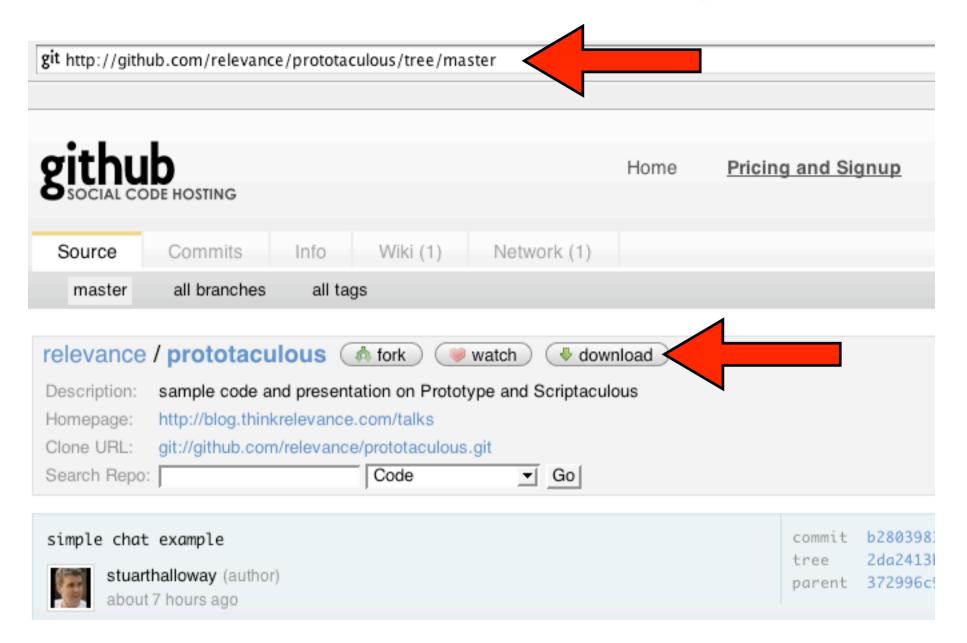


# Proto/taculous

Stuart Halloway Relevance, Inc. http://thinkrelevance.com

# Git the Slides and Samples!



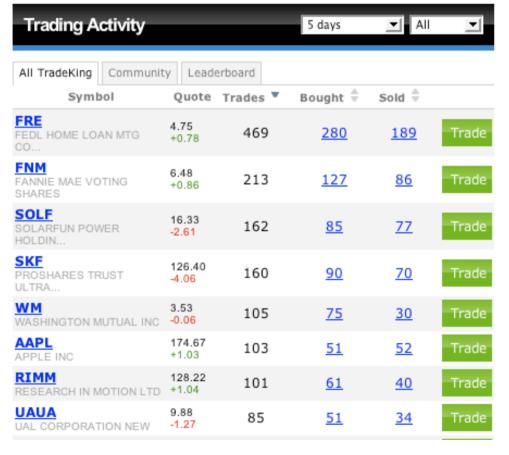
Feedback | Help

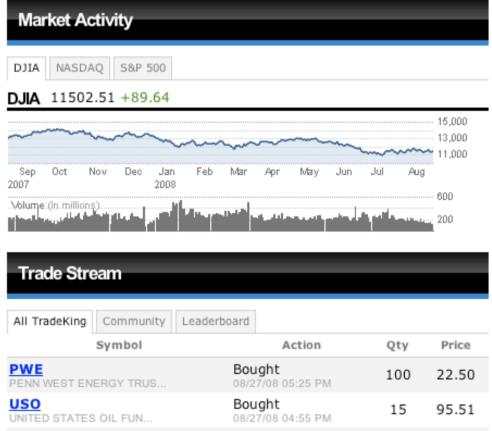
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#### Vehicles



2006 Toyota Camry Solara SLE V6 2dr Convertible - 6300 Sawmill Road Dublin Ohio -\$24,990.00



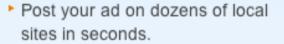
2008 Toyota Prius 5dr HB - 6300 Sawmill Rd Columbus Ohio - \$29,990.00

2006 Springdale 5thWheel camper - Decatur,IL - \$18,500.00 - about 1 hour ago

2000 CR250R Dirt Bike - Conneaut, OH - \$1,200.00 - about 17 hours ago

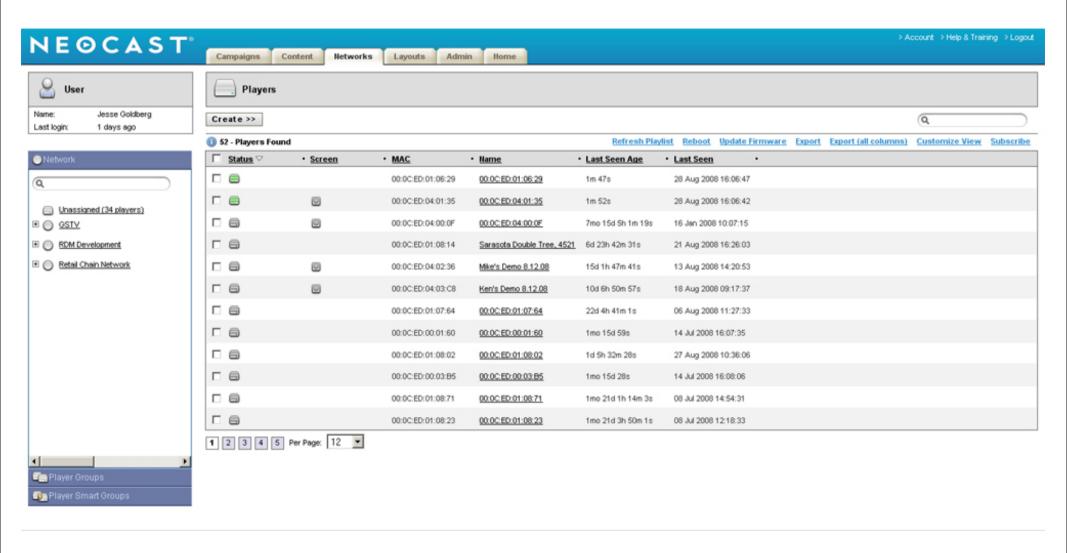
MOTORCYCLE NEW LOWER PRICE NEED TO MOVE NOW!!! PIERPONT OHIO - \$2,250.00 - 1 day ago

# FREE local classified marketplace!



- Search dozens of sites with ease.
- Keep track of local community events.
- Get great deals and have fun doing it.





# Prototype

stdlib for JavaScript
DOM
Events
Ajax

#### **Client-Side Validation**

```
function validate name() {
     if ($("name").value.blank()) {
       return "You must specify a name"
     } else {
 5
       return ""
 6
     }
 7 }
  function validate favorite color() {
     return $("favorite color").value == "blue" ? "" : "Aaaaaargh!"
 9
10 }
11
  document.observe("dom:loaded", function() {
13
     $("name").observe("change", function() {
       $("name validation").innerHTML = validate name();
14
15
    });
     $("favorite color").observe("change", function() {
16
       $("favorite color validation").innerHTML = validate favorite color();
17
18
     });
19 });
```

#### **Server-Side Validation**

```
1 document.observe("dom:loaded", function() {
     $("name", "favorite color").invoke("observe", "change", function(item) {
 2
 3
       var elem = item.element();
       console.log(elem);
 4
       new Ajax.Request("/examples/validate field", {
 5
         method: 'post',
 6
         parameters: {field: elem.id, value: elem.value},
         onSuccess: (function(req) {
 8
 9
           console.log(req.responseText);
           $(elem.id + " validation").update(req.responseText);
10
11
         }),
12
         onFailure: function(req) {alert(req.responseText)},
         onException: function(t,e) {alert(e);}
13
14
     });
15
   });
16 });
```

## Validation with Updater

```
1 document.observe("dom:loaded", function() {
     $("name", "favorite color").invoke("observe", "change", function(item) {
 3
       var elem = item.element();
       console.log(elem);
 4
       new Ajax.Updater(elem.id + " validation", "/examples/validate field", {
 5
         method: 'post',
 6
         parameters: {field: elem.id, value: elem.value},
         onFailure: function(req) {alert(req.responseText)},
 8
 9
         onException: function(t,e) {alert(e);}
10
       });
11
   });
12 });
```

## **Periodical Updater**

```
1 document.observe("dom:loaded", function() {
2    new PeriodicalExecuter(function()) {
3        new Ajax.Updater("messages", "/examples/chat", {
4            method: "get"
5        });
6    }, 10);
7 });
```

#### Form Element Observer

```
1 document.observe("dom:loaded", function() {
     new Form.Element.Observer(
       'search'.
       0.5,
       function(element, value) {
 5
         $('spinner').show();
         new Ajax.Updater(
            'results',
 8
 9
            '/examples/form observer',
10
              asynchronous:true,
11
12
             evalScripts:true,
              // who owns the spinner?
13
             onComplete:function() {
14
15
                Element.hide('spinner')
16
              },
             parameters: {search : value}
17
18
19
20
21
22 });
```

# Exploring \$ and \$\$

```
document.observe("dom:loaded", function() {
2
     $("highlight-by-css").observe("click", function() {
3
        $$($("css-value").value).invoke("highlight");
     });
4
     $("highlight-by-id").observe("click", function() {
        $($("id-value").value).highlight();
   });
     $("markup").innerHTML = $("main").innerHTML.escapeHTML();
9 });
          1 <script type="text/javascript" src="/javascripts/examples/dollars.js"></script>
          3 <div id="main">
          4 <h2>$ and $$ Demo</h2>
          6 <form>
          7 
              $
         10
              <input type="text" name="id-value" id="id-value"/>
         11
              <input type="button" value="Highlight!" name="highlight-by-id" id="highlight-by-id"/>
         12
             14
              $$
         15
              <input type="text" name="css-value" id="css-value"/>
         16
              <input type="button" value="Highlight!" name="highlight-by-css" id="highlight-by-css"/>
         17
             18 
         19 </form>
         20 </div>
         22 jd="markup">
         23 
         24
```

# **CSS Selector Examples**

input #some-class .some-id

ul.menu li:first-of-type
input[type!=submit]
td:not(.function-name)

#### **DOM Insertion**

```
1 $("top").observe("click", function() {
2   $("target").insert({top: $("content").value});
3   });
4 $("before").observe("click", function() {
5   $("target").insert({before: $("content").value});
6   });
7 $("bottom").observe("click", function() {
8    //bottom is the default, no hash needed
9   $("target").insert($("content").value);
10   });
11 $("after").observe("click", function() {
12   $("target").insert({after: $("content").value});
13 });
14
```

#### **Builder**

# Scriptaculous

Effects
Components
Sound

#### **Core Effects**

```
1 document.observe('dom:loaded', function() {
     $('scale').observe('click', function() {
       new Effect.Scale('scale', 110);
    });
     $('highlight').observe('click', function() {
 6
       new Effect.Highlight('highlight', {
         startcolor: "#2222ff",
         duration: 5
 8
     });
10
   });
     $('opacity').observe('click', function() {
11
      new Effect.Opacity('opacity', {
12
13
         to: Element.getOpacity('opacity')*0.8
14
      });
15
   });
$('move').observe('click', function() {
17
      new Effect.Move('move', {x:100, duration: 10});
18
    });
19 });
```

# **Mighty Morph**

```
1 document.observe("dom:loaded", function() {
2   $("morph").morph({
3     padding: '3em',
4     border: '5px solid red',
5     margin: '3em',
6     background: '#ffdddd'
7   });
8 });
```

## **Autocomplete**

## **Autocomplete CSS**

```
1 div.auto complete {
     width: 350px;
     background: #fff;
 4 }
 5 div.auto complete ul {
     border:1px solid #888;
    margin:0;
   padding:0;
   width:100%;
    list-style-type:none;
10
11 }
12 div.auto complete ul li {
13 margin:0;
14
    padding:3px;
15 }
16 div.auto complete ul li.selected {
     background-color: #ffb;
17
18
19 div.auto complete ul strong.highlight {
20 color: #800;
21 margin:0;
22 padding:0;
23 }
```

#### **Sortable**

```
document.observe("dom:loaded", function() {
    Sortable.create("norris_facts", {
        onUpdate:function(){
        new Ajax.Request('/examples/sortable', {
            asynchronous:true,
            evalScripts:true,
            parameters:Sortable.serialize("norris_facts")
            })
        }
}

);
}
```

# **Naming Conventions**

#### Sound

```
document.observe("dom:loaded", function() {
   $("off").observe("click", Sound.disable);
   $("on").observe("click", Sound.enable);
   $("play").observe("click", function() {
      Sound.play("/sounds/frontalot-secrets.mp3");
   });
}
```

# Object Model

Classes
Constructors
Inheritance
Statics

## Friendly O-O

```
Mammal = Class.create({
  furry: true,
  initialize: Prototype.emptyFunction
});
Cat = Class.create(Mammal, {
  initialize: function(lives) {
    this.lives = lives;
});
Dog = Class.create(Mammal, {barks: true});
m = new Mammal();
c = new Cat(9);
```

## **Prototype on Prototype**

```
Ajax.Request = Class.create();
Ajax.Request.Events =
  ['Uninitialized', 'Loading', 'Loaded', 'Interactive', 'Complete'];
Ajax.Request.prototype = Object.extend(new Ajax.Base(), {
  initialize: function(url, options) {
    this.transport = Ajax.getTransport();
    this.setOptions(options);
    this.request(url);
},
//...snip ...
}
```



Photo by Stuart Halloway. All rights reserved.

## Sundance is a Dog

```
1 Mammal = Class.create({
2   isFurry: function() { return true}
3 });
4 Dog = Class.create(Mammal, {
5   name: function() { return "Sundance"}
6 });
7 var dog = new Dog();
8
```

# **Dogs Don't Fly**

```
1 var flight = {
2  canFly: function() { return false}
3 };
4 Object.extend(dog, flight);
5
```

# **Dogs Don't Lay Eggs**

```
1 Mammal.addMethods({
2 laysEggs: function() { return false;}
3 });
4
```



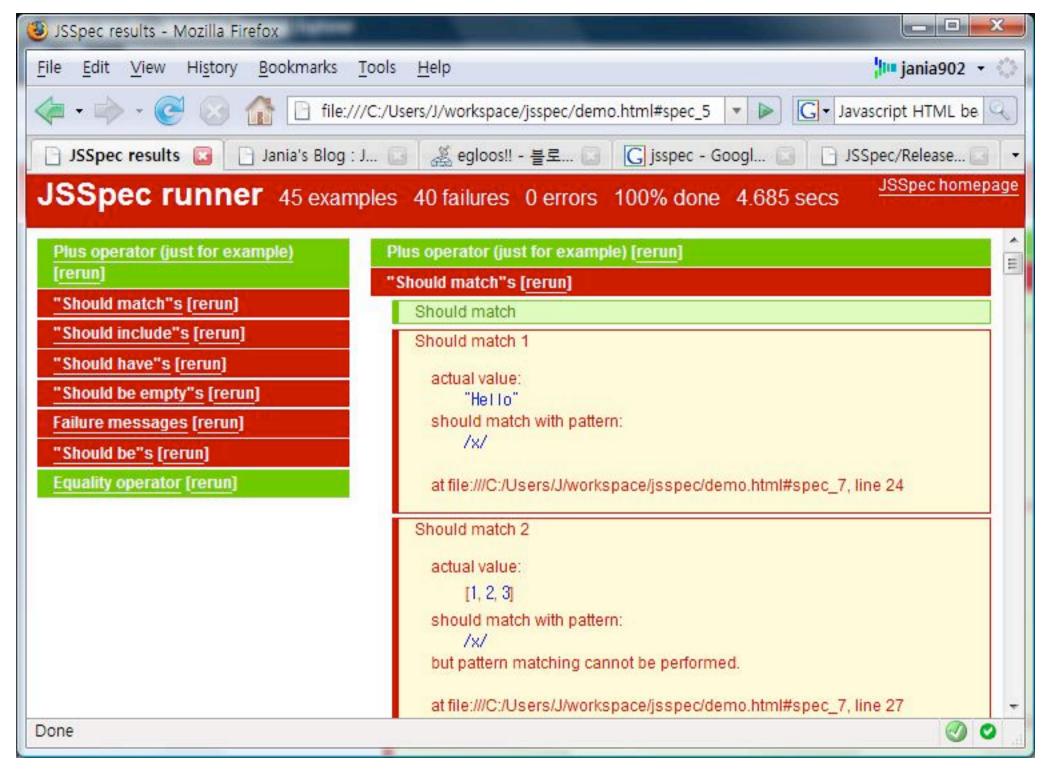
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#### **AOP**

```
Array.prototype.inspect = Array.prototype.inspect.wrap(
  function(proceed, options) {
    var max = options && options.max;
    if (max) {
       return this.slice(0,max).inspect() + "..."
    } else {
       return proceed();
    }
}
```

# Ecosystem

Testing
More Widgets
Playing Nice with Others



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#### Xilinus.Portal

```
1 var portal = new Xilinus.Portal("#page div", {
     onOverWidget: onOverWidget,
 2.
     onOutWidget: onOutWidget,
 3
 4
     onChange: onChange,
 5
     removeEffect: Effect.SwitchOff
 6 });
7 portal.add(new Xilinus.Widget().setTitle("Widget #1.0").setContent(latin1), 0);
8 portal.add(new Xilinus.Widget().setTitle("Widget #1.1").setContent(latin2), 0);
9 portal.add(new Xilinus.Widget().setTitle("Widget #1.2").setContent(latin3), 0);
10
11 portal.add(new Xilinus.Widget().setTitle("Widget #2.0").setContent(latin2 + latin3), 1);
12 portal.add(new Xilinus.Widget().setTitle("Widget #2.1").setContent(latin3), 1);
13
14 portal.add(new Xilinus.Widget().setTitle("Widget #1.4").setContent(latin1 + latin2 + latin3), 2);
15 // Add controls buttons
16 portal.addWidgetControls("control buttons");
17
```

# jQuery's noConflict

# Mixing jQuery

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# jQuery Libs Tested with Prototype

jquery.js
jquery.form.js
jquery.dimensions.js
jquery.flot.js
jquery.tablesorter.js
jquery.maskedinput.js

# Presentations: http://github.com/stuarthalloway http://github.com/relevance

More Info:

http://blog.thinkrelevance.com/talks http://thinkrelevance.com/events

http://blog.thinkrelevance.com

http://workingwithrails.com/recommendation/new/person/5595-stuart-halloway