jQuery in a nutshell

Scotch on the Rocks

Wednesday 4th June 2008

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Who am I?

- Development Manager at Monochrome
- Creator of Feed-Squirrel.com
- Web Developer since 1996

About Monochrome

- Established in 1999 as a traditional web development agency.
- Acquired Prismix (one of the first Macromedia/Adobe Flex Partners in the UK) in April 2006 to increase knowledge share in the RIA space.
- Monochrome has challenged mainstream opinions within the industry by becoming an early adopter of Rich Internet development since 2003.
- Monochrome is an established Adobe Silver Partner and Adobe Flex Partner.

monochrome.
architects in new media.

Adobe | Solution PARTNER

Microsoft CERTIFIED Partner

WTF is jQuery?

- Simply put, a Javascript library
  - Lightweight (only around 15kb when packed and zipped)
  - Fast
  - Simple
  - Extendable
  - Cross-browser

Compatability

- Firefox 1.5+
- Internet Explorer 6+
- Safari 2.0.2+
- Opera 9+

- Known problems with FF 1.0.x, IE 1-5.x, Safari 1.x, Safari 2.0, Opera 1.0-8.5, Konqueror

Who uses jQuery?

- Google
- Dell
- Digg
- MSNBC
- Amazon
- Intel
- BBC
- Newsweek
- AOL
- Oracle
- Cisco Systems
- Technorati
- Sourceforge
- Salesforce
- Newsgator
- The Onion
- Feedburner
- Vodafone
- Linux.com
- Logitech
- Mozilla
- Wordpress
- Drupal
- Trac
- Joomla

Firebug

getfirebug.com

aptana.com

$()

Find this, do something

```
$(“#div1”).show();

$(“#div2”).addClass(“alert”);
```

Find this, do something

```
<div id=”body”>
        <h2>The header</h2>
        <div class=”contents”>
            <P>...</P>
            <P>...</P>
        </div>
</div>
```

Find this, do something

```
$(“div”)
```

```
<div id=”body”>
        <h2>The header</h2>
        <div class=”contents”>
            <P>...</P>
            <P>...</P>
        </div>
</div>
```

Find this, do something

```
$(“#body”)
```

```
<div id=”body”>
        <h2>The header</h2>
        <div class=”contents”>
            <P>...</P>
            <P>...</P>
        </div>
</div>
```

Find this, do something

```
$(“div > div”)
```

```
<div id=”body”>
        <h2>The header</h2>
        <div class=”contents”>
            <P>...</P>
            <P>...</P>
        </div>
</div>
```

Find this, do something

```
$(“div:has(div)”)
```

```
<div id=”body”>
        <h2>The header</h2>
        <div class=”contents”>
            <P>...</P>
            <P>...</P>
        </div>
</div>
```

Now what?

- Events (click, hover, toggle)
- DOM Manipulation (append, prepend, remove)
- Effects (hide, show, slideDown, fadeOut)
- AJAX (load, get, post)

Events

```
$(“form input:last”).click(function() {
        $(“#menu”).slideDown(“slow”);
});
```

DOM Manipulation

```
$(“a[target]”).append(“ (Opens in New Window)”);


$(“#body”).css({
    border: “1px solid green”,
    height: “40px”
});
```

Effects

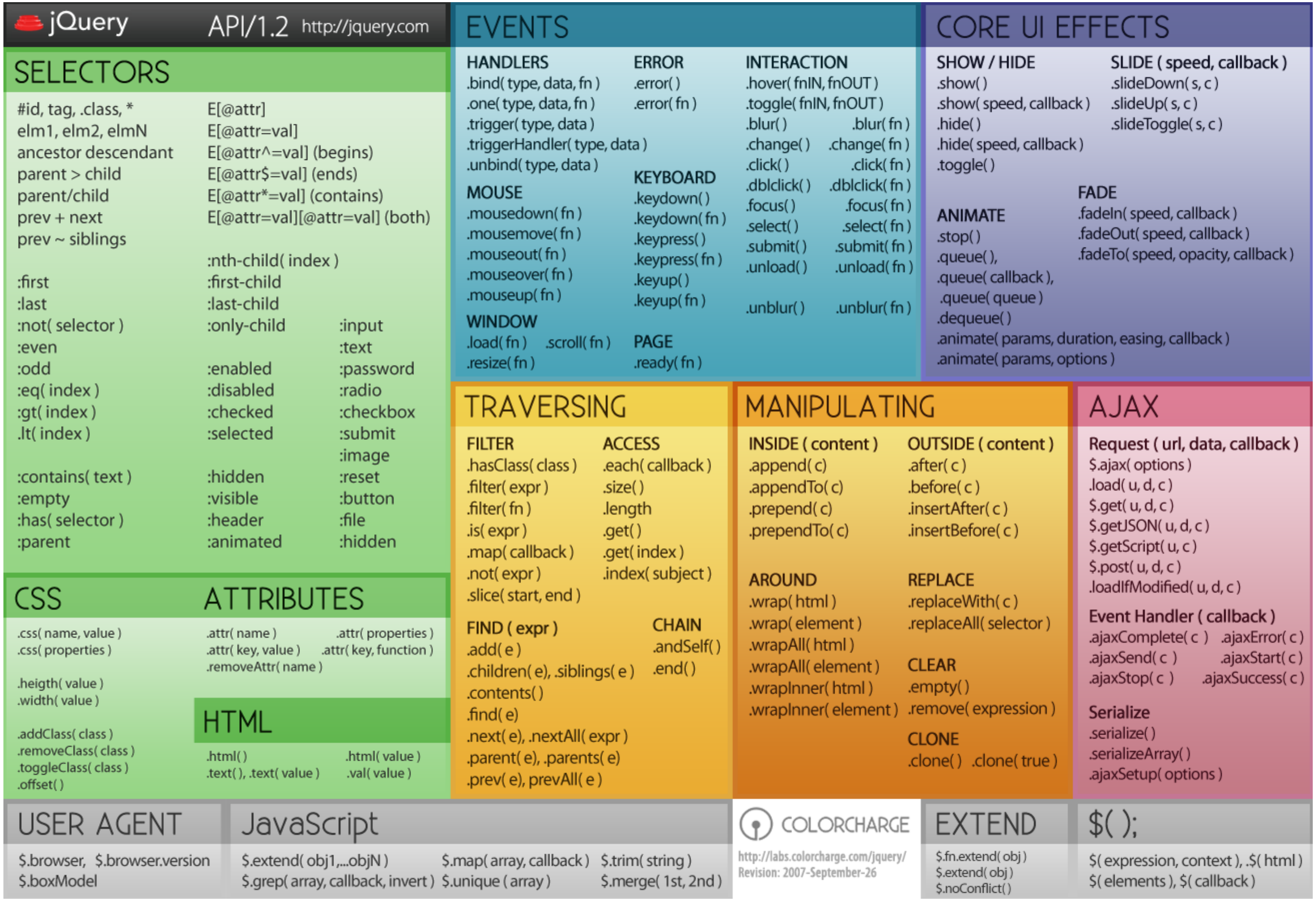
```
$(“#menu”).slideDown(“slow”);

$(“div”).hide(500,function(){
    $(this).show(500);
});
```

AJAX

```
$("#body").load("sample.html");

$.getScript("test.js");

$.ajax();
```

Chaining

```
$(“div”).hide();

$(“div”).hide().color(”blue”);

$(“div”).hide().color(”blue”).slideDown();
```



jQuery API/1.2 http://jquery.com

SELECTORS

#id, tag, .class, *
elm1, elm2, elmN
ancestor descendant
parent > child
parent/child
prev + next
prev ~ siblings

:first
:last
:not(selector)
:even
:odd
:eq(index)
:gt(index)
.lt(index)

:contains(text)
:empty
:has(selector)
:parent

E[@attr]
E[@attr=val]
E[@attr^=val] (begins)
E[@attr$=val] (ends)
E[@attr*=val] (contains)
E[@attr=val][@attr=val] (both)

:nth-child(index)
:first-child
:last-child
:only-child

:enabled
:disabled
:checked
:selected

:hidden
:visible
:header
:animated

:input
:text
:password
:radio
:checkbox
:submit
:image
:reset
:button
:file
:hidden

CSS

.css(name, value)
.css(properties)

.heigth(value)
.width(value)

.addClass(class)
.removeClass(class)
.toggleClass(class)
.offset( )

ATTRIBUTES

.attr(name) .attr(properties)
.attr(key, value) .attr(key, function)
.removeAttr(name)

HTML

.html( ) .html(value)
.text( ), .text(value) .val(value)

EVENTS

HANDLERS
.bind(type, data, fn)
.one(type, data, fn)
.trigger(type, data)
.triggerHandler(type, data)
.unbind(type, data)

MOUSE
.mousedown(fn)
.mousemove(fn)
.mouseout(fn)
.mouseover(fn)
.mouseup(fn)

WINDOW
.load(fn) .scroll(fn)
.resize(fn)

ERROR
.error( )
.error(fn)

KEYBOARD
.keydown( )
.keydown(fn)
.keypress( )
.keypress(fn)
.keyup( )
.keyup(fn)

PAGE
.ready(fn)

INTERACTION
.hover(fnIN, fnOUT)
.toggle(fnIN, fnOUT)
.blur( ) .blur(fn)
.change( ) .change(fn)
.click( ) .click(fn)
.dblclick( ) .dblclick(fn)
.focus( ) .focus(fn)
.select( ) .select(fn)
.submit( ) .submit(fn)
.unload( ) .unload(fn)

.unblur( ) .unblur(fn)

CORE UI EFFECTS

SHOW / HIDE
.show( )
.show(speed, callback)
.hide( )
.hide(speed, callback)
.toggle( )

SLIDE (speed, callback)
.slideDown(s, c)
.slideUp(s, c)
.slideToggle(s, c)

ANIMATE
.stop( )
.queue( ),
.queue(callback),
.queue(queue)
.dequeue( )
.animate(params, duration, easing, callback)
.animate(params, options)

FADE
.fadeIn(speed, callback)
.fadeOut(speed, callback)
.fadeTo(speed, opacity, callback)

TRAVERSING

FILTER
.hasClass(class)
.filter(expr)
.filter(fn)
.is(expr)
.map(callback)
.not(expr)
.slice(start, end)

ACCESS
.each(callback)
.size( )
.length
.get( )
.get(index)
.index(subject)

FIND (expr)
.add(e)
.children(e), .siblings(e)
.contents( )
.find(e)
.next(e), .nextAll(expr)
.parent(e), .parents(e)
.prev(e), prevAll(e)

CHAIN
.andSelf( )
.end( )

MANIPULATING

INSIDE (content)
.append(c)
.appendTo(c)
.prepend(c)
.prependTo(c)

AROUND
.wrap(html)
.wrap(element)
.wrapAll(html)
.wrapAll(element)
.wrapInner(html)
.wrapInner(element)

OUTSIDE (content)
.after(c)
.before(c)
.insertAfter(c)
.insertBefore(c)

REPLACE
.replaceWith(c)
.replaceAll(selector)

CLEAR
.empty( )
.remove(expression)

CLONE
.clone( ) .clone(true)

AJAX

Request (url, data, callback)
$.ajax(options)
.load(u, d, c)
$.get(u, d, c)
$.getJSON(u, d, c)
$.getScript(u, c)
$.post(u, d, c)
.loadIfModified(u, d, c)

Event Handler (callback)
.ajaxComplete(c) .ajaxError(c)
.ajaxSend(c) .ajaxStart(c)
.ajaxStop(c) .ajaxSuccess(c)

Serialize
.serialize( )
.serializeArray( )
.ajaxSetup(options)

USER AGENT

$.browser, $.browser.version
$.boxModel

JavaScript

$.extend(obj1,...objN) $.map(array, callback) $.trim(string)
$.grep(array, callback, invert) $.unique (array) $.merge(1st, 2nd)

COLORCHARGE
http://labs.colorcharge.com/jquery/
Revision: 2007-September-26

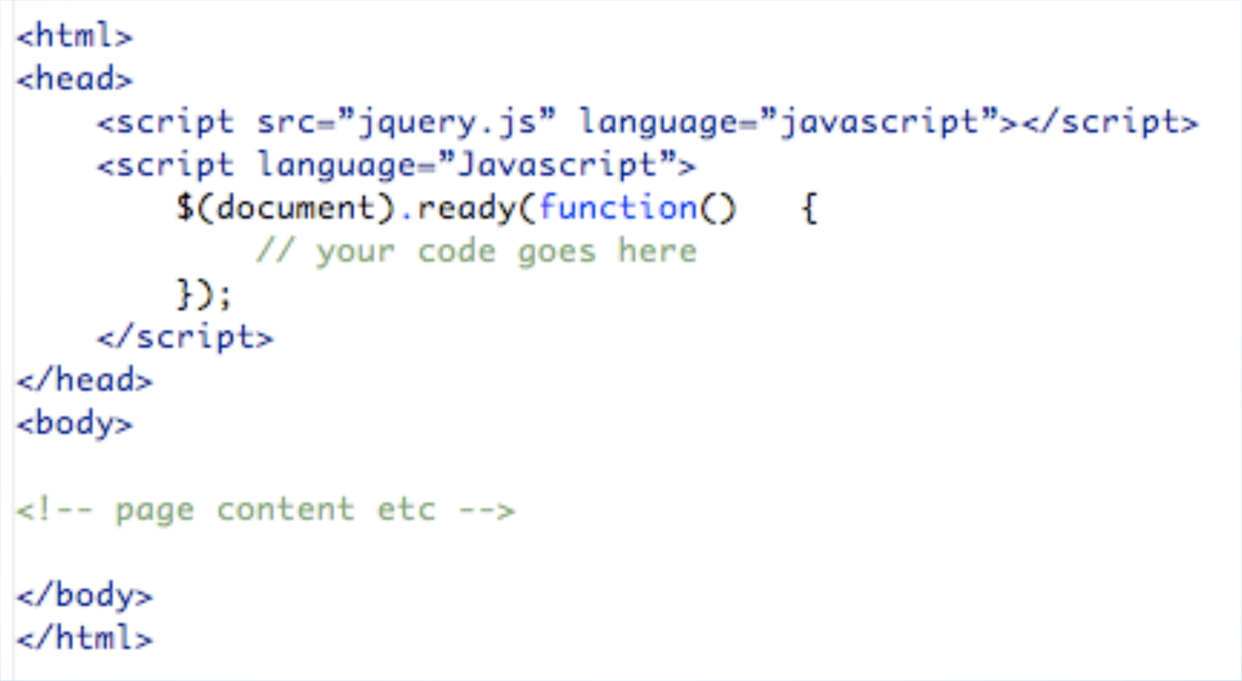
EXTEND

$.fn.extend(obj)
$.extend(obj)
$.noConflict( )

$( );

$(expression, context), .$(html)
$(elements), $(callback)

Demo



```
<html>
<head>
    <script src=”jquery.js” language=”javascript”></script>
    <script language=”Javascript”>
        $(document).ready(function()   {
            // your code goes here
        });
    </script>
</head>
<body>

<!-- page content etc -->

</body>
</html>
```

Plugins

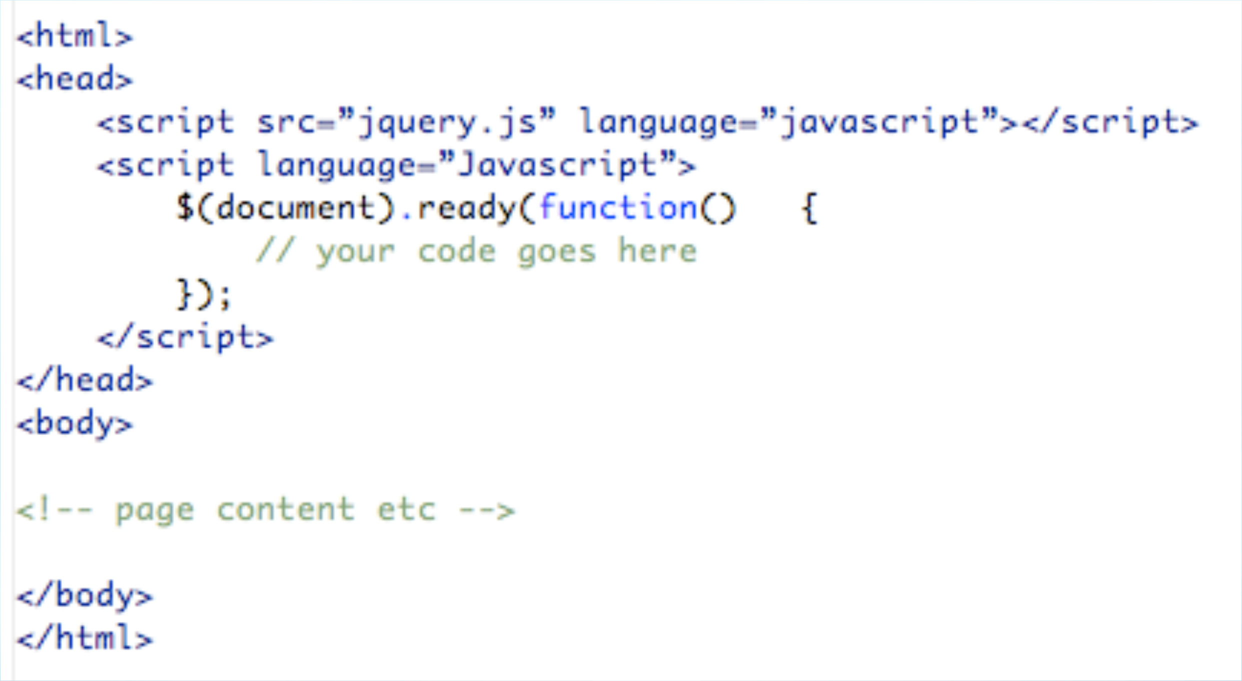
Plugins

- Plugins are a neat way of packaging up methods and functionality
- Most of jQuery is written using the jQuery plugin constructs

A simple plugin

```
jQuery.fn.debug = function()  {
     return this.each(function()  {
           alert(this);
     });
};
jQuery.log = function (message)  {
     if(window.console) {
           console.debug(message);
     } else {
           alert(message);
     }
}
```

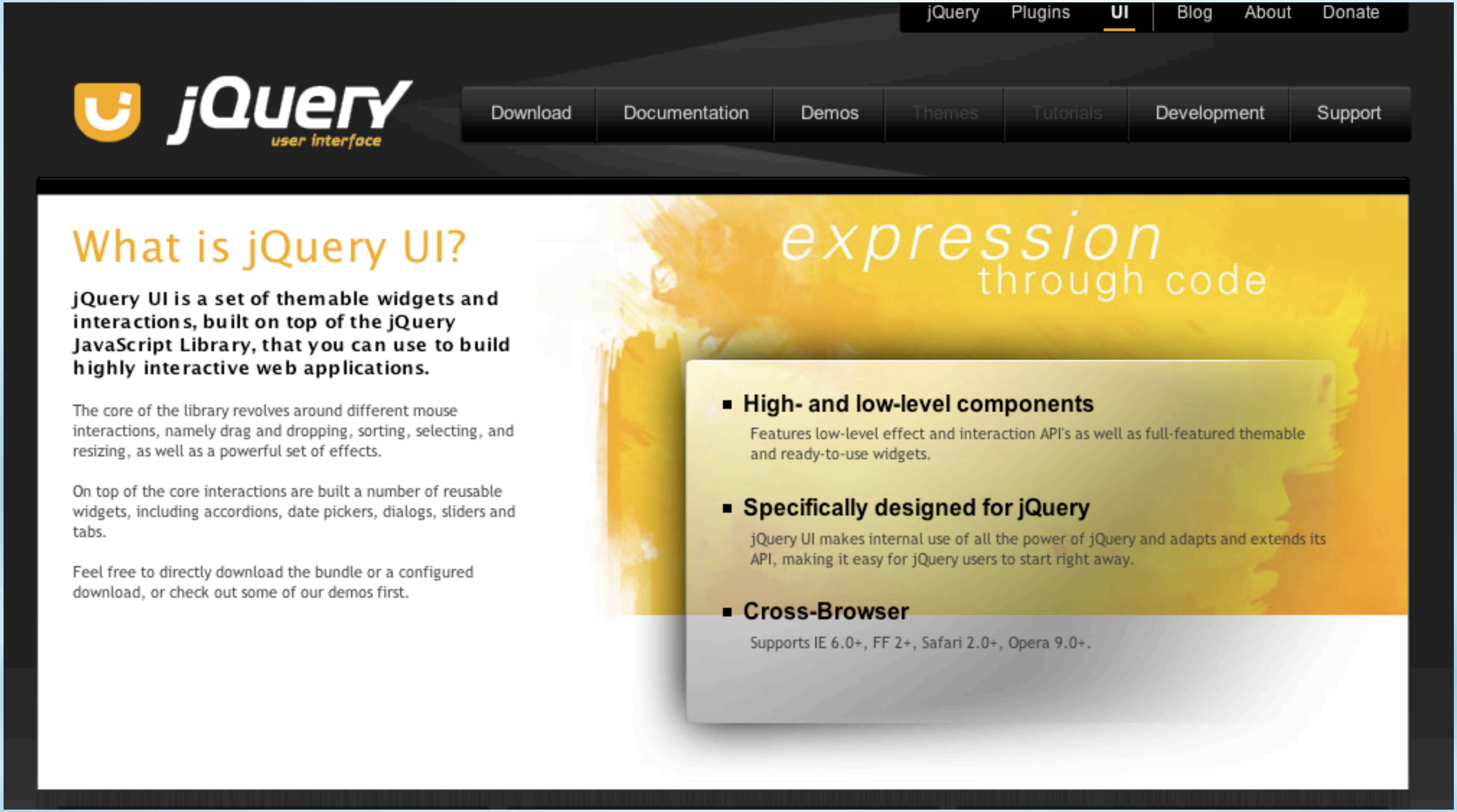
Demo



```
<html>
<head>
    <script src=”jquery.js” language=”javascript”></script>
    <script language=”Javascript”>
        $(document).ready(function()   {
            // your code goes here
        });
    </script>
</head>
<body>

<!-- page content etc -->

</body>
</html>
```

jQuery UI

ui.jquery.com



What is jQuery UI?

jQuery UI is a set of themable widgets and interactions, built on top of the jQuery JavaScript Library, that you can use to build highly interactive web applications.

The core of the library revolves around different mouse interactions, namely drag and dropping, sorting, selecting, and resizing, as well as a powerful set of effects.

On top of the core interactions are built a number of reusable widgets, including accordions, date pickers, dialogs, sliders and tabs.

Feel free to directly download the bundle or a configured download, or check out some of our demos first.

- **High- and low-level components**
  Features low-level effect and interaction API's as well as full-featured themable and ready-to-use widgets.
- **Specifically designed for jQuery**
  jQuery UI makes internal use of all the power of jQuery and adapts and extends its API, making it easy for jQuery users to start right away.
- **Cross-Browser**
  Supports IE 6.0+, FF 2+, Safari 2.0+, Opera 9.0+.

More info

jquery.com

docs.jquery.com

jquery.com/plugins

learningjquery.com

neilmiddleton.com
neil@monochrome.co.uk

Questions