



Stop Writing Amateur jQuerys

You can get far in JS not knowing
what you're doing.

People can do better,
they need to know how



Ask Questions

About me

A green-tinted background image showing a hand holding a fan of US dollar bills. The bills are fanned out, showing various denominations including \$100, \$50, and \$20. The hand is visible on the right side, holding the bills. The entire image has a strong green overlay.

Evan

Filter

Clear Filters

Legacy Donor

Has Kittens

Large Donors

Have not donated

Sort

Clear Sort

Net Worth

Donations



Felix

Donations \$ 0
Net Worth \$ 439,676,101



Max

Donations \$ 0
Net Worth \$ 76,842,875



Minou

Donations \$ 0
Net Worth \$ 645,297,679



Mimi



Charlotte

Donations \$ 0



Lisa

Raise money from wealth cats



Doctor Whiskers

Donations \$ 0
Net Worth \$ 551,849,948



Interested in Philanthropy

Big Data insight

Advanced fundraising tools

Big Data



Delegation vs. Direct

.cards

.card

.buttons

order_tickets54()

.button.order_tickets

Direct

.cards

.card

.buttons

.button.order_tickets

order_tickets54()

click

Direct


```
<% @cats.each do |cat| %>
  <div
    class="btn btn-default glyphicon glyphicon-phone-alt"
    onclick="call_them<%= cat[:donorID] %>()" id="call_them"
  >
    <script>
      function call_them<%= cat[:donorID] %>() {
        alert("Pick up your phone, <%= cat[:name] %> is calling.");
      }
    </script>
  </div>
<% end %>
```

How does it look like?

The Problem

```
<div class="button btn btn-default glyphicon glyphicon-plane"
  onclick="order_tickets50()" id="order_tickets">
  <script>
    function order_tickets50(){
      alert("Your airplane to visit Felix is pulling up shortly")
    }
  </script>
</div>

<div class="button btn btn-default glyphicon glyphicon-plane"
  onclick="order_tickets51()" id="order_tickets">
  <script>
    function order_tickets51(){
      alert("Your airplane to visit Max is pulling up shortly")
    }
  </script>
</div>

<div class="button btn btn-default glyphicon glyphicon-plane"
  onclick="order_tickets52()" id="order_tickets">
  <script>
    function order_tickets52(){
      alert("Your airplane to visit Minou is pulling up shortly")
    }
  </script>
</div>
```

Why is this bad?

The Problem

```
<div class="button btn btn-default glyphicon glyphicon-plane"
  onclick="order_tickets50()" id="order_tickets">
  <script>
    function order_tickets50(){
      alert("Your airplane to visit Felix is pulling up shortly")
    }
  </script>
</div>

<div class="button btn btn-default glyphicon glyphicon-plane"
  onclick="order_tickets51()" id="order_tickets">
  <script>
    function order_tickets51(){
      alert("Your airplane to visit Max is pulling up shortly")
    }
  </script>
</div>

<div class="button btn btn-default glyphicon glyphicon-plane"
  onclick="order_tickets52()" id="order_tickets">
  <script>
    function order_tickets52(){
      alert("Your airplane to visit Minou is pulling up shortly")
    }
  </script>
</div>
```

Repetition wastes memory,
causes slow app

```
$cards  
  .on("click", ".order_tickets",  
      order_tickets)
```

```
.cards
```

```
.card
```

```
.buttons
```

```
.button.order_tickets
```

```
click
```

Delegation


```
$cards  
  .on("click", ".order_tickets",  
      order_tickets)
```

```
.cards
```

```
.card
```

```
.buttons
```

```
click
```

```
.button.order_tickets
```

Delegation

```
$cards  
  .on("click", ".order_tickets",  
      order_tickets)
```

.cards

.card

click

.buttons

.button.order_tickets

Delegation


```
$cards  
  .on("click", ".order_tickets",  
      order_tickets)
```

.cards

click

.card

.buttons

.button.order_tickets

Delegation

```
$cards  
  .on("click", ".order_tickets",  
      order_tickets)
```

.cards

click

.card

.buttons

.button.order_tickets

Delegation

DOM Caching



DOM Caching

Speed & Simplicity

action	computer time	human time
talk to the DOM	.4ms	3.8 days long weekend

<https://gist.github.com/hellerbarde/2843375>

Latency


```
console.time('not caching');  
var networkths = 0;  
for(var i = 0; i<$("[data-networth]").length;i++){  
    var networth = $("[data-networth]").eq(i).data("networth")  
    networkths += parseInt(networth)  
}  
console.timeEnd('not caching')
```

```
console.time('calculate w/ cached');  
var networkths = 0;  
var elements = $("[data-networth]")  
var networth;  
for(var i = 0; i<elements.length;i++){  
    networkths += parseInt(elements.eq(i).data("networth"))  
}  
console.timeEnd('calculate w/ cached')
```

Let's test it out!

25 Cats with Cash

Filter

Clear Filters

Legacy Donor

Has Kittens

Large Donors

Have not donated

Sort

Clear Sort



Felix

Donations \$ 0
Net Worth \$ 439,676,101



Mimi

5.552ms saved!

Elements Network Sources Timeline

<top frame>

not caching: 5.998ms

calculate w/ cached: 0.446ms

undefined

13 times faster

500ms -> 4.7% increase in bounce rate

<http://www.webperformancetoday.com/2011/11/23/case-study-slow-page-load-mobile-business-metrics/>

Lowers bounce rate


```
$('#traffic_light input.on').bind('click', function() { alert('') });  
$('#traffic_light input.on').css('border', '3px dashed yellow');  
$('#traffic_light input.on').css('background-color', 'orange');  
$('#traffic_light input.on').fadeIn('slow');
```

Touches DOM needlessly


```
var $active_light = $('#traffic_light input.on');  
$active_light.on('click', function(){ do_stuff() });  
$active_light.css('border', '3px dashed yellow');  
$active_light.css('background-color', 'orange');  
$active_light.fadeIn('slow');
```

Touches DOM once



Let's Refactor!

1 `git clone git@github.com:Eunoia/catswithcash.git`

2 `git checkout 9e6ecbd -b let_us_refactor`

<https://github.com/Eunoia/catswithcash>

Get the code