

jQuery Essentials v2

by Marc Grabanski





We needed a hero to get
these guys in line





jQuery rescues us by working
the same in all browsers!



Easier to write jQuery than
pure JavaScript

Hide divs with pure JavaScript

```
divs = document.getElementsByTagName('div');
```

```
for (i = 0; i < divs.length; i++) {  
    divs[i].style.display = 'none';  
}
```

Hide divs with pure JavaScript

```
divs = document.getElementsByTagName('div');
```

```
for (i = 0; i < divs.length; i++) {  
    divs[i].style.display = 'none';  
}
```

Hide divs with jQuery

```
 $("div").hide();
```



HTML is tied to JavaScript



jQuery Philosophy



jQuery Philosophy

#1. Find some HTML

jQuery Philosophy

#1. Find some HTML

#2. Do something to it

Find
`$(“div”)`

Find
 `$("div")`

let's find some
elements



Give `$()` a selector



Give `$()` a selector

```
$("#myId")
```



Give `$()` a selector

```
$("#myId") $(".myClass")
```

Give \$() a selector

`$("#myId")` `$(".myClass")` `$("table")`

`$("#content")` get element with id content

`$("#content")` get element with id content

`$("li:first")` get first list item

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`$("li:first")` get first list item

`$("tr:odd")` get odd numbered table rows

`$("#content")` get element with id content

`$("li:first")` get first list item

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`$("a[target=_blank]")`
get all links who's target is "_blank"

`$("#content")` get element with id content

`$("li:first")` get first list item

`$("tr:odd")` get odd numbered table rows

`$("a[target=_blank]")`
get all links who's target is "_blank"

`$("form[id^=step]")`
get all forms who's id starts with "step"



You can also string selectors together

You can also string selectors together

```
$("#myId, .myClass, table")
```

Find
`$(“div”)`

Find

Do

```
$(“div”).addClass(“redbox”);
```



jQuery API Spice

Two things that make the API HOT

Chain Methods

```
$(“div”).addClass(“redbox”)
```

Chain Methods

```
$("div").addClass("redbox").fadeOut();
```

One Method, Many Uses

`$(...).html();`

One Method, Many Uses

```
$(...).html();
```

```
$(...).html("<p>hello</p>");
```

One Method, Many Uses

```
$(...).html();
```

```
$(...).html("<p>hello</p>");
```

```
$(...).html(function(i){  
    return "<p>hello " + i + "</p>";  
});
```



jQuery Methods

- Moving Elements:
`append()`, `appendTo()`, `before()`, `after()`,

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`append()`, `appendTo()`, `before()`, `after()`,
- **Attributes**
`css()`, `attr()`, `html()`, `val()`, `addClass()`

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- **Attributes**
`css()`, `attr()`, `html()`, `val()`, `addClass()`
- **Events**
`bind()`, `trigger()`, `unbind()`, `live()`, `click()`

- **Moving Elements:**
`append()`, `appendTo()`, `before()`, `after()`,
- **Attributes**
`css()`, `attr()`, `html()`, `val()`, `addClass()`
- **Events**
`bind()`, `trigger()`, `unbind()`, `live()`, `click()`
- **Effects**
`show()`, `fadeOut()`, `toggle()`, `animate()`

- **Moving Elements:**
`append()`, `appendTo()`, `before()`, `after()`,
- **Attributes**
`css()`, `attr()`, `html()`, `val()`, `addClass()`
- **Events**
`bind()`, `trigger()`, `unbind()`, `live()`, `click()`
- **Effects**
`show()`, `fadeOut()`, `toggle()`, `animate()`
- **Traversing**
`find()`, `is()`, `prevAll()`, `next()`, `hasClass()`

- **Moving Elements:**
`append()`, `appendTo()`, `before()`, `after()`,
- **Attributes**
`css()`, `attr()`, `html()`, `val()`, `addClass()`
- **Events**
`bind()`, `trigger()`, `unbind()`, `live()`, `click()`
- **Effects**
`show()`, `fadeOut()`, `toggle()`, `animate()`
- **Traversing**
`find()`, `is()`, `prevAll()`, `next()`, `hasClass()`
- **Ajax**
`get()`, `getJSON()`, `post()`, `ajax()`, `load()`



jQuery Factory Method \$()

You can also pass `$()` a function
to run the function after the page loads.

You can also pass `$()` a function
to run the function after the page loads.

```
$(function(){  
});
```

You can also pass `$()` a function to run the function after the page loads.

```
$(function(){
    code here will execute after DOM is ready
});
```

You can also pass `$()` a function to run the function after the page loads.

```
$(function(){
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});
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Note: This is essentially the same as..
`$(document).ready(function(){ });`

You can also pass `$()` a function to run the function after the page loads.

```
$(function(){
    code here will execute after DOM is ready
});
```

Note: This is essentially the same as..

```
$(document).ready(function(){ });
```

..you will see this in tutorials around the net

Get element with ID foo and add some HTML.

```
$("#foo")
```

```
<html>
  <body>
    <div>jQuery</div>
    <div id="foo">example</div>
  </body>
</html>
```

Get element with ID foo and add some HTML.

```
$("#foo").append("<p>test</p>");
```

```
<html>
  <body>
    <div>jQuery</div>
    <div id="foo">example</div>
  </body>
</html>
```

Get element with ID foo and add some HTML.

```
$("#foo").append("<p>test</p>");
```

```
<html>
  <body>
    <div>jQuery</div>
    <div id="foo">example<p>test</p></div>
  </body>
</html>
```

Move paragraphs to element with id “foo”

```
$(“p”)
```

```
<html>
  <body>
    <div>jQuery
      <p>moving</p>
      <p>paragraphs</p>
    </div>
    <div id=“foo”>example</div>
  </body>
</html>
```

Move paragraphs to element with id “foo”

```
$(“p”).appendTo(“#foo”);
```

```
<html>
  <body>
    <div>jQuery
      <p>moving</p>
      <p>paragraphs</p>
    </div>
    <div id=“foo”>example</div>
  </body>
</html>
```

Move paragraphs to element with id “foo”

```
$(“p”).appendTo(“#foo”);
```

```
<html>
  <body>
    <div>jQuery</div>
    <div id=“foo”>example
      <p>moving</p>
      <p>paragraphs</p>
    </div>
  </body>
</html>
```



Attributes

Get

`.attr('id')`

Attributes

Get

`.attr('id')`

`.html()`

Get

`.attr('id')`

`.html()`

`.val()`

Get

`.attr('id')`

`.html()`

`.val()`

`.css("top")`

Get

`.attr('id')`

`.html()`

`.val()`

`.css("top")`

`.width()`

Attributes

Get

`.attr('id')`

`.html()`

`.val()`

`.css("top")`

`.width()`

Set

`.attr('id', 'foo')`

Attributes

Get

`.attr('id')`

`.html()`

`.val()`

`.css("top")`

`.width()`

Set

`.attr('id', 'foo')`

`.html("<p>hi</p>")`

Attributes

Get

`.attr('id')`



Set

`.attr('id', 'foo')`

`.html()`



`.html("<p>hi</p>")`

`.val()`



`.val("new val")`

`.css("top")`

`.width()`

Attributes

Get

`.attr('id')`



Set

`.attr('id', 'foo')`

`.html()`



`.html("<p>hi</p>")`

`.val()`



`.val("new val")`

`.css("top")`



`.css("top", "80px")`

`.width()`

Attributes

Get

`.attr('id')`



Set

`.attr('id', 'foo')`

`.html()`



`.html("<p>hi</p>")`

`.val()`



`.val("new val")`

`.css("top")`



`.css("top", "80px")`

`.width()`



`.width(60)`



Attributes

Set border to 1px black

```
$(...).css("border", "1px solid black");
```

Set border to 1px black

```
$(...).css("border", "1px solid black");
```

Set various css properties.

```
$(...).css({
  "background": "yellow",
  "height": "400px"
});
```

Set border to 1px black

```
$(...).css("border", "1px solid black");
```

Set various css properties.

```
$(...).css({
  "background": "yellow",
  "height": "400px"
});
```

Set all link's href attribute to google.com

```
 $("a").attr("href", "http://google.com");
```



Attributes

Replace HTML with a new paragraph.

```
$(...).html("<p>I'm new</p>");
```

Replace HTML with a new paragraph.

```
$(...).html("<p>I'm new</p>");
```

<div>whatever</div> turns into
<div><p>I'm new</p></div>

Replace HTML with a new paragraph.

```
$(...).html("<p>I'm new</p>");
```

<div>whatever</div> turns into
<div><p>I'm new</p></div>

Set checkboxes attribute “checked” to checked.

```
$("#checkbox").attr("checked","checked");
```

Replace HTML with a new paragraph.

```
$(...).html("<p>I'm new</p>");
```

<div>whatever</div> turns into
<div><p>I'm new</p></div>

Set checkboxes attribute “checked” to checked.

```
$("#checkbox").attr("checked","checked");
```

Set input value to 3.

```
$(...).val("3");
```

Replace HTML with a new paragraph.

```
$(...).html("<p>I'm new</p>");
```

<div>whatever</div> turns into
<div><p>I'm new</p></div>

Set checkboxes attribute “checked” to checked.

```
$("#checkbox").attr("checked","checked");
```

Set input value to 3.

```
$(...).val("3");
```

Get input value.

```
$(...).val();
```



Events Examples



Events

When a button is clicked, do something.

```
$("button").click(function(){  
    something();  
});
```

When a button is clicked, do something.

```
$(“button”).click(function(){  
    something();  
});
```

Setup a custom event and trigger it.

```
$(“button”).bind(“expand”, function(){  
    something();  
});  
$(“button:first”).trigger(“expand”);
```

When a button is clicked, do something.

```
$(“button”).click(function(){  
    something();  
});
```

Setup a custom event and trigger it.

```
$(“button”).bind(“expand”, function(){  
    something();  
});  
$(“button:first”).trigger(“expand”);
```

Unbind custom event.

```
$(“button”).unbind(“expand”);
```



Event Delegation

Attach events to document

```
$(“button”).live(‘click’, function(){  
    something();  
});
```

Attach events to document

```
$(“button”).live(‘click’, function(){  
    something();  
});
```

Attach event delegation to elements

```
$(“form”).delegate(“button”, “click”, function(){  
    something();  
});
```

Effects / Animation Examples

Types of Effects

Types of Effects

#1. Hide and Show

Types of Effects

#1. Hide and Show

#2. Fade In and Out

Types of Effects

#1. Hide and Show

#2. Fade In and Out

#3. Slide Up and Down



Animation / Effects

With each click, slide up / slide down a div.

```
$(...).click(function(){
  $("div:first").slideToggle();
});
```

With each click, slide up / slide down a div.

```
$(...).click(function(){  
    $("div:first").slideToggle();  
});
```

Animate elements to 300px wide in .5 seconds.

```
$(...).animate({ "width": "300px" }, 500);
```

With each click, slide up / slide down a div.

```
$(...).click(function(){  
    $("div:first").slideToggle();  
});
```

Animate elements to 300px wide in .5 seconds.

```
$(...).animate({ "width": "300px" }, 500);
```

Take focus off elements by fading them to
30% opacity in .5 seconds

```
$(...).fadeTo(500, 0.3);
```



Traversing Examples

Get previous table cells to #myCell.

```
$("#myCell")
```

```
<html>
  <body>
    <table><tr>
      <td></td>
      <td></td>
      <td id="myCell"></td>
      <td></td>
    </tr></table>
  </body>
</html>
```

Get previous table cells to #myCell.

```
$("#myCell").prevAll()
```

```
<html>
  <body>
    <table><tr>
      <td></td>
      <td></td>
      <td id="myCell"></td>
      <td></td>
    </tr></table>
  </body>
</html>
```

Get previous table cells to #myCell.

```
$("#myCell").prevAll().andSelf();
```

```
<html>
  <body>
    <table><tr>
      <td></td>
      <td></td>
      <td id="myCell"></td>
      <td></td>
    </tr></table>
  </body>
</html>
```

Move paragraphs to element with id “foo”

```
$("#table")
```

```
<html>
  <body>
    <table></table>
    <div>
      <p>foo</p>
      <span>bar</span>
    </div>
  </body>
</html>
```

Move paragraphs to element with id “foo”

```
$("#table").next()
```

```
<html>
  <body>
    <table></table>
    <div>
      <p>foo</p>
      <span>bar</span>
    </div>
  </body>
</html>
```

Move paragraphs to element with id “foo”

```
$("#table").next()
```

```
<html>
  <body>
    <table></table>
    <div>
      <p>foo</p>
      <span>bar</span>
    </div>
  </body>
</html>
```

Move paragraphs to element with id “foo”

```
$(“table”).next().find(“p”);
```

```
<html>
  <body>
    <table></table>
    <div>
      <p>foo</p>
      <span>bar</span>
    </div>
  </body>
</html>
```



Ajax Examples



Ajax Examples

Post data, "bar" equals "baz" to tag.php using get.

```
$(...).get("tag.php", { "bar": "baz" });
```

Post data, "bar" equals "baz" to tag.php using get.

```
$(...).get("tag.php", { "bar": "baz" });
```

Post data, "foo" equals "bar" to send.php, then alert the response.

```
$.post("send.php", { foo: "bar" },
function(response){
    alert(response);
});
```



Extending jquery

```
$.fn.myPlugin = function(){
    return this.each(function(){
        $(this).html("you used myPlugin!");
    });
});
```

```
<html>
  <body>
    <div></div>
    <div></div>
  </body>
</html>
```

```
$.fn.myPlugin = function(){
    return this.each(function(){
        $(this).html("you used myPlugin!");
    });
};

$("div").myPlugin();

<html>
    <body>
        <div></div>
        <div></div>
    </body>
</html>
```

```
$.fn.myPlugin = function(){
    return this.each(function(){
        $(this).html("you used myPlugin!");
    });
};

$("div").myPlugin();

<html>
    <body>
        <div>you used myPlugin!</div>
        <div>you used myPlugin!</div>
    </body>
</html>
```



Wait, There's More!



jQuery isn't only about simpler code



jQuery isn't only about simpler code
and being more productive



**jQuery isn't only about simpler code
and being more productive**

It is also about..

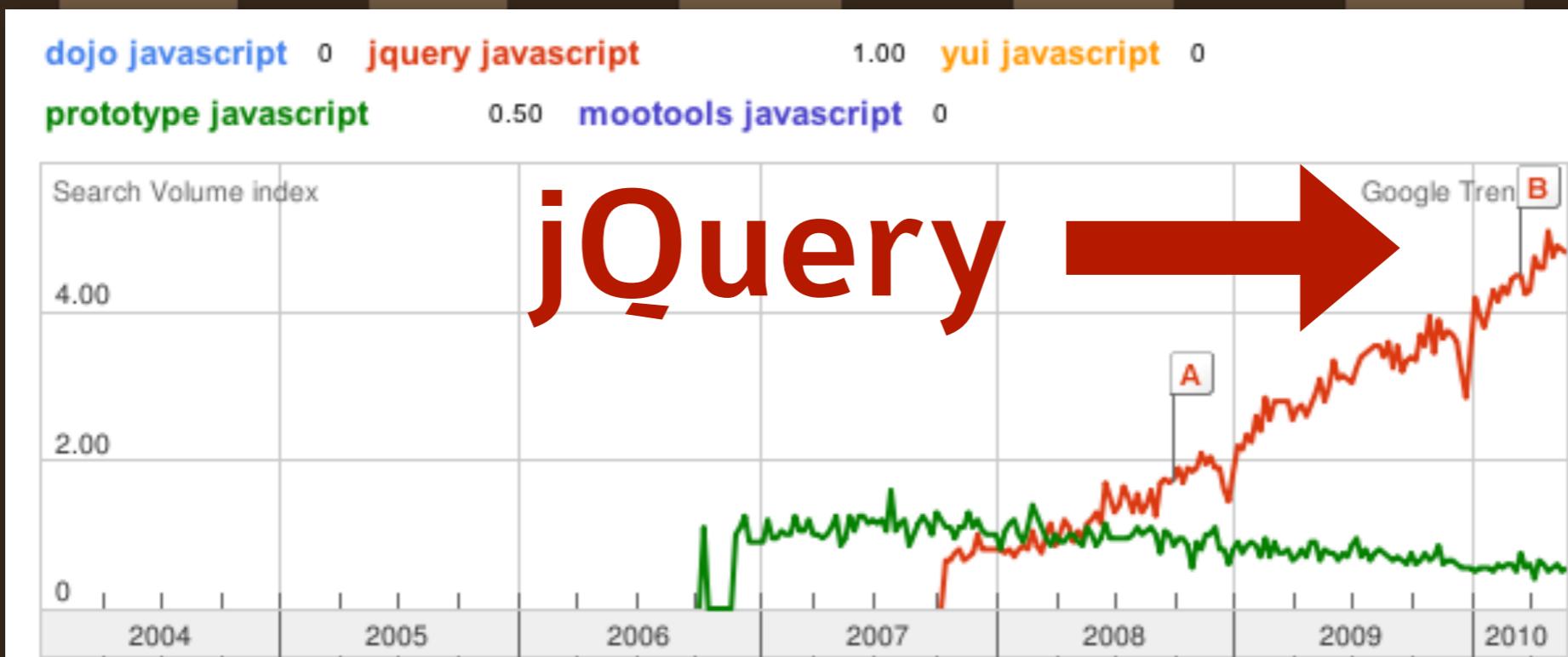


**jQuery isn't only about simpler code
and being more productive**

It is also about..

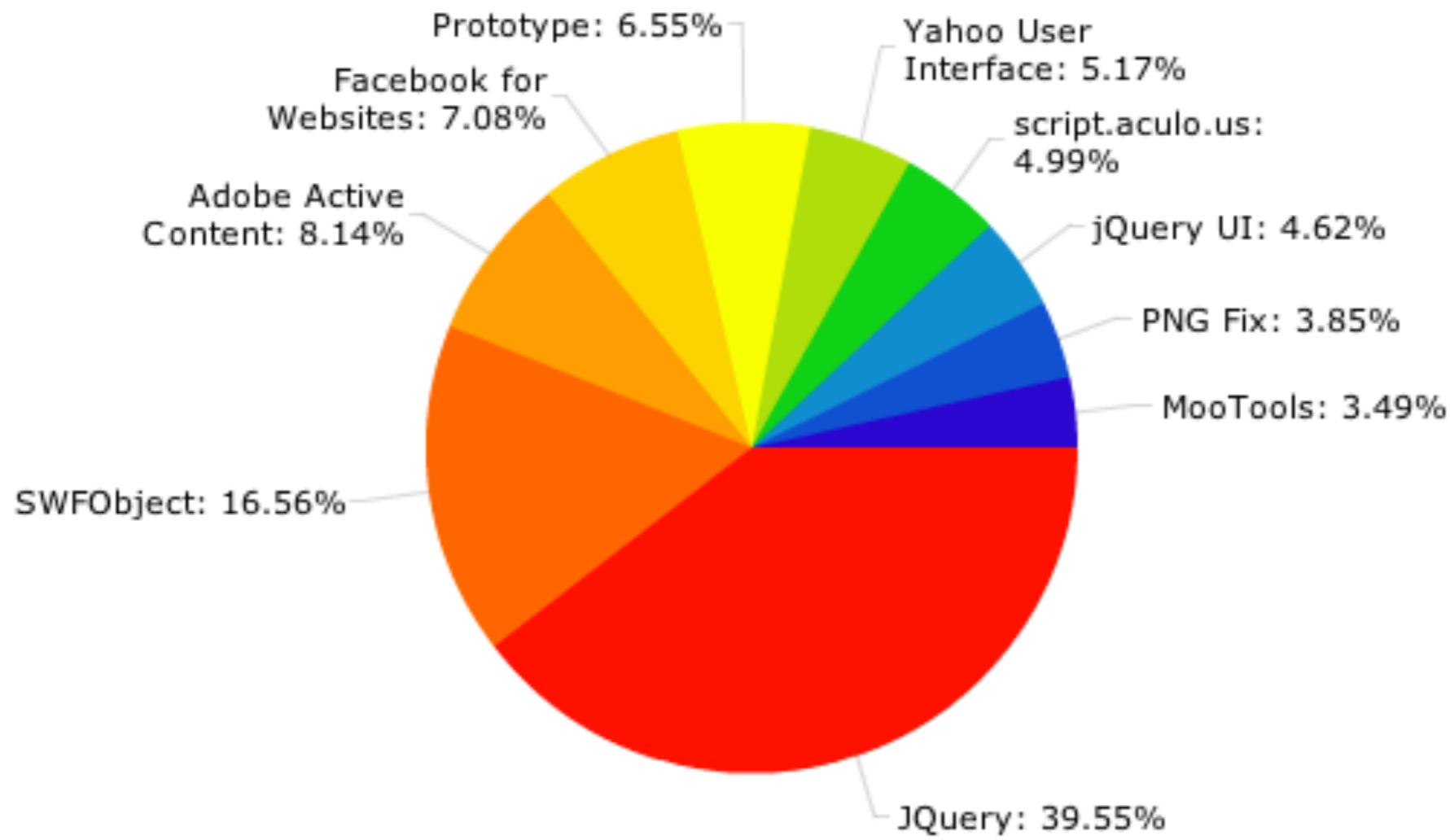
test coverage	great community	books
support	plugins	tutorials
open (free) license		speed
	light weight code	

Led to World Domination



<http://google.com/trends?q=dojo+javascript,+jquery+javascript,+yui+javascript,+prototype+javascript,+mootools+javascript&ctab=0&geo=all&date=all&sort=1>

Usage Across Top 10,000 Sites



Plugins

jQuery has hundreds of plugins at
<http://plugins.jquery.com/>

jQuery UI

Set of official user interface
components at:
<http://jqueryui.com>



Support

jQuery general discussion mailing list

<http://forum.jquery.com>

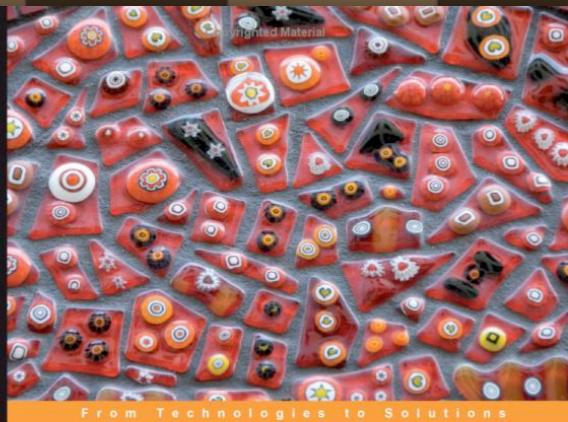
jQuery discussion docs page

<http://docs.jquery.com/Discussion>

jQuery IRC room

#jquery on FreeNode.net

Books



Learning jQuery 1.3

Better Interaction Design and Web Development with Simple JavaScript Techniques

Foreword by John Resig, Creator of jQuery

Jonathan Chaffer Karl Swedberg

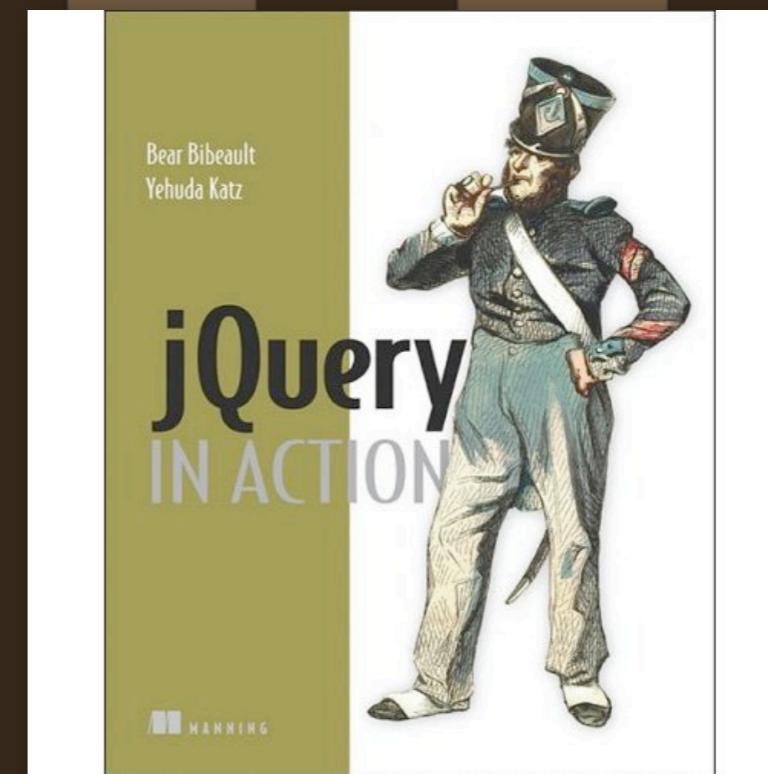
[PACKT]
PUBLISHING

Лучший способ
разработать
веб-сайт

[PACKT]

Learning jQuery 1.3
by Karl Swedberg

[http://www.amazon.com/gp/product/1847196705?
ie=UTF8&tag=jacofalltrawe-20&linkCode=as2&camp
=1789&creative=9325&creativeASIN=1847196705](http://www.amazon.com/gp/product/1847196705?ie=UTF8&tag=jacofalltrawe-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1847196705)



jQuery in Action
Yahuda Katz

[http://www.amazon.com/gp/product/1933988355?
ie=UTF8&tag=jacofalltrawe-20&linkCode=as2&camp
=1789&creative=9325&creativeASIN=1933988355](http://www.amazon.com/gp/product/1933988355?ie=UTF8&tag=jacofalltrawe-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1933988355)

Video Training

The jQuery Course

with Marc Grabanski



<http://marcgrabanski.com/article/the-jquery-course-prerelease>

Thank you!

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