

# jQuery for Designers

LEARN  
**MAGIC**  
**TRICKS**  
IN  
2 MINITS

A man dressed as Santa Claus is shown from the chest up. He is wearing a red Santa hat with white fur trim and a white pom-pom. He has a wide-eyed, excited expression. His right hand is raised, showing a large, bloody palm print on the back of his hand. He has a bandage on his forehead and a large, bloody wound on his right cheek. He is wearing a white and blue striped shirt and a red patterned tie. The background is a dark, wood-paneled wall with a door handle and a light switch.

**\* Hi, I'm Remy**

**\* Screencast @  
[jqueryfordesigners.com](http://jqueryfordesigners.com)**

**\* Questions: interrupt me  
& ask!**

# Part 1: In the Beginning



W30



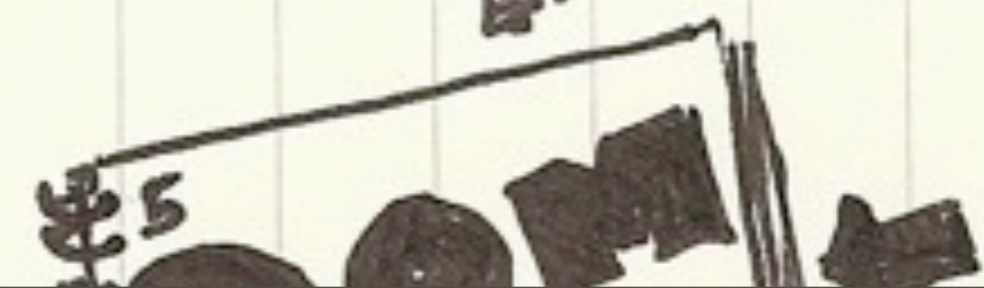
THE BEGINNING



Part 1

1996

ETSCALE



Case

②

"Java" Script.

③  
EA

- Ma
- No
- "it's"

③  
EARLY YEARS



- Marketing cockup.
- No IDE or debuggers
- "it's a toy!"



- No IDE or debugger
- "it's a toy!"

1997



WAR!

IE4: document.all["myid"]  
NN4: document.layers["myid"]

---

UP NEXT:

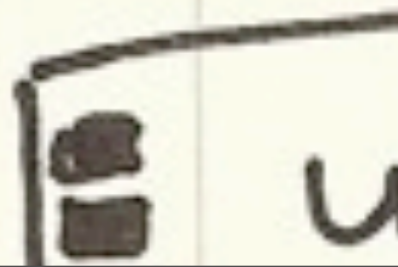




- No
- it's

1997

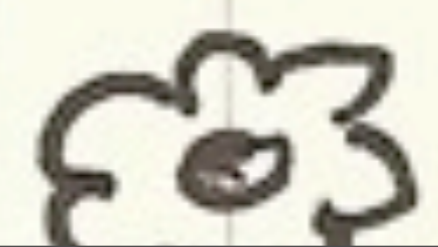
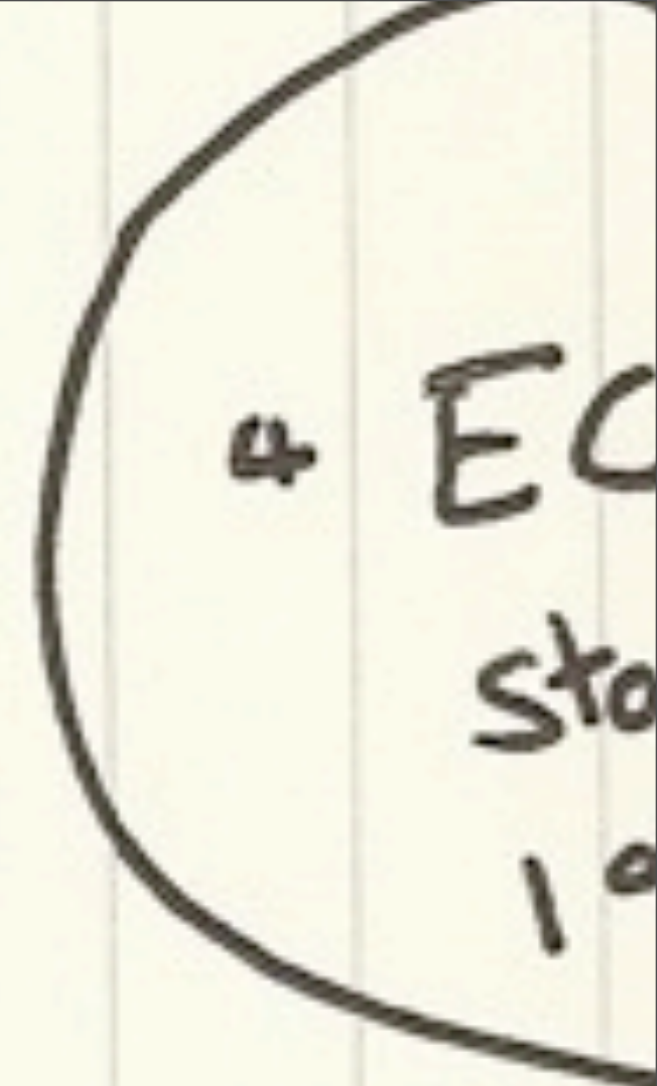
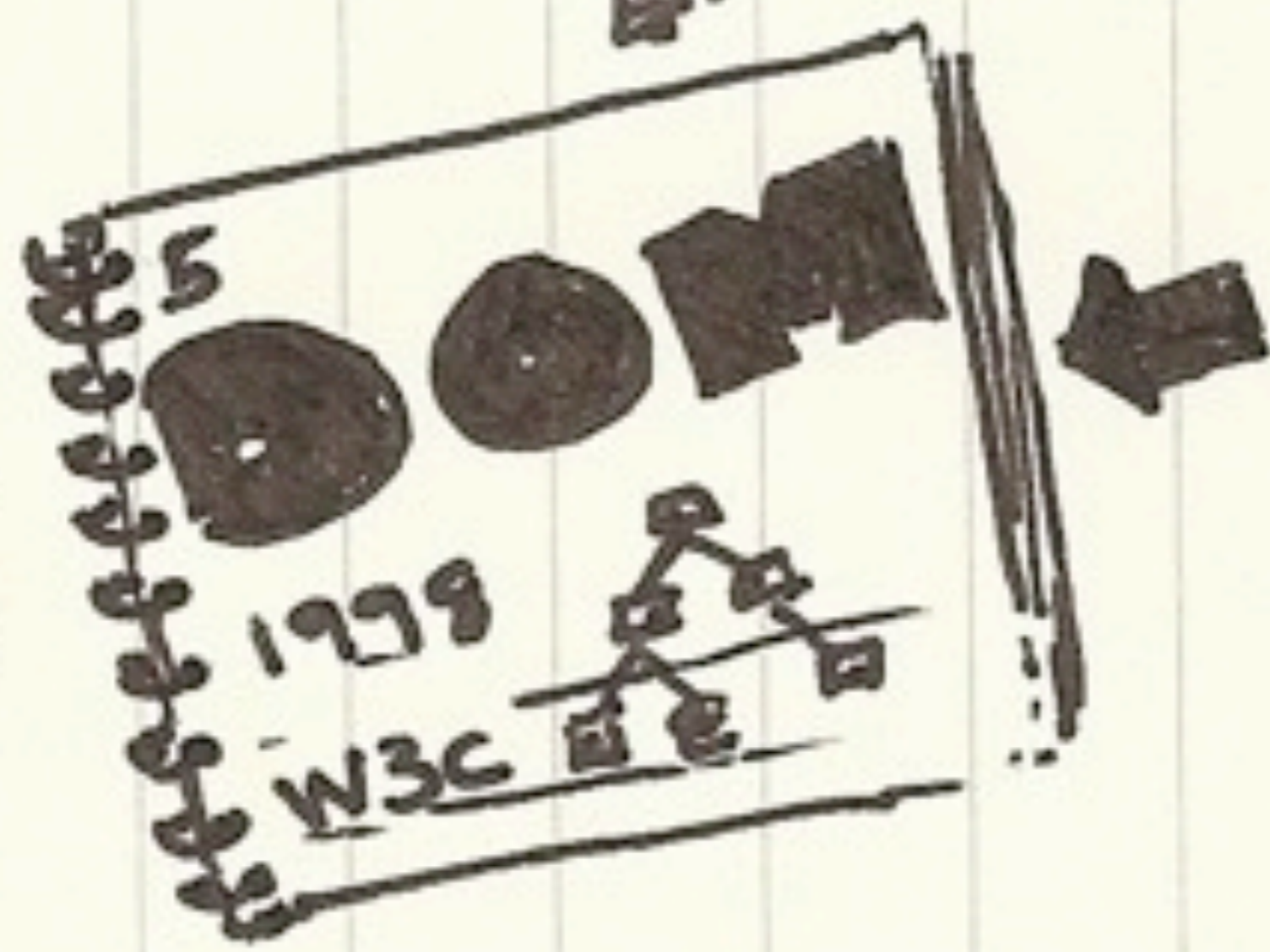
IE4:  
224



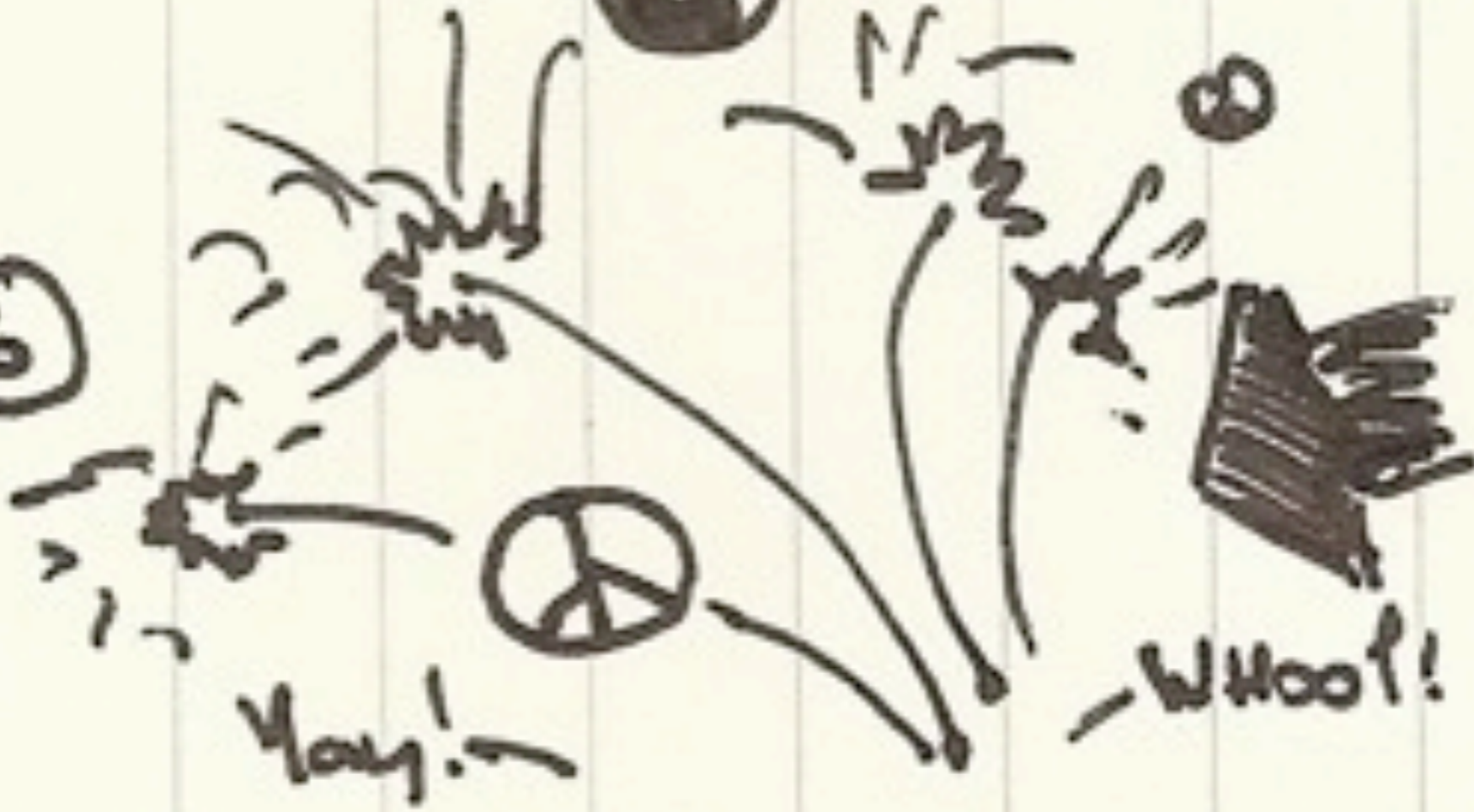


Whoop!

PEACE



⑥



Blowser

PEACE

....sorta!



1996

~~N~~ETSCAPE



② "Java" Script.

③ EARLY YEARS

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- "it's a toy!"

1997 @ = N WAR!

IE4: document.all['myid']  
 NN4: document.layers['myid']

ECMAScript Standard 1997

DOM 1998 W3C



BROWSER PEACE

....sorta!

THE BEGINNING

Part 1

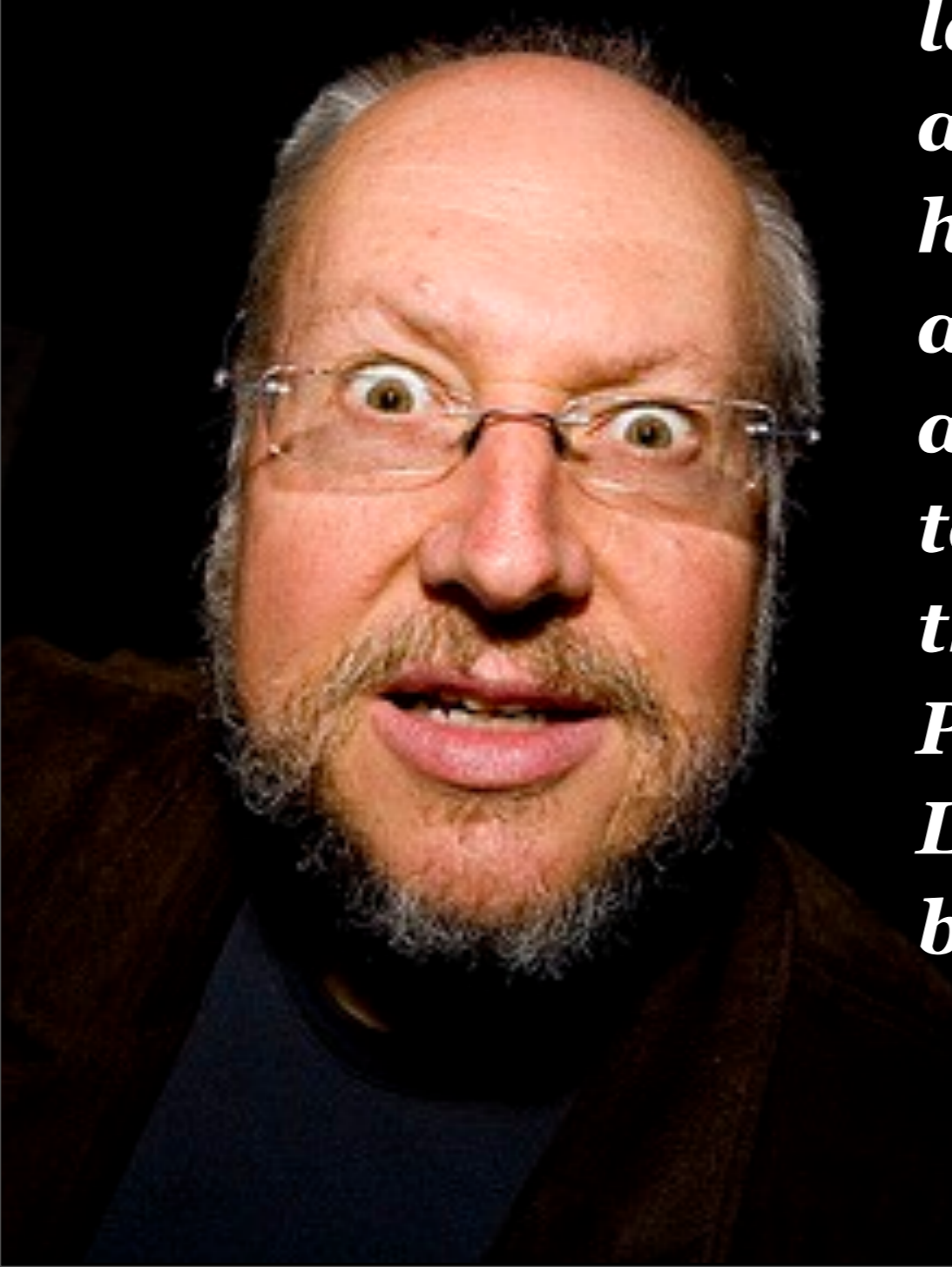
UP NEXT:  
 JavaScript, Popular?  
 Baaaaad JavaScript  
 Blank pages  
 The way forward.

***"How did JavaScript  
succeed?"***

# Popularity helped.

*Because JavaScript is the language of the web browser, and because the web browser has become the dominant application delivery system, and because JavaScript isn't too bad, JavaScript has become the World's Most Popular Programming Language ...JavaScript has become important.*

**- Douglas Crockford**



**Best Practice**



# Unobtrusive JavaScript

`<script type="text/javascript">`



# Baaaaaad

```
<a href="javascript:window.open(  
  'help.html' ) ">Help</a>
```

# Baddddd

```
<a href="#" onclick="window.open(
  'help.html')">Help</a>
```

# **B-b-b-bad too**

```
<a href="#" onclick="window.print  
( )">Print</a>
```

```
<noscript>
```

```
<p>Please enable JavaScript!</p>
```

```
</noscript>
```

***"Doesn't everyone  
have JavaScript turned  
on?"***

**No!**



**Corporate  
policies**

**NoScript  
Firefox  
plugin**

**No!**

**Script stripping  
proxies**



***What's the worst  
that could happen?***

Ingredients: bleached whole wheat vermicelli (water, whole durum wheat flour),  
chicken (white meat chicken, water, modified tapioca starch, chicken flavor [dried  
natural flavor], carrageenan, whey protein concentrate, soybean oil, corn syrup,  
asparagus, broccoli, basil, bleached wheat flour, salt, garlic powder, sugar, chicken  
modified cornstarch, basil, bleached wheat flour, salt, garlic powder, sugar, chicken  
flavor, water, chicken powder, chicken fat, sodium lactate, sugar, sodium phosphate,  
extract, natural flavor, cheese flavor [enzymes modified parmesan cheese] [cultured in  
CONTAINS: MILK, WHEAT INGREDIENTS





# Unobtrusive way

```
<a href="help.html">Help</a>
```

**Progressive  
Enhancement**

**Graceful  
Degradation**

**Progressive  
Enhancement**

***What's the difference????***

**Graceful  
Degradation**

# GD vs. PE

- **Old way**
- **Top down**
- **All singing all dancing first**
- **Add fail cases**
- **Run out of time, you're caught out**

- **New way**
- **Bottom up**
- **Layered development**
- **No environment assumptions**
- **Works by default**

# GD vs. PE

- **Old way**
- **Top down**
- **All singing all dancing first**
- **Add fail cases**
- **Run out of time, you're caught out**

- **New way**
- **Bottom up**
- **Layered development**
- **No environment assumptions**
- **Works by default**

# Assumptions

```
if (version < "4") {  
    alert("Not supported");  
}
```

```
if ("10" < "4") { // true!  
    alert("Not supported");  
}
```

**jQuery**



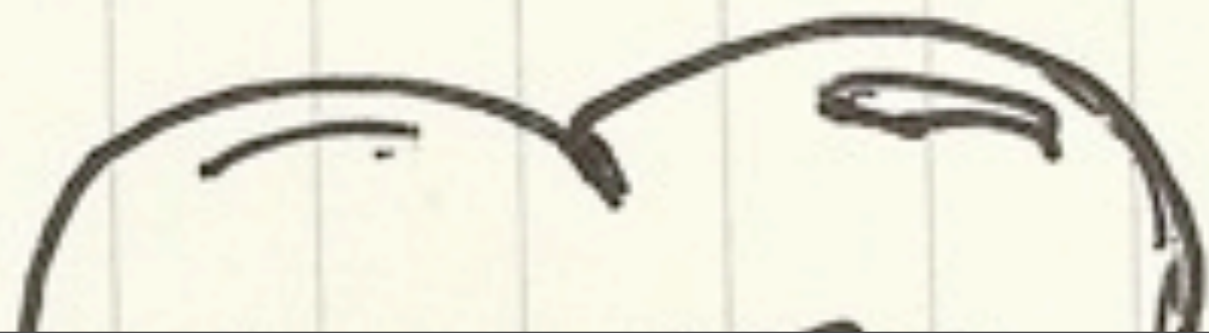
**Progressive  
Enhancement**



# Part 2: Faking it



FAKING IT AS A  
JAVASCRIPTER:



n false;

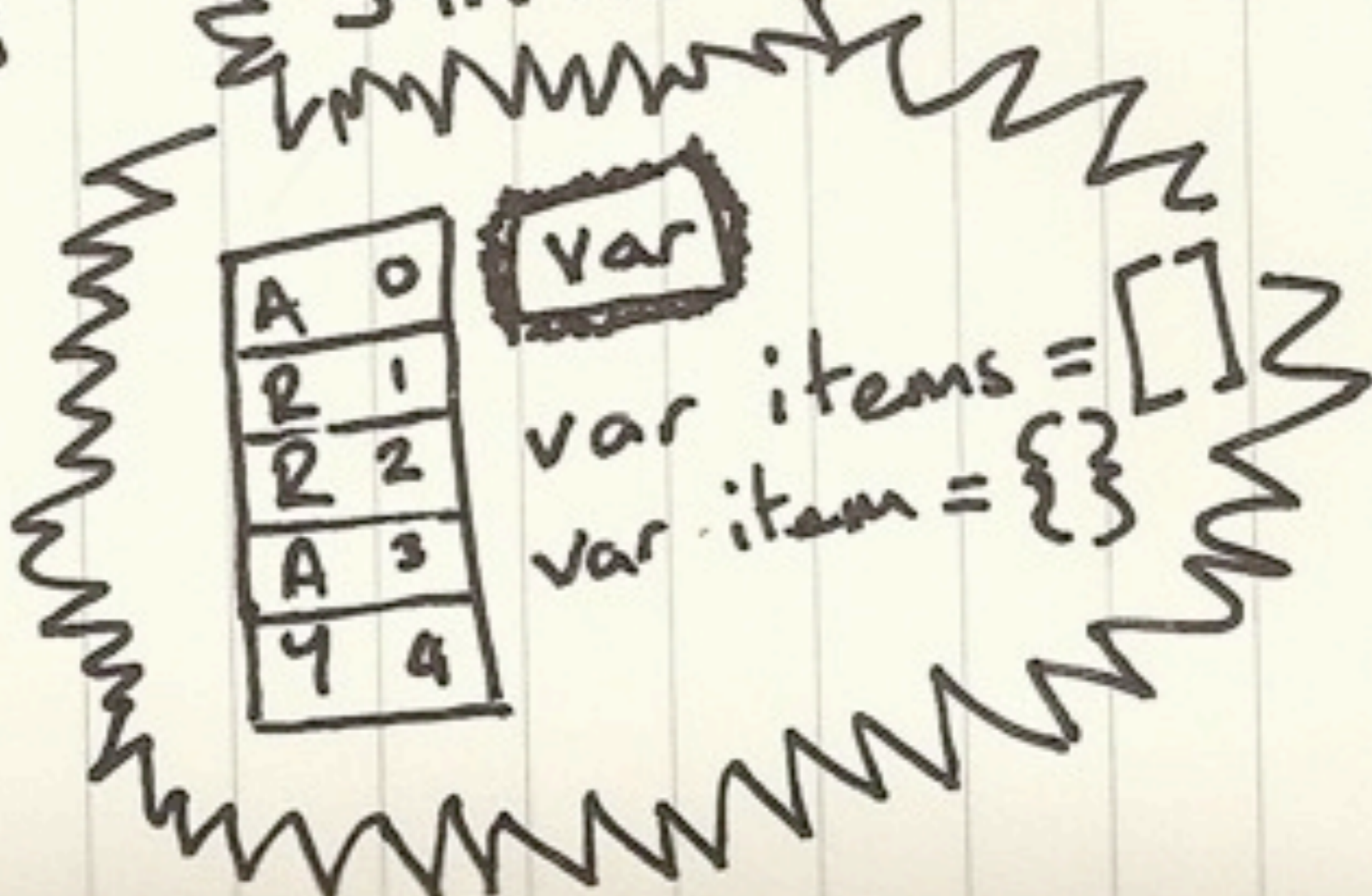
# SYNTAX

4	A
3	A
2	R
1	R
0	A

var

var items =

var item = { }



return false;

CALLBACK  
IS A  
VARIABLE!



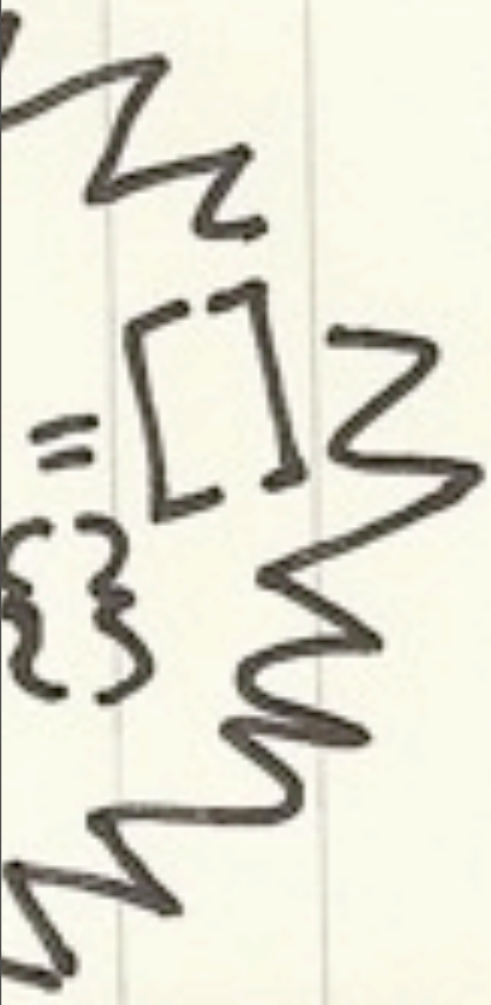
A  
R:

ML



THIS

1/16



FIRE BUG

Learn to love it!



return false;

SYNTAX

# Part 2

FAKING IT AS A JAVASCRIPTER:



InnerHTML



CALLBACK  
IS A  
VARIABLE!

SYNTAX

A	0
R	1
R	2
A	3
Y	4

var

var items = []

var item = {}



FIRE BUG  
Learn to love it!



```
var items = new Array()
```

```
var items = []
```

```
var cats = [ 'Dizzy', 'Ninja' ];
```

```
cats[0] == 'Dizzy';
```

```
cats[1] == 'Ninja';
```

```
var item = new Object ( )
```

```
var item = {}
```

```
var cat = {  
    name: "Dizzy",  
    class: "Dopey"  
};
```

```
var cat = {  
    name: "Dizzy",  
    class: "Dopey"  
};
```

```
var cat = {  
  "name": "Dizzy",  
  "class": "Dopey"  
};
```



"Dizzy",

:"Dopey"

```
var cat = {  
    "name": "Dizzy",  
    "class": "Dopey"  
};
```

```
cat.name == 'Dizzy';
```

```
cat['name'] == 'Dizzy';
```

```
cat.name == cat['name'];
```

```
// Breaks
```

```
cat.class = 'Cute';
```

```
// Works
```

```
cat['class'] = 'Cute';
```

```
var cats = [  
  { name: "Dizzy" },  
  { name: "Missy" },  
  { name: "Ninja" }  
];
```

# Callbacks

```
$( 'a' ).click(function () {  
    alert( 'hello cats' );  
});
```

# Callbacks

```
$('a').click(function () {  
    alert('hello cats');  
});
```

# Callbacks

```
$( 'a' ).click( function () {  
    alert( 'hello cats' );  
} );
```

**Important: this is a variable**



# Anonymous Functions

```
var dostuff = function () {  
    alert( 'do stuff' );  
};
```

```
dostuff();
```

# Anonymous Functions

```
};
```

```
dostuff();
```

```
$( 'a' ).click( dostuff );
```

```
$( 'a' ).click( dostuff() );
```

# **Variable Scope**

**1.Global scope**

**2.Function scope**

```
// global
var name = "Missy";

if (false) {
  // still global
  var othername = "Dizzy";
}

function myfunc() {
  // private and doesn't affect name
  var name = "Ninja";

  alert(name);
}
```

```
// private and doesn't affect name  
var name = "Ninja";  
  
alert(name);  
}  
  
alert(name); // shows "Missy"  
myfunc(); // shows "Ninja"  
alert(name); // shows "Missy"  
  
// shows undefined - doesn't break!  
alert(othername);
```

**this**

**this**

***The ever changing werewolf!***



- **this is the context to which function runs**
- **In jQuery, changes on each iteration**
- **A bit magic, so use Firebug!**

# `$('a').click(fn)`

```
<ul>
```

```
  <li>
```

```
    <a href="#first">1st</a>
```

```
    
```

```
  </li>
```

```
  <li>
```

```
    <a href="#second">2nd</a>
```

```
    
```

```
  </li>
```

```
</ul>
```

# `$('a').click(fn)`

```
<ul>
```

```
  <li>
```

```
    <a href="#first">1st</a>
```

```
    
```

```
  </li>
```

```
  <li>
```

```
    <a href="#second">2nd</a>
```

```
    
```

```
  </li>
```

```
</ul>
```

# `$('a').click(fn)`

```
<ul>
```

```
  <li>
```

```
    <a href="#first">1st</a>
```

```
    
```

```
  </li>
```

```
  <li>
```

```
    <a href="#second">2nd</a>
```

```
    
```

```
  </li>
```

```
</ul>
```

# Events

- **click**
- **mouseover, mouseout, mousein**
- **keyboard events, etc**

- **All event handlers get the event object\***

- **All event handlers get the event object\***
- **If you're not using IE\***



- **All event handlers get the event object\***
- **If you're not using IE\***
- **But JS libraries come to the rescue!**

```
function clicked(event) {  
    if (event) {  
        alert("Got some info about  
event!");  
    }  
}
```

```
function clicked(event) {  
  if (event) {  
    alert("Got some info about  
event!");  
  }  
}
```

```
function clicked(event) {  
    if (event) {  
        alert("Got some info about  
event!");  
    }  
}
```

# Bubbling

```
<ul>
  <li>
    <a href="#first">1st</a>
    
  </li>
  <li>
    <a href="#second">2nd</a>
    
  </li>
</ul>
```

# Bubbling

```
<ul>
```

```
  <li>
```

```
    <a href="#first">1st</a>
```

```
    
```

```
  </li>
```

```
  <li>
```

```
    <a href="#second">2nd</a>
```

```
    
```

```
  </li>
```

```
</ul>
```

# Bubbling

```
<ul>
```

```
<li>
```

```
<a href="#first">1st</a>
```

```

```

```
</li>
```

```
<li>
```

```
<a href="#second">2nd</a>
```

```

```

```
</li>
```

```
</ul>
```

# Bubbling

```
<ul>
```

```
<li>
```

```
<a href="#first">1st</a>
```

```

```

```
</li>
```

```
<li>
```

```
<a href="#second">2nd</a>
```

```

```

```
</li>
```

```
</ul>
```



# Bubbling

```
<ul>
  <li>
    <a href="#first">1st</a>
    
  </li>
  <li>
    <a href="#second">2nd</a>
    
  </li>
</ul>
```

**stopPropagation**

**Also:**

**preventDefault**

**Combo:**  
**return false**

```
function clicked(event) {  
    // cancel bubble  
    // & click through  
    return false;  
}
```

**Firebug**

Mozilla Firefox Start Page

http://www.google.co.uk/firefox?client=firefox-a&rls= Google

remysharp@googlemail.com | Settings | Sign out

# Firefox Start



Google™ Advanced Search

Console HTML CSS Script DOM Net

Clear Profile

```
>>> $('a')
```

```
[ a.gb1 imghp?clie...=en&tab=wi, a.gb1 video.google.co.uk, a.gb1 maps?clien...=en&tab=wl, a.gb1 nwshp?clie...=en&tab=wn, a.gb1 prdhp?clie...=en&tab=wf, a.gb1 mail?hl=en&tab=wm, a.gb3 options, a.gb2 grphp?clie...=en&tab=wg, a.gb2 bkshp?clie...=en&tab=wp, a.gb2 schhp?clie...=en&tab=ws, a.gb2 finance?cl...=en&tab=we, a.gb2 blogsearch...ogle.co.uk, a.gb2 translate....ogle.co.uk, a.gb2 www.youtube.com, a.gb2 render?hl=en&tab=wc, a.gb2 home?clien...=en&tab=wq, a.gb2 docs.google.com, a.gb2 view?hl=en&tab=wy, a.gb2 sites.google.com, a.gb2 options, a.gb3 preferences?hl=en, a ClearSID?c...B:official, a.gb2 preferences?hl=en, a.gb2 ManageAccount, a advanced_s...arch?hl=en, a preferences?hl=en, a www.getpersonas.com, a about ]
```

```
$('a')
```

Run Clear Copy

Done

# Demo!

# **Faking Tips**



- **Crockford's style guide**
- **Agree within your team**
- **Once agreed easier to maintain**

**<http://javascript.crockford.com/code.html>**

- **Always define using var**
- **Try to keep variables at the top**
- **Semi-colons & readable**
- **Use sensible names, mixedgrill is not useful nor funny a year later**

# Part 3: jQuery



***"Find something,  
do something to it"***

***Why jQuery?***

***Why a DOM Library?***

- **Cross browser quirks handled for you**
- **DOM scripting made easy**



**Less donkey work**

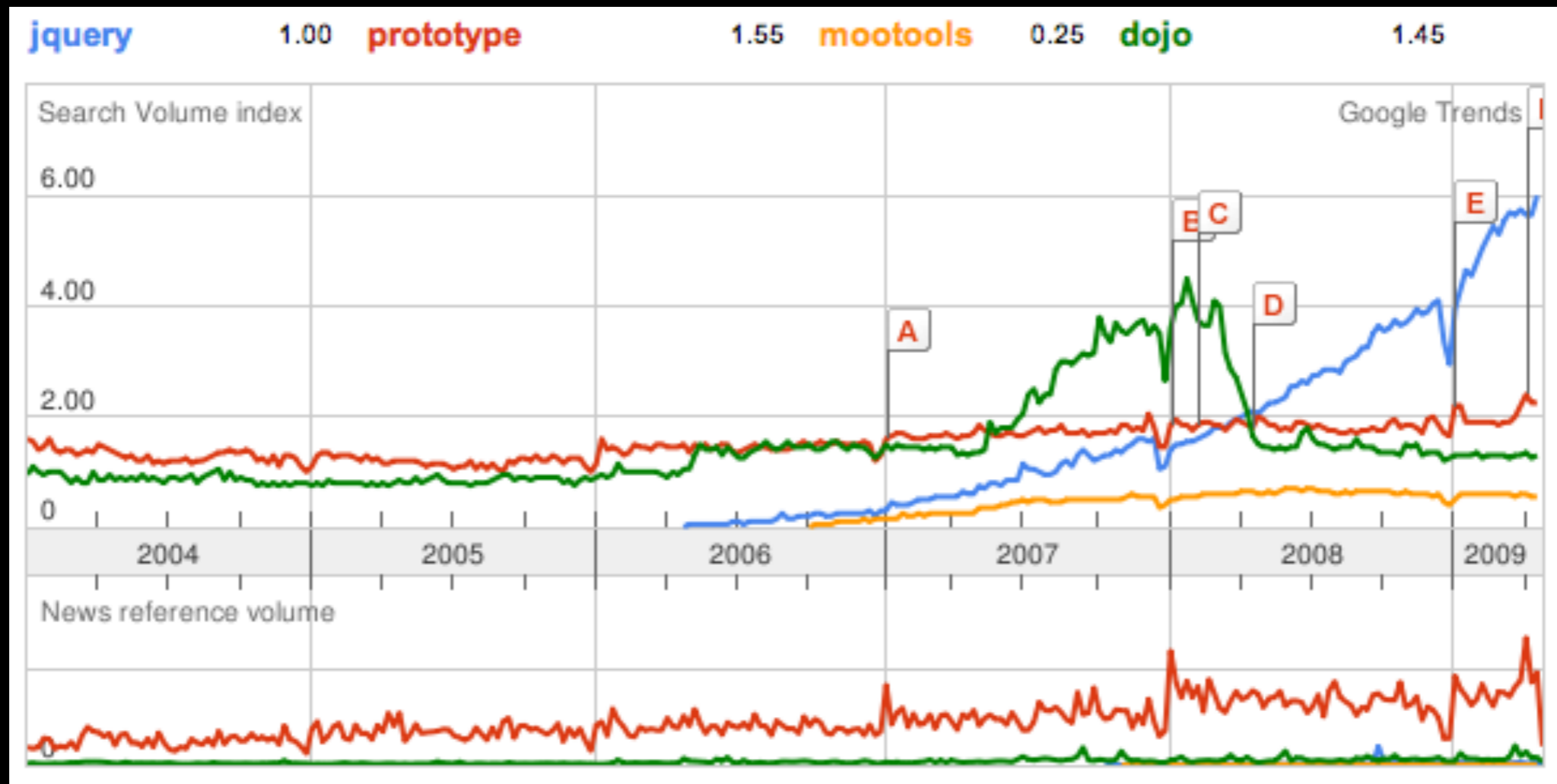




**More fun**

***What's so special  
about jQuery?***

# It's pretty popular...





**Community!**

**Community**

**APIs**

**docs.jquery.com**

**api.jquery.com**

**visualjquery.com**

**Community**

## **APIs**

**[docs.jquery.com](http://docs.jquery.com)**

**[api.jquery.com](http://api.jquery.com)**

**[visualjquery.com](http://visualjquery.com)**

## **Blogs, tutorials,**

**screencasts, plugins,**

**development sprints,**

**books (shameless plug!)**

# **Community**

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# **Community**

## **Google Groups**

**jquery-en**

**jquery-dev**

**jquery-ui-en**

**jquery-ui-dev**

**jquery-all**



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**IRC channel**

**freenode.net/#jquery**

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**jquery-dev**

**jquery-ui-en**

**jquery-ui-dev**

**jquery-a11y**



**What's in the box?**

- **Selector engine:  
Sizzle**
- **DOM manipulation**
- **Events**
- **Effects**
- **Ajax**
- **Utilities**

**What's in the box?**

New in  
1.3

Sizzle JavaScript Selector Library

http://sizzlejs.com/

Google

# Sizzle

A pure-JavaScript CSS selector engine designed to be easily dropped in to a host library.

[Download .zip file](#)

[Documentation](#)

[Github project \(source code\)](#)

[Sizzle discussion group](#)

Features	Selector Features	Code Features
<ul style="list-style-type: none"><li>● Completely standalone (no library dependencies)</li><li>● Competitive performance for most frequently used selectors</li><li>● Only 4KB minified and gzipped</li><li>● Highly extensible with easy-to-use API</li><li>● Designed for optimal performance with event delegation</li></ul>	<ul style="list-style-type: none"><li>● CSS 3 Selector support</li><li>● Full Unicode support</li><li>● Escaped selector support <code>#id\ :value</code></li><li>● Contains text <code>:contains(text)</code></li><li>● Complex <code>:not(a#id)</code></li><li>● Multiple <code>:not(div,p)</code></li><li>● Not attribute value <code>[name!=value]</code></li></ul>	<ul style="list-style-type: none"><li>● Provides meaningful error messages for syntax problems</li><li>● Uses a single code path (no XPath)</li><li>● Uses no browser-sniffing</li><li>● Caja-compatible code</li></ul>

**sizzlejs.com**



**The *bling* function**

**\$ == jQuery**

`$('div')`

`==`

`jQuery('div')`



\$

- **Selectors - CSS1, CSS2 and some CSS3**



- **Selectors - CSS1, CSS2 and some CSS3**
- **DOM elements**



- **Selectors - CSS1, CSS2 and some CSS3**
- **DOM elements**
- **Raw HTML**



- **Selectors - CSS1, CSS2 and some CSS3**
- **DOM elements**
- **Raw HTML**
- **"Ready" functions**



`$ ( ' u 1 ' )`

```
$ ( ' u1 ' )
```

```
$ ( document . createElement ( ' u1 ' ) )
```

```
$('ul')
```

```
$(document.createElement('ul'))
```

```
$('<ul />') or $('<ul></ul>')
```



```
jQuery(document).ready(fn)
```

```
$(document).ready(fn)
```

```
$(fn)
```

```
jQuery(function ($) {  
    // private instance of $  
})
```

```
jQuery(document).ready(fn)
```

```
$(document).ready(fn)
```

```
$(fn)
```

```
jQuery(function ($) {  
    // private instance of $  
})
```

```
jQuery(document).ready(fn)
```

```
$(document).ready(fn)
```

```
$(fn)
```

```
jQuery(function ($) {  
    // private instance of $  
})
```

```
jQuery(document).ready(fn)
```

```
$(document).ready(fn)
```

```
$(fn)
```

```
jQuery(function ($) {  
    // private instance of $  
})
```

# Custom Selectors

- **:visible, :hidden**
- **:first, :last**
- **:even, :odd**
- **:animated**
- **:has**

# \$('li a')

```
<ul>
```

```
  <li>1st</li>
```

```
  <li>2nd</li>
```

```
  <li><a href="#third">3rd</a></li>
```

```
  <li>4th</li>
```

```
</ul>
```

# \$('li a')

```
<ul>  
  <li>1st</li>  
  <li>2nd</li>  
  <li><a href="#third">3rd</a></li>  
  <li>4th</li>  
</ul>
```

# `$('li:has(a)')`

```
<ul>
```

```
  <li>1st</li>
```

```
  <li>2nd</li>
```

```
  <li><a href="#third">3rd</a></li>
```

```
  <li>4th</li>
```

```
</ul>
```



# `$('li:has(a)')`

```
<ul>
```

```
  <li>1st</li>
```

```
  <li>2nd</li>
```

```
  <li><a href="#third">3rd</a></li>
```

```
  <li>4th</li>
```

```
</ul>
```

**Fails silently, just  
like CSS!**

# Play!

**<http://icanhaz.com/j4d-controls>**

**<http://icanhaz.com/j4d-sandbox>**

**<http://icanhaz.com/j4d-bookmarklet>**

**\$ *returns a new  
version of itself***

***...that also has array  
like properties.***

```
>>> $('li')
```

```
[li, li]
```

```
>>> $('li')[0]
```

```
<li>
```

```
>>> $('li').length
```

```
2
```

# Does Selector Exist?

```
if ( $(expr).length ) {  
    // do stuff  
}
```



**Chaining**



# Common

```
$( ' a ' ).addClass( ' ready ' ).click( fn );
```

# Common

```
$( 'a' ).addClass( 'ready' ).click( fn );
```

# Common

```
$( 'a' ).addClass( 'ready' ).click( fn );
```

# Common

```
$( ' a ' ).addClass( ' ready ' ).click( fn );
```

# One line!

```
$img = $('<img />')  
  .addClass('loading')  
  .load(function () {  
    $img.removeClass('loading');  
  })  
  .error(function () {  
    $img.addClass('error')  
      .attr('src', 'empty.gif');  
  })  
  .attr('src', 'somebigimage.jpg')  
  .appendTo('body');
```

# One line!

```
$img = $( '<img />' )  
  .addClass( 'loading' )  
  .load(function () {  
    $img.removeClass( 'loading' );  
  })  
  .error(function () {  
    $img.addClass( 'error' )  
      .attr( 'src', 'empty.gif' );  
  })  
  .attr( 'src', 'somebigimage.jpg' )  
  .appendTo( 'body' );
```

# One line!

```
$img = $('<img />')  
  .addClass('loading')  
  .load(function () {  
    $img.removeClass('loading');  
  })  
  .error(function () {  
    $img.addClass('error')  
      .attr('src', 'empty.gif');  
  })  
  .attr('src', 'somebigimage.jpg')  
  .appendTo('body');
```

# One line!

```
$img = $('<img />')  
  .addClass('loading')  
  .load(function () {  
    $img.removeClass('loading');  
  })  
  .error(function () {  
    $img.addClass('error')  
      .attr('src', 'empty.gif');  
  })  
  .attr('src', 'somebigimage.jpg')  
  .appendTo('body');
```



# One line!

```
$img = $('<img />')  
  .addClass('loading')  
  .load(function () {  
    $img.removeClass('loading');  
  })  
  .error(function () {  
    $img.addClass('error')  
    .attr('src', 'empty.gif');  
  })  
  .attr('src', 'somebigimage.jpg')  
  .appendTo('body');
```

# One line!

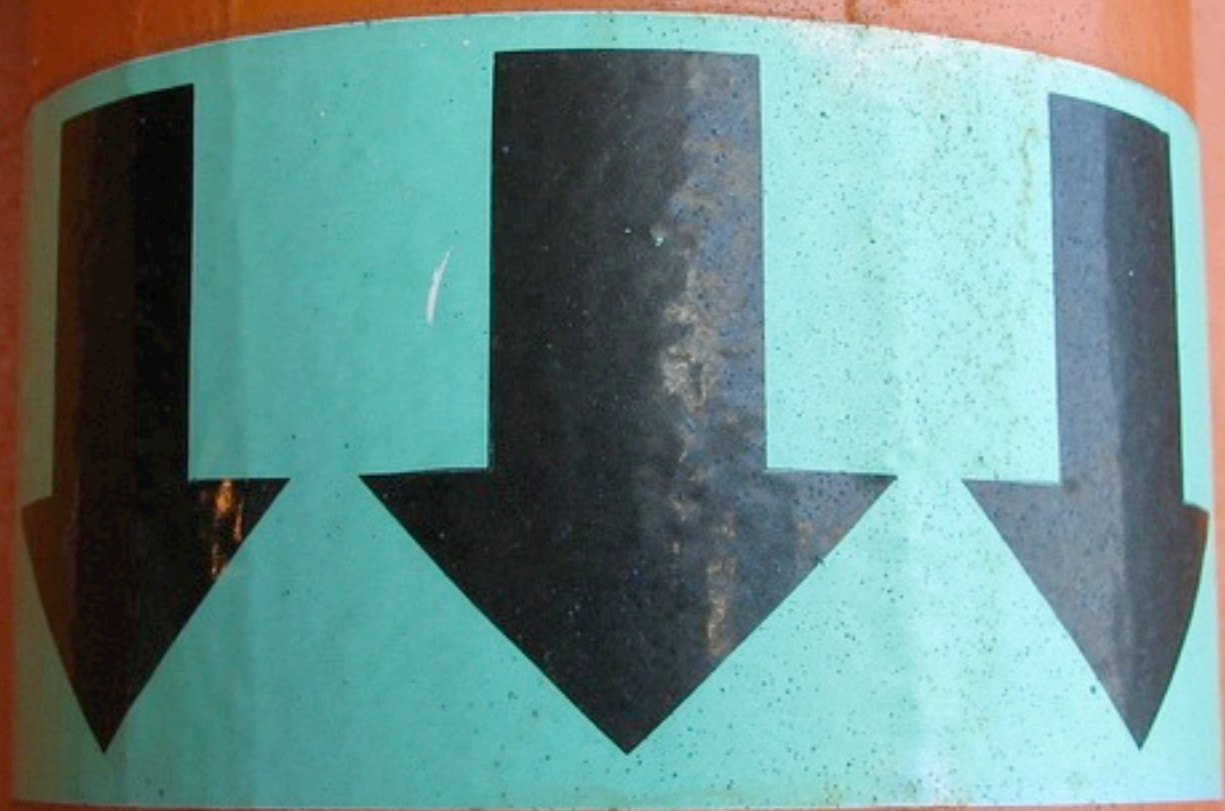
```
$img = $('<img />')  
  .addClass('loading')  
  .load(function () {  
    $img.removeClass('loading');  
  })  
  .error(function () {  
    $img.addClass('error')  
    .attr('src', 'empty.gif');  
  })  
  .attr('src', 'somebigimage.jpg')  
  .appendTo('body');
```

# One line!

```
$img = $('<img />')  
  .addClass('loading')  
  .load(function () {  
    $img.removeClass('loading');  
  })  
  .error(function () {  
    $img.addClass('error')  
      .attr('src', 'empty.gif');  
  })  
  .attr('src', 'somebigimage.jpg')  
  .appendTo('body');
```



# DOM Navigation



**Finding**

```
$('li a')
```

```
$('li').find('a')
```

```
$('a').next()
```

```
$('a').parent()
```

```
$('a').parents('ul')
```

# `$('li a')`

```
<ul>
  <li>
    <a href="#first">1st</a>
    
  </li>
  <li>
    <a href="#second">2nd</a>
    
  </li>
</ul>
```

# \$('li a')

```
<ul>
```

```
  <li>
```

```
    <a href="#first">1st</a>
```

```
    
```

```
  </li>
```

```
  <li>
```

```
    <a href="#second">2nd</a>
```

```
    
```

```
  </li>
```

```
</ul>
```



# `$('li a').next()`

```
<ul>  
  <li>  
    <a href="#first">1st</a>  
      
  </li>  
  <li>  
    <a href="#second">2nd</a>  
      
  </li>  
</ul>
```

# `$('li a').next()`

```
<ul>  
  <li>  
    <a href="#first">1st</a>  
      
  </li>  
  <li>  
    <a href="#second">2nd</a>  
      
  </li>  
</ul>
```

# `$('li a').next().parent()`

```
<ul>
  <li>
    <a href="#first">1st</a>
    
  </li>
  <li>
    <a href="#second">2nd</a>
    
  </li>
</ul>
```

# `$('li a').next().parent()`

```
<ul>
```

```
  <li>
```

```
    <a href="#first">1st</a>
```

```
    
```

```
  </li>
```

```
  <li>
```

```
    <a href="#second">2nd</a>
```

```
    
```

```
  </li>
```

```
</ul>
```

# `$('li a').parents('ul')`

```
<ul>
```

```
  <li>
```

```
    <a href="#first">1st</a>
```

```
    
```

```
  </li>
```

```
  <li>
```

```
    <a href="#second">2nd</a>
```

```
    
```

```
  </li>
```

```
</ul>
```

# `$('li a').parents('ul')`

```
<ul>
```

```
  <li>
```

```
    <a href="#first">1st</a>
```

```
    
```

```
  </li>
```

```
  <li>
```

```
    <a href="#second">2nd</a>
```

```
    
```

```
  </li>
```

```
</ul>
```



New in  
1.3

# .closest('expr')

```
<u1>  
  <li>  
    <a href="#second">2nd</a>  
      
  </li>  
</u1>
```



New in  
1.3

# `$('img').closest('ul')`

```
<ul>
  <li>
    <a href="#second">2nd</a>
    
  </li>
</ul>
```





New in  
1.3

# `$('img').closest('ul')`

```
<ul>
  <li>
    <a href="#second">2nd</a>
    
  </li>
</ul>
```



New in  
1.3

# `$('img').closest('ul')`

```
<ul>
```

```
  <li>
```

```
    <a href="#second">2nd</a>
```

```
    
```

```
  </li>
```

```
</ul>
```



Filtering

```
$( 'li' ).filter( ':first' )
```

```
$( 'a' ).not( ':has( span )' )
```

```
$( 'a' ).slice( 1, 1 )
```

# \$('li')

```
<li>
```

```
  <a href="#first">1st</a>
```

```
  
```

```
</li>
```

```
<li>
```

```
  <a href="#second">2nd</a>
```

```
  
```

```
</li>
```

```
<li>
```

```
  <a href="#third">3rd</a>
```

```
</li>
```

# \$('li')

```
<li>
```

```
<a href="#first">1st</a>
```

```

```

```
</li>
```

```
<li>
```

```
<a href="#second">2nd</a>
```

```

```

```
</li>
```

```
<li>
```

```
<a href="#third">3rd</a>
```

```
</li>
```

# `$('li').filter(':has(img)')`

```
<li>
```

```
<a href="#first">1st</a>
```

```

```

```
</li>
```

```
<li>
```

```
<a href="#second">2nd</a>
```

```

```

```
</li>
```

```
<li>
```

```
<a href="#third">3rd</a>
```

```
</li>
```

# `$('li').filter(':has(img)')`

```
<li>
```

```
  <a href="#first">1st</a>
```

```
  
```

```
</li>
```

```
<li>
```

```
  <a href="#second">2nd</a>
```

```
  
```

```
</li>
```

```
<li>
```

```
  <a href="#third">3rd</a>
```

```
</li>
```



# `$('li').not(':first')`

```
<li>
```

```
<a href="#first">1st</a>
```

```

```

```
</li>
```

```
<li>
```

```
<a href="#second">2nd</a>
```

```

```

```
</li>
```

```
<li>
```

```
<a href="#third">3rd</a>
```

```
</li>
```

# `$('li').not(':first')`

```
<li>
```

```
  <a href="#first">1st</a>
```

```
  
```

```
</li>
```

```
<li>
```

```
  <a href="#second">2nd</a>
```

```
  
```

```
</li>
```

```
<li>
```

```
  <a href="#third">3rd</a>
```

```
</li>
```

# \$('li:gt(0)')

```
<li>
```

```
<a href="#first">1st</a>
```

```

```

```
</li>
```

```
<li>
```

```
<a href="#second">2nd</a>
```

```

```

```
</li>
```

```
<li>
```

```
<a href="#third">3rd</a>
```

```
</li>
```

# \$('li:gt(0)')

```
<li>
```

```
  <a href="#first">1st</a>
```

```
  
```

```
</li>
```

```
<li>
```

```
  <a href="#second">2nd</a>
```

```
  
```

```
</li>
```

```
<li>
```

```
  <a href="#third">3rd</a>
```

```
</li>
```

# Manipulation



- **append, appendTo, prepend, prependTo**
- **after, before, insertAfter, insertBefore**
- **wrap, wrapAll, wrapInner**
- **empty, remove**
- **clone**
- **html, text**

```
$('li').append('<span />')
```

```
<li>  
  <a href="#first">1st</a>  
    
</li>
```

```
$('li').append('<span />')
```

```
<li>  
  <a href="#first">1st</a>  
    
  <span></span>  
</li>
```



`$('li').prepend('<span />')`

```
<li>  
  <a href="#first">1st</a>  
    
</li>
```

# `$('li').prepend('<span />')`

```
<li>  
  <span></span>  
  <a href="#first">1st</a>  
    
</li>
```

# `$('#foo').prependTo('li')`

```
<li>
```

```
  <a href="#first">1st</a>
```

```
  
```

```
</li>
```

```

```

# `$('#foo').prependTo('li')`

```
<li>  
    
  <a href="#first">1st</a>  
    
</li>
```

# `$('ul').wrap('<div />')`

```
<ul>
```

```
  <li><a href="#first">1st</a></li>
```

```
</ul>
```

```
<ul>
```

```
  <li><a href="#second">2nd</a></li>
```

```
</ul>
```

```
$('ul').wrap('<div />')
```

```
<div>
```

```
<ul>
```

```
<li><a href="#first">1st</a></li>
```

```
</ul>
```

```
</div>
```

```
<div>
```

```
<ul>
```

```
<li><a href="#second">2nd</a></li>
```

```
</ul>
```

```
</div>
```

# `$('ul').wrapAll('<div />')`

```
<div>
```

```
<ul>
```

```
<li><a href="#first">1st</a></li>
```

```
</ul>
```

```
<ul>
```

```
<li><a href="#second">2nd</a></li>
```

```
</ul>
```

```
</div>
```

# `$('li').wrapInner('<em />')`

```
<ul>
```

```
  <li><em><a href="#first">1st</a></em></li>
```

```
</ul>
```

```
<ul>
```

```
  <li><em><a href="#second">2nd</a></em></li>
```

```
</ul>
```



# **Style Manipulation**

# Key/Value Pair

```
// get
$( 'input' ).attr( 'title' );
$( 'a' ).css( 'font-weight' );

// set
$( 'input' ).attr( 'title', 'Name' );
$( 'a' ).css( 'font-weight', 'bold' );
```

# Changing Multiples

```
$( 'input' ).attr({  
  'title' : 'Your username',  
  'value' : 'Enter your username'  
});
```

```
$( 'a' ).css({  
  'font-weight' : 'bold',  
  'background-color' : '#c00'  
});
```

```
$('#a').attr({ class : 'home',  
             href : '/home' });
```

```
<a href="/logout" class="logout">Go</a>
```

```
$('a').attr({ class : 'home',  
             href : '/home' });
```

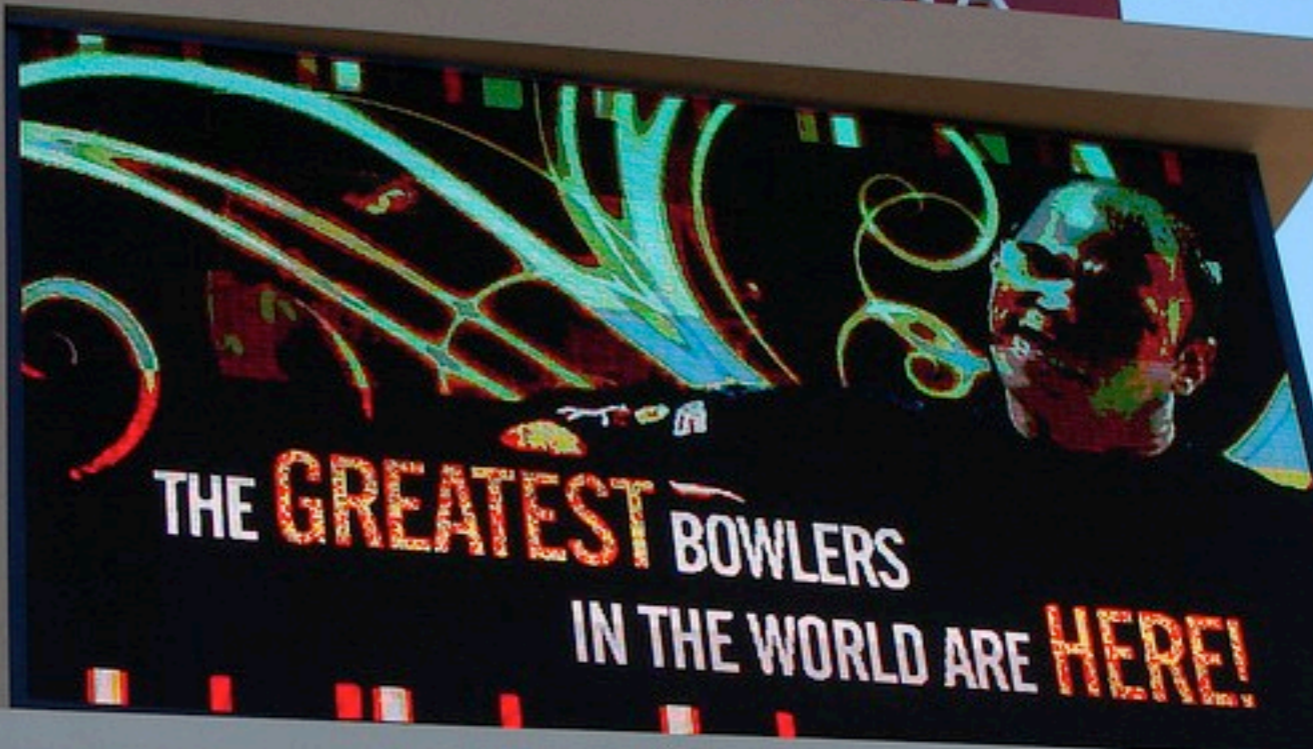
```
<a href="/home" class="home">Go</a>
```

# **Dimensions & Position**

- **width, height**
- **innerHeight, innerWidth**
- **outerHeight, outerWidth (pass true to include margins)**
- **scrollLeft, scrollTop**
- **offset, position (includes margin)**

# Events

**red rock**  
CASINO · RESORT · SPA



**SQUIRREL NUT ZIPPERS**  
**LIVE FRI, DEC 14 &**  
**SAT, DEC 15**  
**FREE IN ROCKS LOUNGE**  
**DOORS @ 8PM, SHOW @ 9PM**



**bind, trigger & unbind**

**bind, trigger & unbind**

**...and .one(fn) (which unbinds on trigger)**

```
$( 'a' ).bind( 'click', function () {  
    alert( 'you clicked' );  
    return false;  
});
```

```
$( 'a' ).bind( 'click', function () {  
    alert( 'you clicked' );  
    return false;  
});
```

```
$( 'a' ).bind( 'click', function () {  
    alert( 'you clicked' );  
    return false;  
});
```

```
$( 'a' ).bind( 'click', function () {  
    alert( 'you clicked' );  
    return false;  
} );
```

```
$( 'a' ).bind( 'click', function () {  
    alert( 'you clicked' );  
    return false;  
});
```

```
$( 'a' ).bind( 'click', function (event, msg) {  
    alert( 'you clicked: ' + msg );  
    return false;  
}).trigger( 'click', [ 'ok' ] );
```



```
$( 'a' ).bind( 'click', function (event, msg) {  
    alert( 'you clicked: ' + msg );  
    return false;  
}).trigger( 'click', [ 'ok' ] );
```

```
$( 'a' ).bind( 'click', function (event, msg) {  
    alert( 'you clicked: ' + msg);  
    return false;  
}).trigger( 'click', [ 'ok' ] );
```


```
$( 'a' ).bind( 'click', function (event, msg) {  
    alert( 'you clicked: ' + msg);  
    return false;  
}).trigger( 'click', [ 'ok' ] );
```

```
$( 'a' ).bind( 'click', function (event, msg) {  
    alert( 'you clicked: ' + msg );  
    return false;  
}).trigger( 'click', [ 'ok' ] );
```

Example



 http://test.com/sample.html

 Google

[link!](#)



**http://test.com**

you clicked: **ok**

OK

# Demo

<http://jsbin.com/amapo>

<b>blur</b>	<b>mousemove</b>
<b>change *</b>	<b>mouseout</b>
<b>click</b>	<b>mouseover</b>
<b>dblclick</b>	<b>mouseup</b>
<b>error</b>	<b>ready</b>
<b>focus</b>	<b>resize</b>
<b>hover</b>	<b>scroll</b>
<b>keydown</b>	<b>select</b>
<b>keypress</b>	<b>submit</b>
<b>keyup</b>	<b>toggle</b>
<b>load</b>	<b>unload</b>
<b>mousedown</b>	

```
triggerHandler(event, data)
```



```
triggerHandler(event, data)
```

***Watch out: doesn't chain!***

# Event object

- **preventDefault()**
- **stopPropagation()**
- **return false (preventDefault + stopPropagation)**
- **stopImmediatePropagation()**

new in  
**1.3**

# **Task:**

# **Simple Gallery**

**<http://jsbin.com/eremi/edit>**

# **Task: Tabbing System**

**<http://jsbin.com/etopi/edit>**

# Tips

- **On ready**
- **Get tab links**
- **Collect panels**
- **On tab click:  
hide panels**
- **Then show  
appropriate  
panel**
- **this.hash**
- **Filter tabs**

# Part 4: Effects

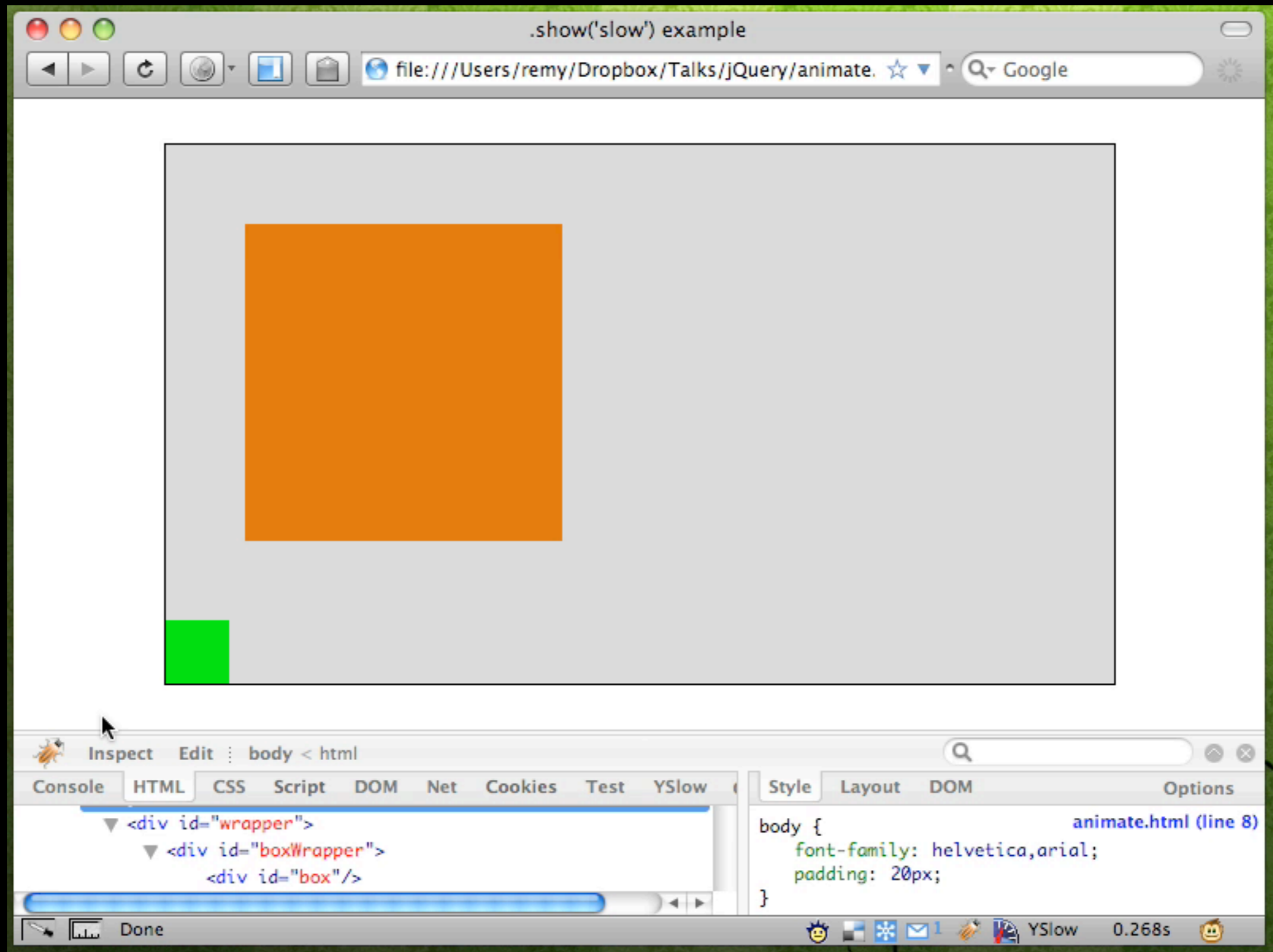


# Built in Effects

- **show, hide, toggle**
- **fadeIn, fadeOut, fadeTo**
- **slideUp, slideDown, slideToggle**
- **animate - roll your own!**

**<http://icanhaz.com/j4d-hide>**





<http://icanhaz.com/j4d-hide>

**.animate(prop,  
speed, callback)**

```
$( '#block' ).animate({
  'opacity' : 0.5,
  'width' : '-=20px',
  'height' : '-=20px',
  'top' : (winHeight - 168) + 'px'
}, 400, 'easeOutBounce').animate({
  'foo' : 1 // acts as a pause
}, 500).animate({
  'left' : '150%' // fly off screen
}, 500, function () {
  $(this).hide();
});
```

```
$( '#block' ).animate({
  'opacity' : 0.5,
  'width' : '-=20px',
  'height' : '-=20px',
  'top' : (winHeight - 168) + 'px'
}, 400, 'easeOutBounce').animate({
  'foo' : 1 // acts as a pause
}, 500).animate({
  'left' : '150%' // fly off screen
}, 500, function () {
  $(this).hide();
});
```

```
$( '#block' ).animate({
  'opacity' : 0.5,
  'width' : '-=20px',
  'height' : '-=20px',
  'top' : (winHeight - 168) + 'px'
}, 400, 'easeOutBounce').animate({
  'foo' : 1 // acts as a pause
}, 500).animate({
  'left' : '150%' // fly off screen
}, 500, function () {
  $(this).hide();
});
```

```
$( '#block' ).animate({
  'opacity' : 0.5,
  'width' : '-=20px',
  'height' : '-=20px',
  'top' : (winHeight - 168) + 'px'
}, 400, 'easeOutBounce').animate({
  'foo' : 1 // acts as a pause
}, 500).animate({
  'left' : '150%' // fly off screen
}, 500, function () {
  $(this).hide();
});
```

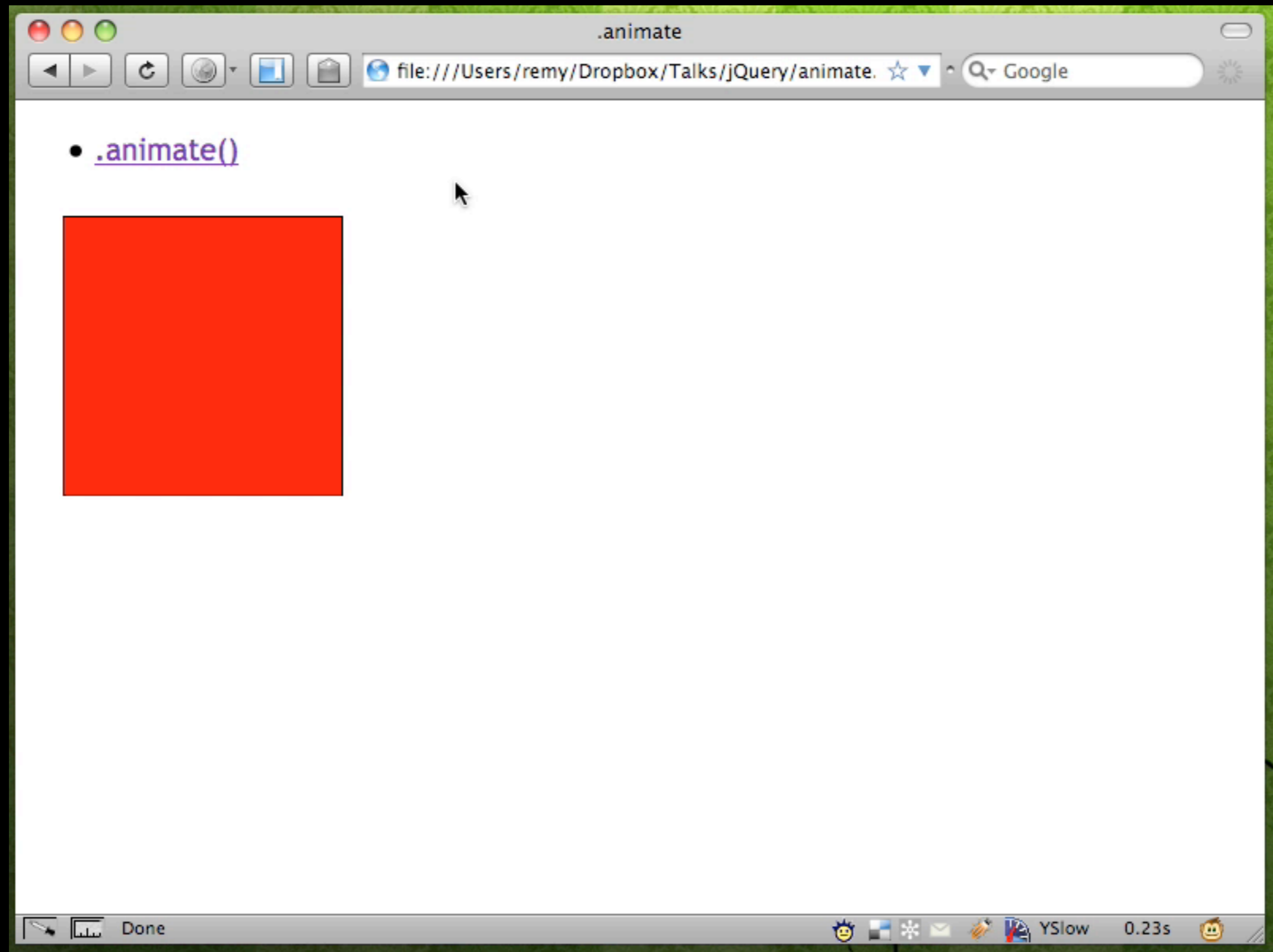
```
$( '#block' ).animate({
  'opacity' : 0.5,
  'width' : '-=20px',
  'height' : '-=20px',
  'top' : (winHeight - 168) + 'px'
}, 400, 'easeOutBounce').animate({
  'foo' : 1 // acts as a pause
}, 500).animate({
  'left' : '150%' // fly off screen
}, 500, function () {
  $(this).hide();
});
```

```
$( '#block' ).animate({
  'opacity' : 0.5,
  'width' : '-=20px',
  'height' : '-=20px',
  'top' : (winHeight - 168) + 'px'
}, 400, 'easeOutBounce').animate({
  'foo' : 1 // acts as a pause
}, 500).animate({
  'left' : '150%' // fly off screen
}, 500, function () {
  $(this).hide();
});
```



```
$( '#block' ).animate({
  'opacity' : 0.5,
  'width' : '-=20px',
  'height' : '-=20px',
  'top' : (winHeight - 168) + 'px'
}, 400, 'easeOutBounce').animate({
  'foo' : 1 // acts as a pause
}, 500).animate({
  'left' : '150%' // fly off screen
}, 500, function () {
  $(this).hide();
});
```

**<http://icanhaz.com/j4d-animate>**



**<http://icanhaz.com/j4d-animate>**

# Easing

<http://gsgd.co.uk/sandbox/jquery/easing/>

```
$( 'div' ).animate({  
    'height' : 'toggle'  
}, 500, 'easeOutBounce' );
```

```
$( 'div' ).animate({  
    'height' : 'toggle'  
}, 500, 'easeOutBounce' );
```

```
$( 'div' ).animate({  
    'height' : 'toggle'  
}, 500, 'easeOutBounce' );
```



`$ .fx.off = true`



**Enchantment**

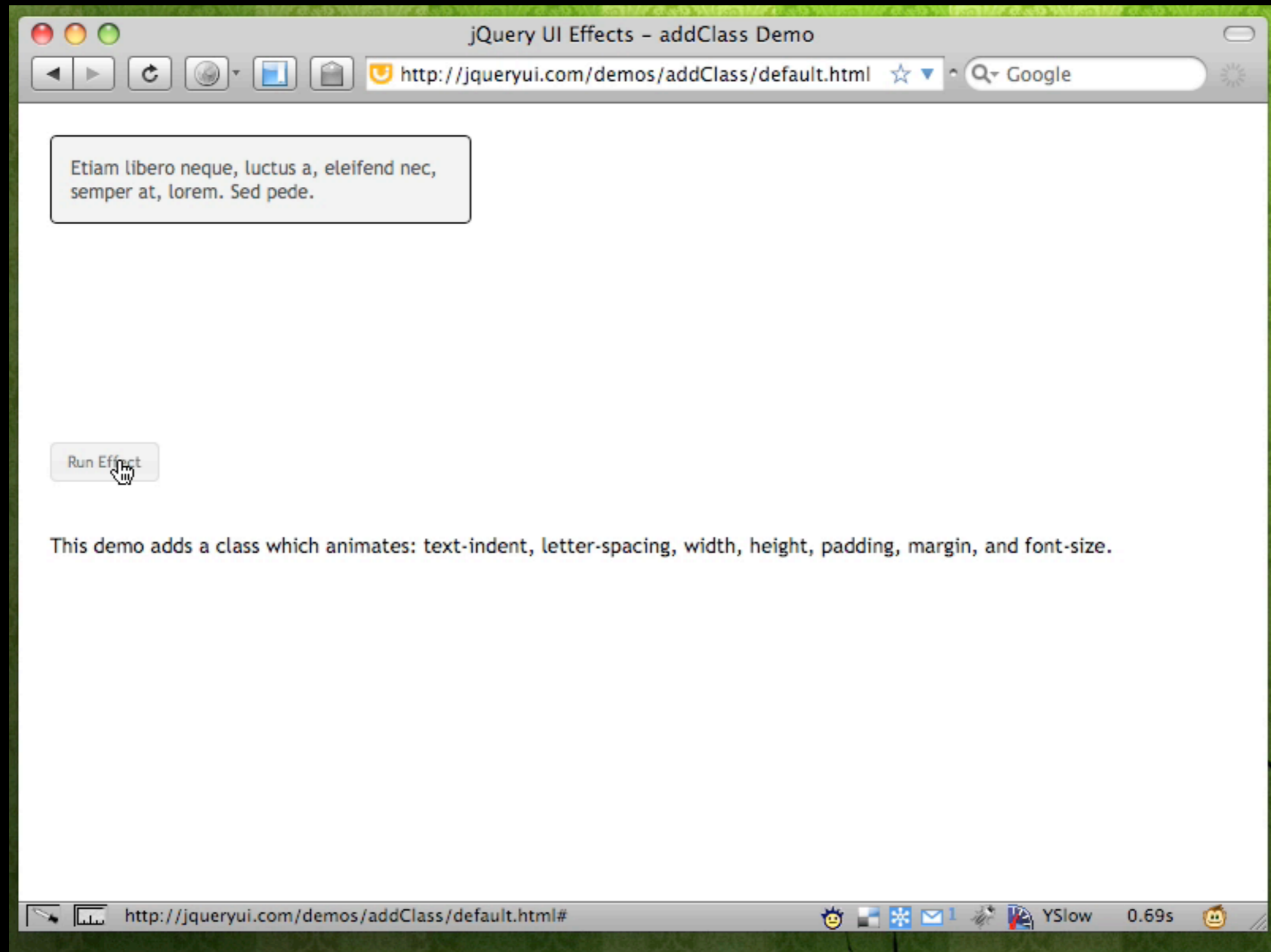
# **Enchantment**

**<http://jqueryui.com/docs/Effects/Methods>**

# UI Effects Core

- **addClass, removeClass, toggleClass**
- **show, hide, toggle**
- **animate**

**<http://icanhaz.com/j4d-jui-addclass>**



**<http://icanhaz.com/j4d-jui-addclass>**

**Stop!**



# BERT TIMMERMANS



## LOG POST

Keypoint goes Appstore



**Keypoint**

Keypoint was one of my first real iPhone (web)apps as just a fun project. "

### Behind Keypoint

Keypoint is a simple app that lets you create presentations on the go by adding slides, view them on your

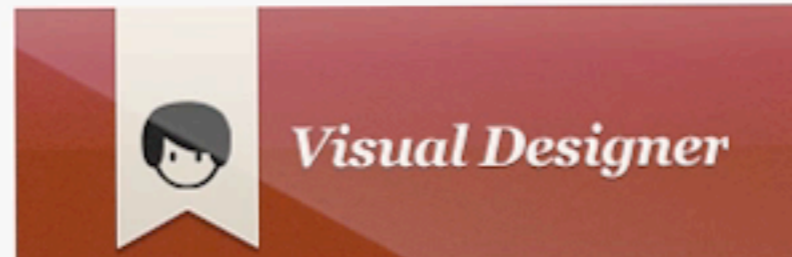
## HELLO

*I am Bert Timmermans a young internet fanatic with a passion for development and design that cannot be described in a few words.*

If you have any questions feel free to [contact](#) or [follow](#) me



## LATEST WORK



*Visual Designer*



**Fixing using stop**

# **Task: Animated Accordion**

**<http://jsbin.com/oyero/edit>**

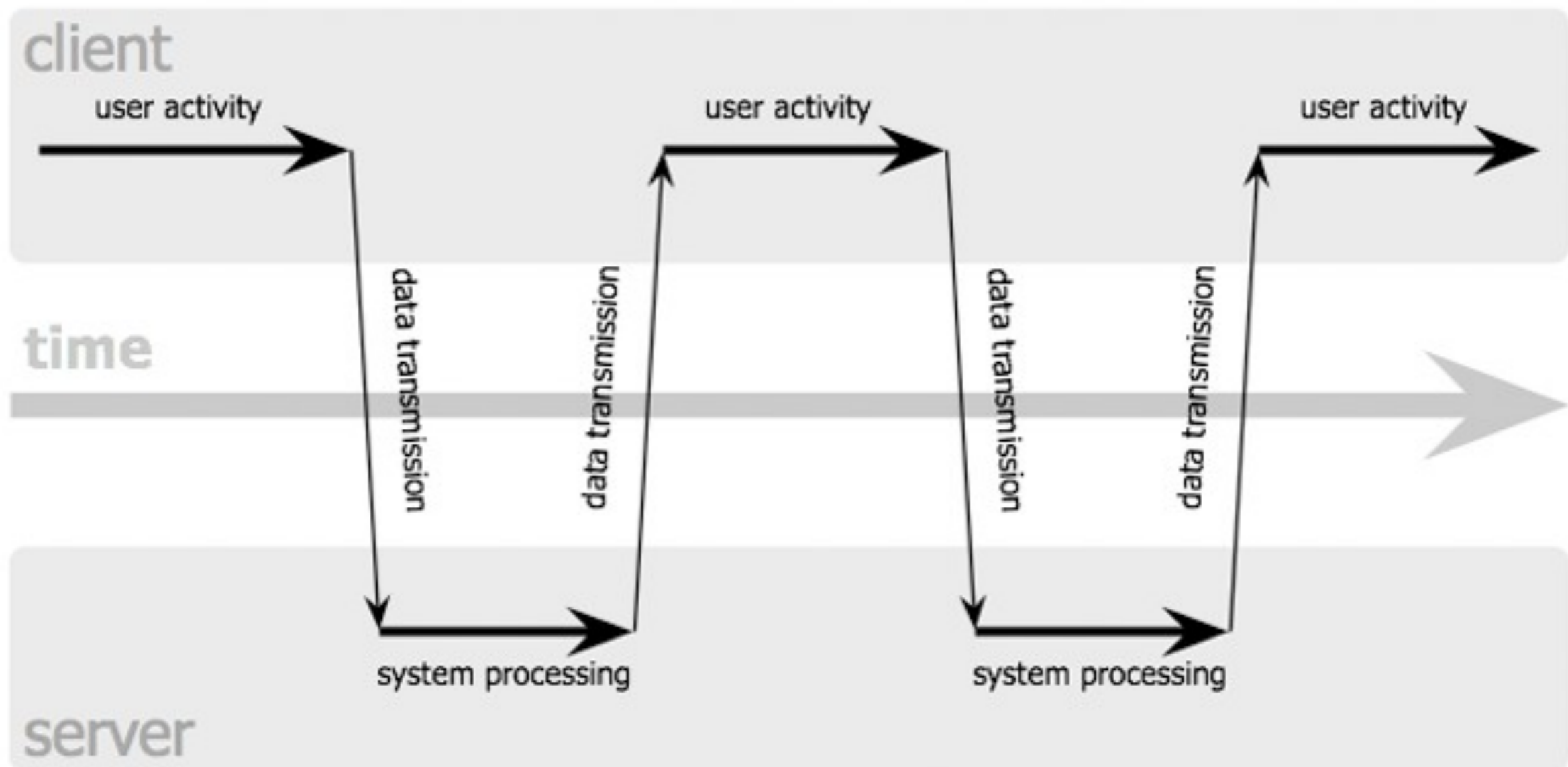
# Tips

- **Navigate the DOM**
- **Use slideUp / slideDown**
- **Think about clicking open panels**
- **Think about permalinks**

# Part 5: Ajax



## classic web application model (synchronous)



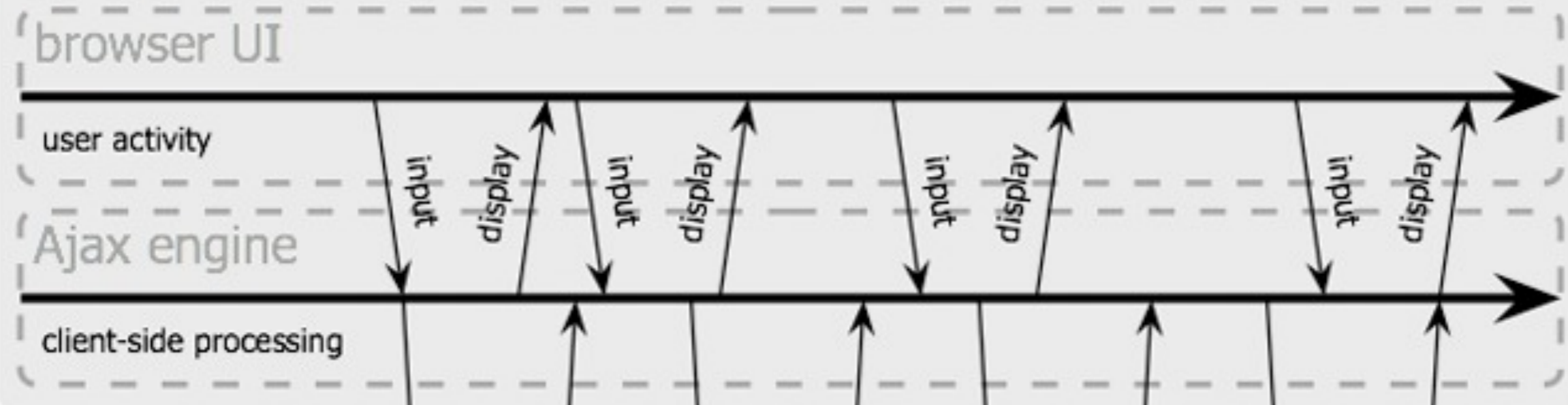
## Ajax web application model (asynchronous)



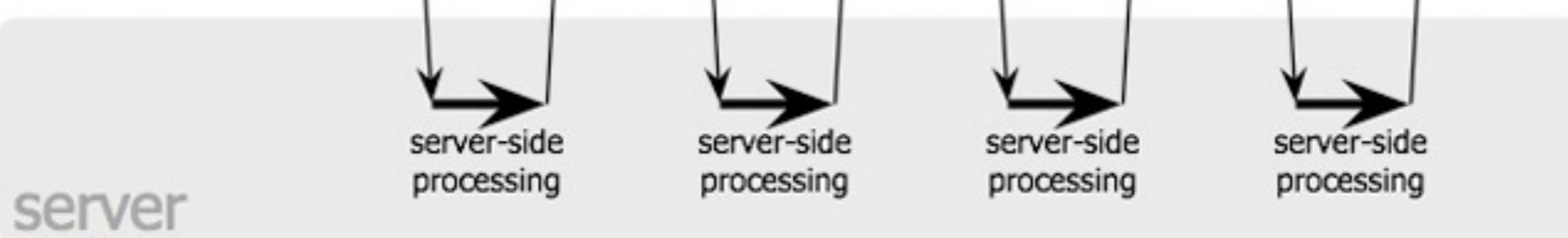
server

## Ajax web application model (asynchronous)

client



time



server

**Ajax != XML**

# Über Easy Ajax

```
$ ( ' #content ' ) .load ( url ) ;
```

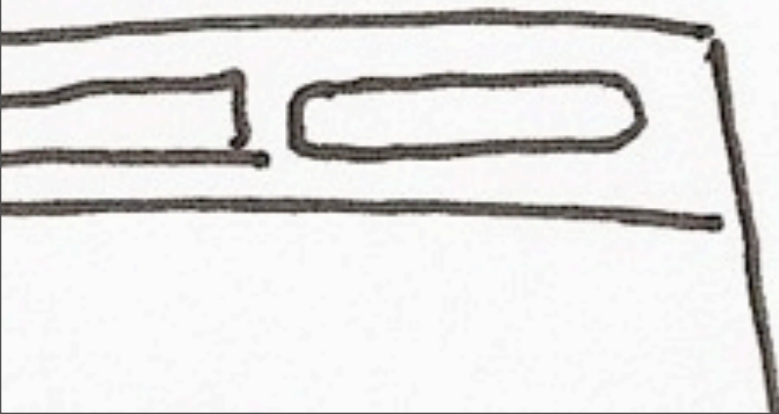


# Über Easy Ajax

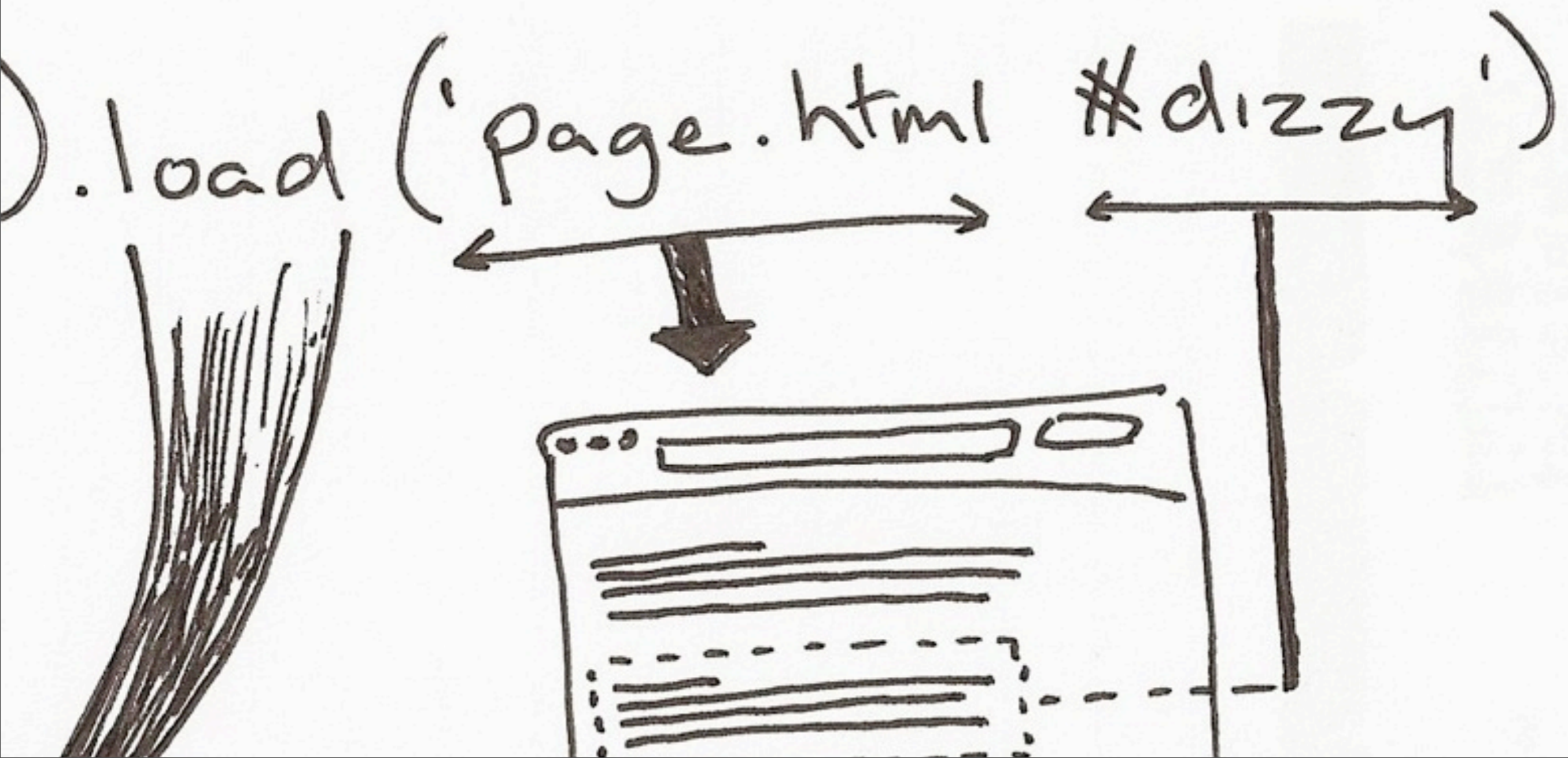
```
$ ( ' #content ' ) .load ( url ) ;
```

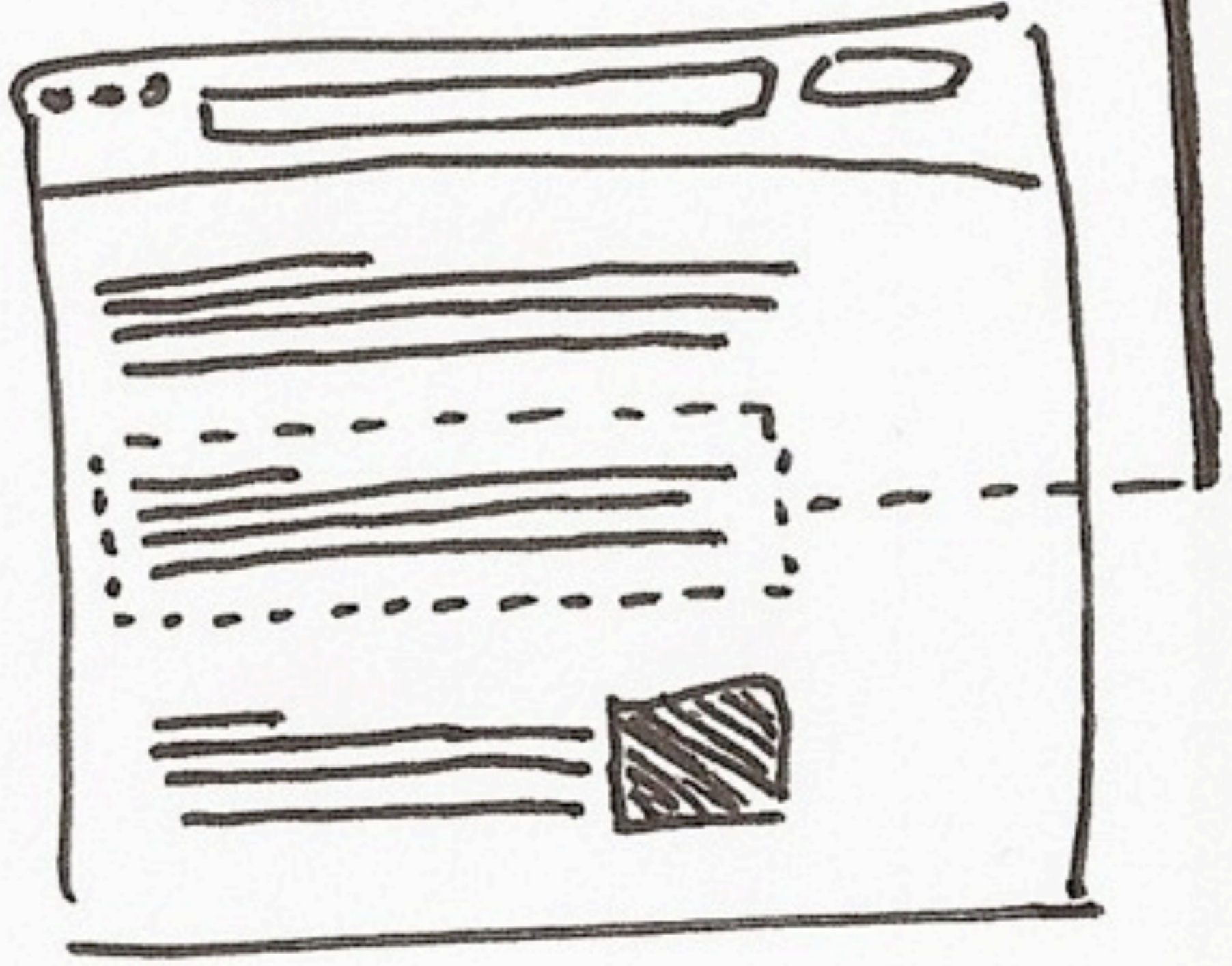
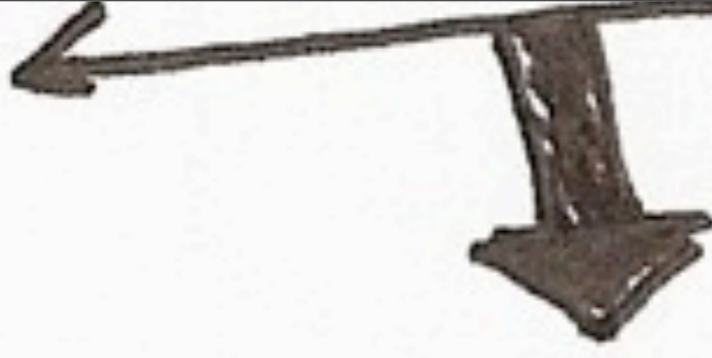
```
.load ( ' page.html #stuff ' ) ;
```

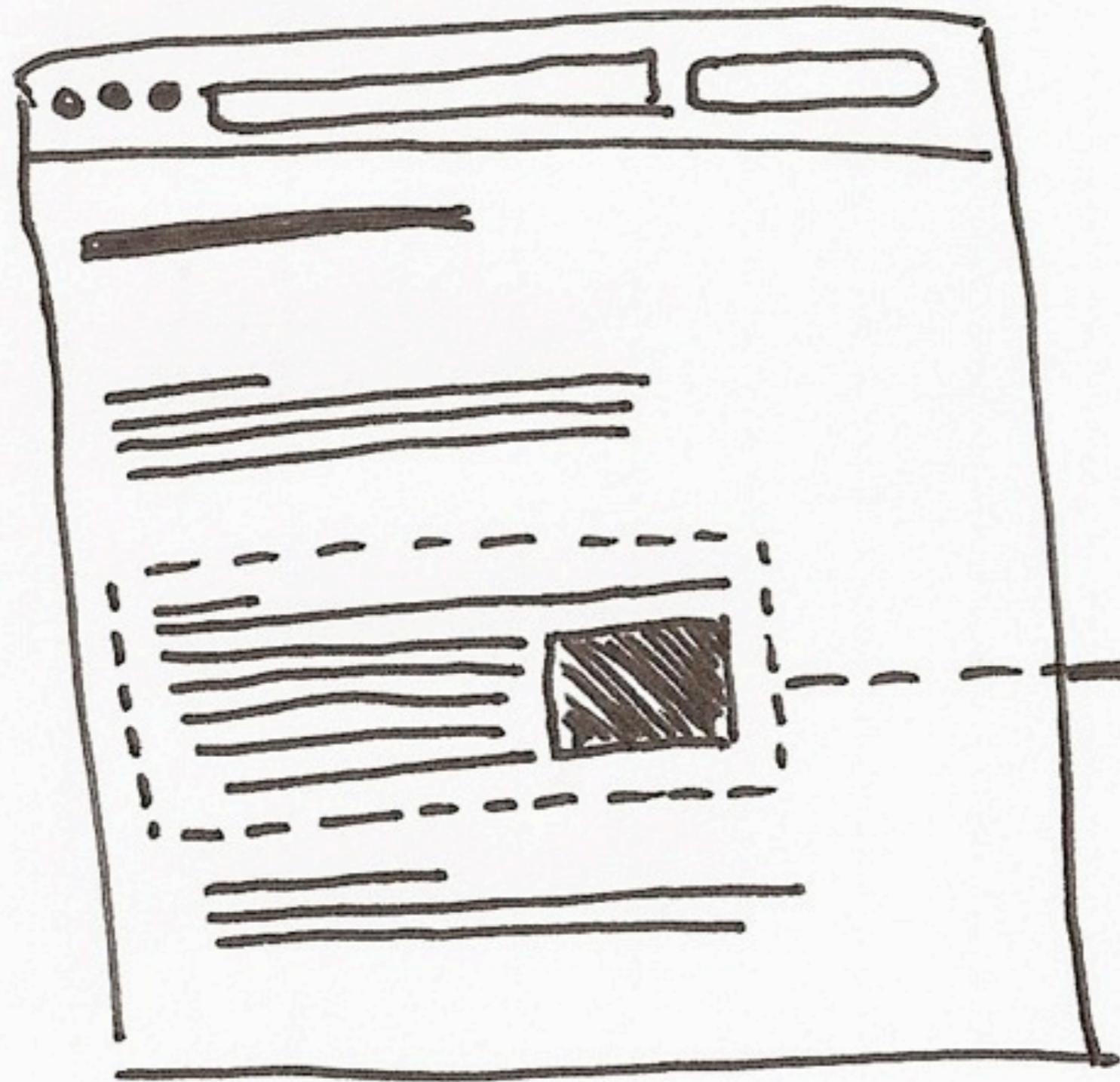
\$ ( '# Content ' ) . load ( ' )











**Task:**  
**Ajaxy Tabs**

# Tips

- **this is the anchor clicked**
- **Check out this.pathname**
- **...and this.hash**



**JSON**

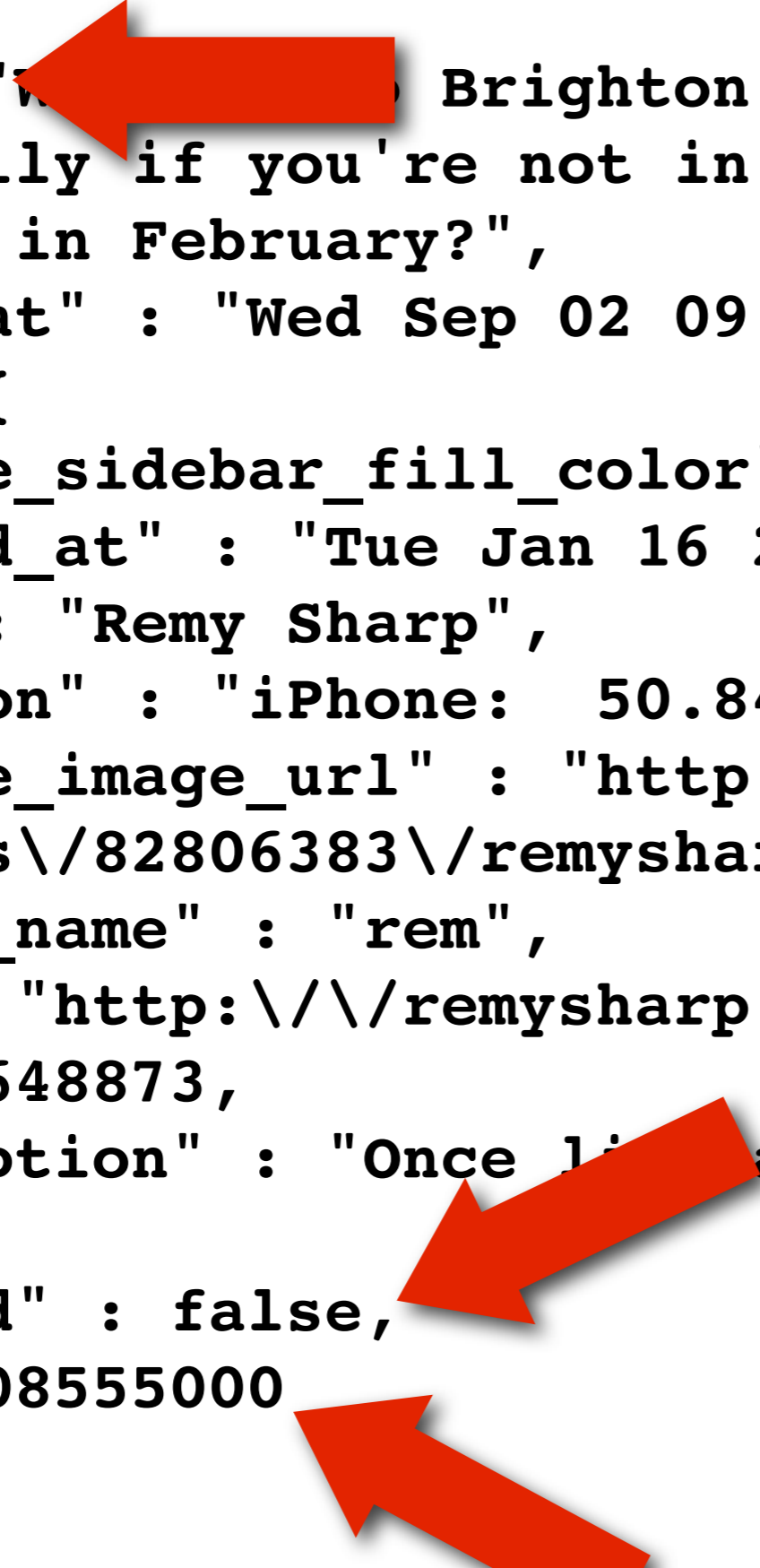
- **json.org**
- **“Lightweight data exchange”**
- **Really damn easy**
- **Text representation of JS var**

```
[
  {
    "text" : "Welcome to Brighton. If you're in the sea you'll
get wet, equally if you're not in the sea, you'll get soaked.
Did I wake up in February?",
    "created_at" : "Wed Sep 02 09 : 53 : 00 +0000 2009",
    "user" : {
      "profile_sidebar_fill_color" : "f5f4f4",
      "created_at" : "Tue Jan 16 20:11:35 +0000 2007",
      "name" : "Remy Sharp",
      "location" : "iPhone: 50.841824,-0.145860",
      "profile_image_url" : "http://\a3.twimg.com/\
profile_images\82806383\remysharp_normal.jpg",
      "screen_name" : "rem",
      "url" : "http://\remysharp.com",
      "id" : 648873,
      "description" : "Once lied about squirrels"
    },
    "truncated" : false,
    "id" : 3708555000
  }
]
```

```
[
  {
    "text" : "Welcome to Brighton. If you're in the sea you'll
get wet, equally if you're not in the sea, you'll get soaked.
Did I wake up in February?",
    "created_at" : "Wed Sep 02 09 : 53 : 00 +0000 2009",
    "user" : {
      "profile_sidebar_fill_color" : "f5f4f4",
      "created_at" : "Tue Jan 16 20:11:35 +0000 2007",
      "name" : "Remy Sharp",
      "location" : "iPhone: 50.841824,-0.145860",
      "profile_image_url" : "http://a3.twimg.com/
profile_images/82806383/remysharp_normal.jpg",
      "screen_name" : "rem",
      "url" : "http://remysharp.com",
      "id" : 648873,
      "description" : "Once lied about squirrels"
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    "truncated" : false,
    "id" : 3708555000
  }
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      "screen_name" : "rem",
      "url" : "http://remysharp.com",
      "id" : 648873,
      "description" : "Once lied about squirrels"
    },
    "truncated" : false,
    "id" : 3708555000
  }
]
```

```
[
  {
    "text" : "I'm in Brighton. If you're in the sea you'll
get wet, equally if you're not in the sea, you'll get soaked.
Did I wake up in February?",
    "created_at" : "Wed Sep 02 09 : 53 : 00 +0000 2009",
    "user" : {
      "profile_sidebar_fill_color" : "f5f4f4",
      "created_at" : "Tue Jan 16 20:11:35 +0000 2007",
      "name" : "Remy Sharp",
      "location" : "iPhone: 50.841824,-0.145860",
      "profile_image_url" : "http://a3.twimg.com/
profile_images/82806383/remysharp_normal.jpg",
      "screen_name" : "rem",
      "url" : "http://remysharp.com",
      "id" : 648873,
      "description" : "Once I wrote about squirrels"
    },
    "truncated" : false,
    "id" : 3708555000
  }
]
```



```
[
  {
    "text" : "Welcome to Brighton. If you're in the sea you'll
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    "created_at" : "Wed Sep 02 09 : 53 : 00 +0000 2009",
    "user" : {
      "profile_sidebar_fill_color" : "f5f4f4",
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      "name" : "Remy Sharp",
      "location" : "iPhone: 50.841824,-0.145860",
      "profile_image_url" : "http://a3.twimg.com/
profile_images/82806383/remysharp_normal.jpg",
      "screen_name" : "rem",
      "url" : "http://remysharp.com",
      "id" : 648873,
      "description" : "Once lied about squirrels"
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      "name" : "Remy Sharp",
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profile_images/82806383/remysharp_normal.jpg",
      "screen_name" : "rem",
      "url" : "http://remysharp.com",
      "id" : 648873,
      "description" : "Once lied about squirrels"
    },
    "truncated" : false,
    "id" : 3708555000
  }
]
```



- **`$.get`**

- **`$.post`**

- **`$.getJSON`**

- **`$.getScript`**

- **`$.ajax`**

# **\$.ajax**

- **Full control**
- **Global setup available**
- **Much easier to debug**
- **<http://docs.jquery.com/Ajax/jQuery.ajax#options>**

# Server Side Tip!

```
// sent headers include:
```

```
X-Requested-With = XMLHttpRequest
```

```
$.ajax({  
  url: '/username-check',  
  dataType: 'json',  
  data: "u=" + $('#username').val(),  
  success: function(data) {  
    // this == XMLHttpRequest object  
    if (!data.ok) {  
      $('#status').text('Taken');  
    }  
  },  
  error: function(xhr, status, e) {  
    // debugging enabled  
    console.log(arguments);  
  }  
});
```

```
$.ajax({
  url: '/username-check',
  dataType: 'json',
  data: "u=" + $('#username').val(),
  success: function(data) {
    // this == XMLHttpRequest object
    if (!data.ok) {
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    // debugging enabled
    console.log(arguments);
  }
});
```

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  url: '/username-check',
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  data: "u=" + $('#username').val(),
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    // this == XMLHttpRequest object
    if (!data.ok) {
      $('#status').text('Taken');
    }
  },
  error: function(xhr, status, e) {
    // debugging enabled
    console.log(arguments);
  }
});
```

```
$.ajax({
  url: '/username-check',
  dataType: 'json',
  data: "u=" + $('#username').val(),
  success: function(data) {
    // this == XMLHttpRequest object
    if (!data.ok) {
      $('#status').text('Taken');
    }
  },
  error: function(xhr, status, e) {
    // debugging enabled
    console.log(arguments);
  }
});
```

# **Demo**

**<http://icanhaz.com/j4d-ajax>**



**JSONP**

# **JSONP**

**JSON & *padding***

**json**

**callback ( json )**

```
<script>
```

```
function callback(cats) {
```

```
    var n = cats.length;
```

```
    alert("I've got " + n + " cats");
```

```
}
```

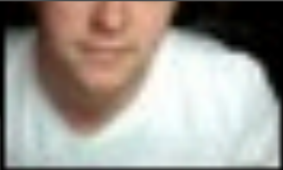
```
</script>
```

```
<script src="http://jsbin.com/oxuyu">
```

```
</script>
```

# JSONP Contained...

```
callback([ 'Dizzy', 'Missy', 'Ninja' ]);
```



# Welcome!

Hello and welcome to my [b:log](#). I'm Remy



Console

HTML

CSS

Script

Clear

All

HTML

CSS

JS

XHR

Images

Fla

▶	GET banners	200 OK	
▶	GET remysharp_normal.	304 Not Modified	
▶	GET __utm.gif?utmwv=1	200 OK	
▼	GET rem.json?callback=	200 OK	

Params

Headers

Response

```
twitterCallback1([{"in_reply_to_user_id":22073
:"alexgreg","created_at":"Wed Sep 02 19:43:59
:"f5f4f4","followers count":2427,"time_zone":
"+0000 2007","verified":false,"statuses_count"
:"e0e0e0","following":null,"name":"Remy Sharp"
:"iPhone: 50.841824,-0.145860","profile_backgr
\/3983564\/twitter-peel2.jpg","profile_image_u
.jpg","notifications":null,"profile link color
```



Console

HTML

CSS

Clear

All

HTML

CSS

JS

XHR

- ▶ GET banners 200 OK
- ▶ GET remysharp\_normal. 304 Not Mod
- ▶ GET \_\_utm.gif?utmwv=1 200 OK
- ▼ GET rem.json?callback= 200 OK

Params

Headers

Response

```
twitterCallback1([{"in_reply_to_user  
:"alexgreg", "created_at": "Wed Sep 0  
:"151414", "followers_count": 2427, "t  
+0000 2007", "verified": false, "stat  
:"e0e0e0", "following": null, "name": "  
:"iPhone: 50.841824, -0.145860", "pro
```



```
$.ajax({  
  url: 'http://www.twitter.com/  
statuses/user_timeline/rem.json',  
  dataType: 'jsonp',  
  cache: false,  
  success: function(json) {  
    $('#status').html(json[0].text);  
  }  
});
```

```
$.ajax({  
  url: 'http://www.twitter.com/  
statuses/user_timeline/rem.json',  
  dataType: 'jsonp',  
  cache: false,  
  success: function(json) {  
    $('#status').html(json[0].text);  
  }  
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```
$.ajax({  
  url: 'http://www.twitter.com/  
statuses/user_timeline/rem.json',  
  dataType: 'jsonp',  
  cache: false,  
  success: function(json) {  
    $('#status').html(json[0].text);  
  }  
});
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$.ajax({  
  url: 'http://www.twitter.com/  
statuses/user_timeline/rem.json',  
  dataType: 'jsonp',  
  cache: false,  
  success: function(json) {  
    $('#status').html(json[0].text);  
  }  
});
```

**Task:**

**Get your Tweets**

# Tips

- **dataType: 'jsonp'**
- **<http://ajaxload.info> for throbber if you want one?**
- **Don't be afraid to add access points to your DOM**

New in  
**1.3**

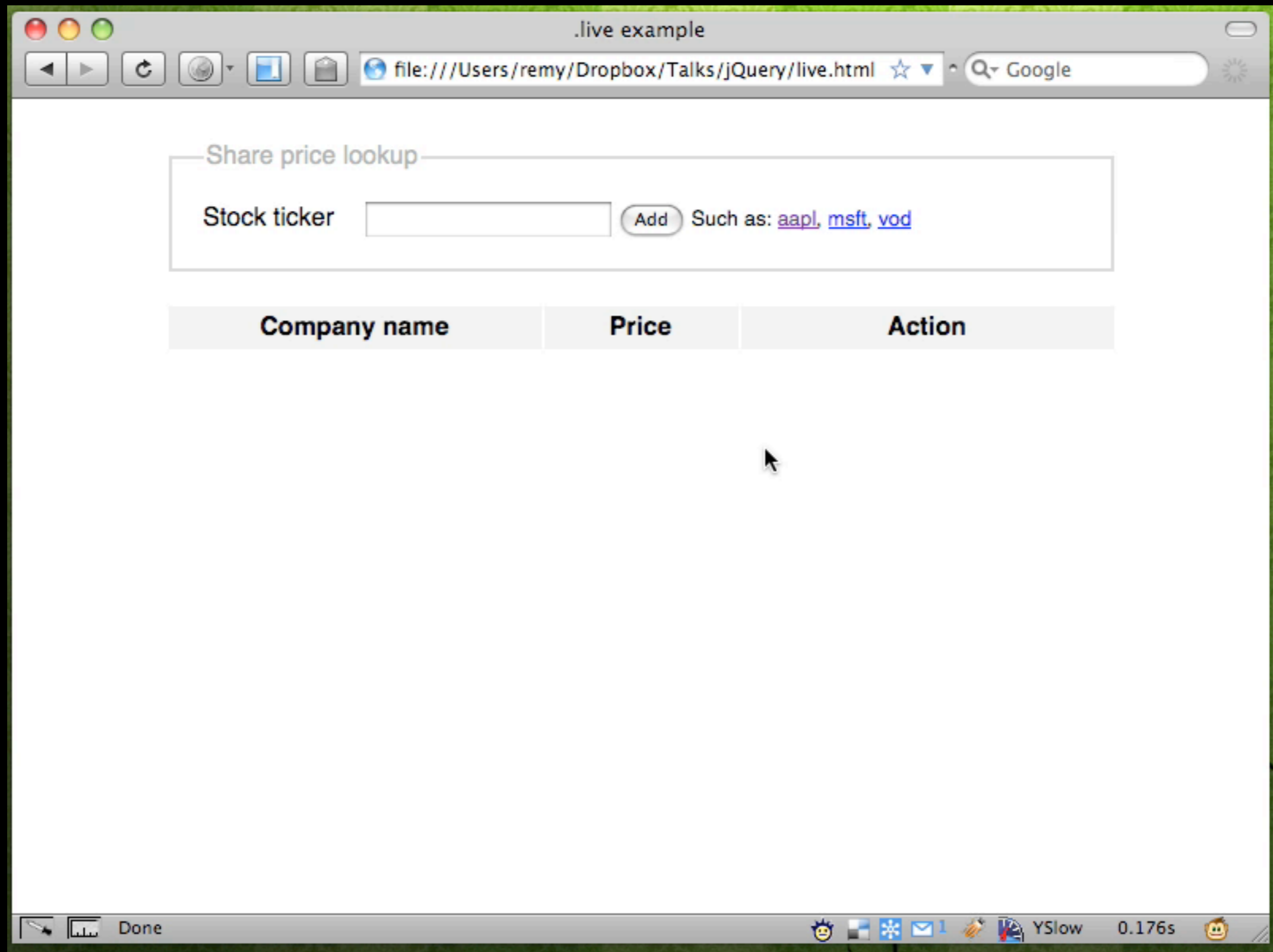


# Live Events

```
$( '.remove' ).live( 'click', function() {  
    $( this ).closest( 'tr' ).remove();  
} );
```



**<http://icanhaz/j4d-live.html>**



**<http://icanhaz/j4d-live.html>**

# Live support

- **Supported: click, dblclick, mousedown, mouseup, mousemove, mouseover, mouseout, keydown, keypress, keyup**
- **Not supported: blur, focus, mouseenter, mouseleave, change, submit**

**Remy Sharp**

**@rem**

**remy@leftlogic.com**

**My Blog:**

**remysharp.com**

**Screencasts &**

**upcoming book:**

**jqueryfordesigners.com**

