

Prototype vs. jQuery

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Who am I?

- Nathaniel T. Schutta
<http://www.ntschutta.com/jat/>
- @ntschutta
- Foundations of Ajax & Pro Ajax and Java Frameworks
- UI guy
- Author, speaker, teacher
- More than a couple of web apps

The Plan

- Pros and cons.
- Ajax made easy.
- CSS selectors.
- Events.
- Animations and effects.

Prototype vs. jQuery.

Both are small.

Readable code.

**Similar features: XHR,
CSS selectors, etc.**

Excellent documentation.

Active mailing lists.

Widely used.

**Fundamentally different
philosophies.**

**Prototype is heavily
influenced by Ruby.**

**jQuery - bit of a
reaction to Prototype.**

Each uses \$ differently!

**Each has influenced
the other though...**

**Better, each has
improved the other.**

Pros and Cons.

Prototype's pros:

**Adds useful functions
to core elements.**

**Widgets and effects
via script.aculo.us.**

Ruby flavored JS.

**Widely used in a
variety of projects.**

jQuery's pros:

**Focussed on
HTML elements.**

**Doesn't pollute
global namespace.**

DOM manipulation a snap.

Extensive plugins.

**Widely used in a
variety of projects.**

Prototype's cons:

**Where's the
minified version?**

**Performance not
always a priority.**

**Pollutes the global
namespace.**

jQuery's cons:

**Parameter ordering in
APIs not always intuitive.**

**Plugins required for a
variety of functionality.**

**Some functions
reassign 'this.'**

This is a bit nit-picky!

Both quite good...

Ajax made easier.

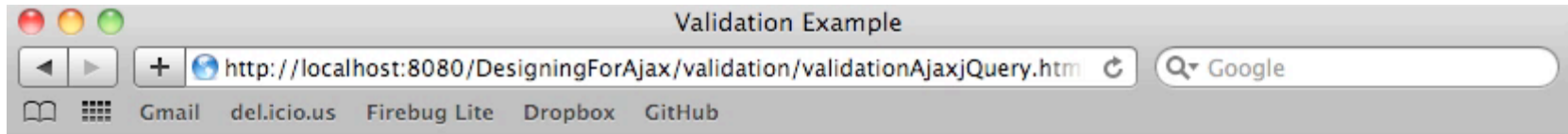
XHR isn't complicated.

But abstractions help.

ActiveX vs. JS native...

**All the wrappers
are pretty similar.**

**URI to call, parameters,
HTTP method, callback.**



Really Simple Address Book

Invalid zip, city, state combo.

Name:

Email:

Phone:

Street:

City: State: Zip:

Website:

IM:



Prototype: Ajax.Request.

Ajax.Request(url, [options])

**Second arg is a hash of
configuration options.**

**HTTP method, parameters,
content type, callbacks.**

```
new Ajax.Request('/fooApp/validate', {
  method: 'get',
  parameters: {zip: $F('zip'), city: $F('city'),
              state: $F('state')},
  onComplete: function(request) {
    $('messages').update(request.responseText);
  }
});
```

**\$F - convenience
method, retrieves value.**

jQuery's approach.

Variety of methods.

`$.ajax(options)`

Also more specific calls.

**\$.getJSON(url,
[data], [callback])**

```
$.get("/DesigningForAjax/validate",
    {
        zip: $("#zip").val(),
        city: $("#city").val(),
        state: $("#state").val()
    },
    function(message) {
        $("#messages").html(message);
    });
```

Very similar!

**JavaScript lacks
namespaces - thus \$.**

Which is better?

CSS selectors.

**CSS selectors are
very powerful.**

**Browser support
can be lacking...**

**Libraries come in and
smooth things out!**

Hide Show Example

http://localhost:8080/DesigningForAjax/hideShow/hideShowAjaxjQuery.html

Google

Gmail del.icio.us Firebug Lite Dropbox GitHub

Really Simple Address Book

Contact Info

Name:

Email:

Phone:

Address

Street:

City:

State:

Zip:

Web Info

Website:

IM:

Save

Prototype gives us \$\$.

**Want everything
with a given style?**

```
$$('.header').each(function(el) {el.observe("click", toggleSection)});
```

That's some terse code!

[http://steve-yegge.blogspot.com/
2008/02/portrait-of-n00b.html](http://steve-yegge.blogspot.com/2008/02/portrait-of-n00b.html)

\$\$ returns an array.

**Prototype adds an each
method to arrays.**

**Observe part of
events...more in a minute!**

**When someone clicks a
header element...**

**jQuery excels at
CSS selectors.**

Top notch support.

Outstanding performance.

**Browsers do the heavy
lifting when possible.**

```
$(function(){
  $('.header').click(function() {
    $(this).next().toggle("blind", { direction: "vertical" }, 500);
  });
});
```

**Put toggleSelect in the
call in this example.**

And we add a nice effect!

**Little bit of code
= big return.**

Which is better?

Event handling.

**Coding to events gives
us cleaner markup.**

**But browsers get in
the way...again.**

Unobtrusive JavaScript.

<http://www.alistapart.com/articles/behavioralseparation>

Library designers help us!

**Prototype gives
us observe.**

```
$$('.header').each(function(el) {el.observe("click", toggleSection)});
```

**jQuery includes a
variety of APIs.**

**Including some great
helper methods.**

```
$(function(){
  $('header').click(function() {
    $(this).next().toggle("blind", { direction: "vertical" }, 500);
  });
});
```

Either way, we've attached a handler to the click event.

Which is better?

Animations and effects.

Neither stands alone.

Extensive add ons!

**Want animations
and widgets?**

**script.aculo.us builds on
top of Prototype.**

Appear, fade, puff,
pulse, fold, grow...

- [script.aculo.us](#) Click for Effect.Appear demo
- [script.aculo.us](#) Click for Effect.Fade demo
- [script.aculo.us](#) Click for Effect.Puff demo
- [script.aculo.us](#) Click for Effect.BlindDown demo

- [script.aculo.us](#) Click for Effect.BlindUp demo
- [script.aculo.us](#) Click for Effect.SwitchOff demo

- [script.aculo.us](#)
Click for Effect.SlideDown demo

- [script.aculo.us](#) Click for Effect.SlideUp demo
- [script.aculo.us](#) Click for Effect.DropOut demo
- [script.aculo.us](#) Click for Effect.Shake demo
- [script.aculo.us](#) Click for Effect.Pulsate demo
- [script.aculo.us](#) Click for Effect.Squish demo
- [script.aculo.us](#) Click for Effect.Fold demo
- [script.aculo.us](#) Click for Effect.Grow demo
- [script.aculo.us](#) Click for Effect.Shrink demo
- [script.aculo.us](#) Click for Effect.Highlight demo

- Effect.BlindDown
- Effect.BlindUp
- Effect.DropOut
- Effect.Fade
- Effect.Fold
- Effect.Grow
- Effect.Highlight
- Effect.Methods
- Effect.Morph
- Effect.Move
- Effect.multiple
- Effect.Opacity
- Effect.Parallel
- Effect.Puff
- Effect.Pulsate
- Effect.Scale
- Effect.ScrollTo
- Effect.Shake
- Effect.Shrink
- Effect.SlideDown
- Effect.SlideUp
- Effect.Squish
- Effect.SwitchOff
- Effect.tagifyText
- Effect.toggle
- Effect.Transitions
- Effect.Tween
- Effects
- FAQ
- Form.Element.DelayedObserv
- Ghostly
- Ghostly Sortable Demo
- Giving Elements Layout
- Home
- License
- List Morph Demo

Drag and drop, controls.

Very useful stuff.

Let's add an effect!

```
$('#messages').update(request.responseText).highlight({duration: 1.0});
```

Notice the chaining?

jQuery relies on plugins.

jQuery UI.

**Gives us widgets,
effects, draggable etc.**



Interactions

- Draggable
- Draggable
- Resizable
- Selectable
- Sortable

Widgets

- Accordion
- Autocomplete
- Button
- Datepicker
- Dialog
- Progressbar
- Slider
- Tabs

Effects

- Add Class
- Remove Class
- Switch Class
- Toggle Class
- Show
- Hide
- Toggle
- Animate
- Effect

Utilities

FUNCTIONAL DEMO:

Effect

Theme: UI Lightness

New window

Examples

- Effect showcase
- Easing showcase

Effect

Etiam libero neque, luctus a, eleifend nec, semper at, lorem. Sed pede. Nulla lorem metus, adipiscing ut, luctus sed, hendrerit vitae, mi.

Blind
Run Effect

Click the button above to show the effect.

View Source

effect(effect, [options], [speed], [callback])

Dependencies
Effects Core

```
$(function(){
  $('.header').click(function() {
    $(this).next().toggle("blind", { direction: "vertical" }, 500);
  });
});
```

Very easy to
add a little flash.

Easy to go too far.

Seasoning, not the entree.

Blink tag anyone?

**Used right, adds that
extra bit of polish.**

Which one is better?

It depends!

Honestly, both are great.

Can't go wrong either way.



Passion on both sides...

Pros and cons.

[http://blog.thinkrelevance.com/2009/1/12/
why-i-still-prefer-prototype-to-jquery](http://blog.thinkrelevance.com/2009/1/12/why-i-still-prefer-prototype-to-jquery)

Play with them.

**Which one solves
your problems?**

Don't like either?

**Luckily, you've got
plenty of choices!**

Questions?!?

Thanks!

Please complete your surveys.