn.github.com/skrollr/examples/
snapping_nav.html#d](http://prinzhorn.github.com/skrollr/examples/snapping_nav.html#d)

Best of 2012

<http://speckyboy.com/2012/12/10/jquery-plugins-2012/>

[http://coding.smashingmagazine.com/2012/09/23/useful-
javascript-libraries-jquery-plugins-web-developers/](http://coding.smashingmagazine.com/2012/09/23/useful-javascript-libraries-jquery-plugins-web-developers/)



COMPARE JS AND JQ

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JAVASCRIPT VS. JQUERY

<http://jsperf.com/jquery-attr-vs-native-setattribute/4>

<http://jsperf.com/jquery-vs-native-element-performance/3>



Resources



<http://learn.jquery.com/>

<http://api.jquery.com/>



<https://tutsplus.com/course/30-days-to-learn-jquery/>

<http://thephuse.com/development/you-don-t-need-a-jquery-plug-in-for-that/>



NEXT...AJAX

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