

# Essential Knockout and JavaScript Tips

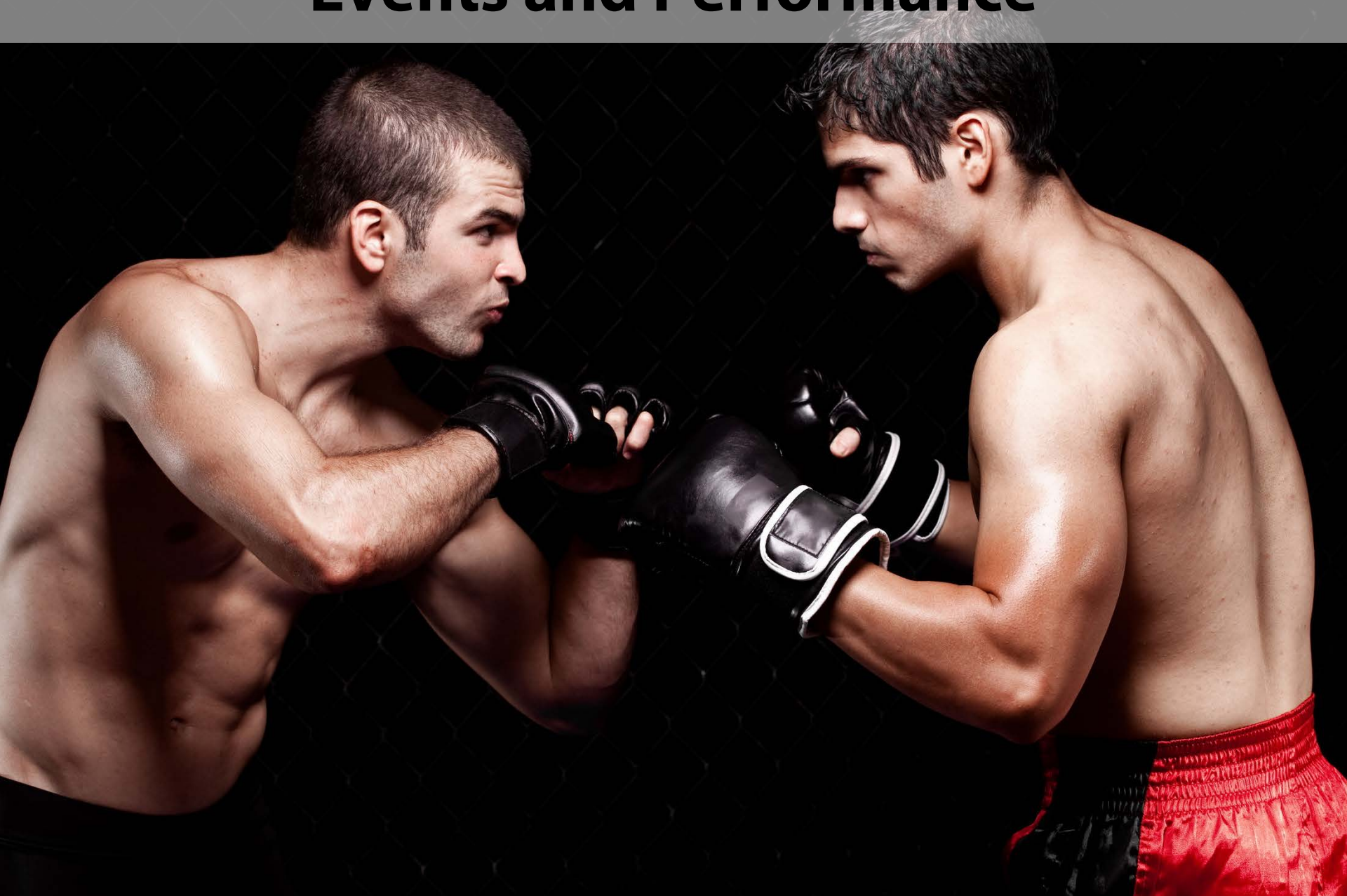
Round 7: Event Delegation and Performance

John Papa  
<http://johnpapa.net>  
Twitter: @john\_papa



**pluralsight**   
hardcore developer training

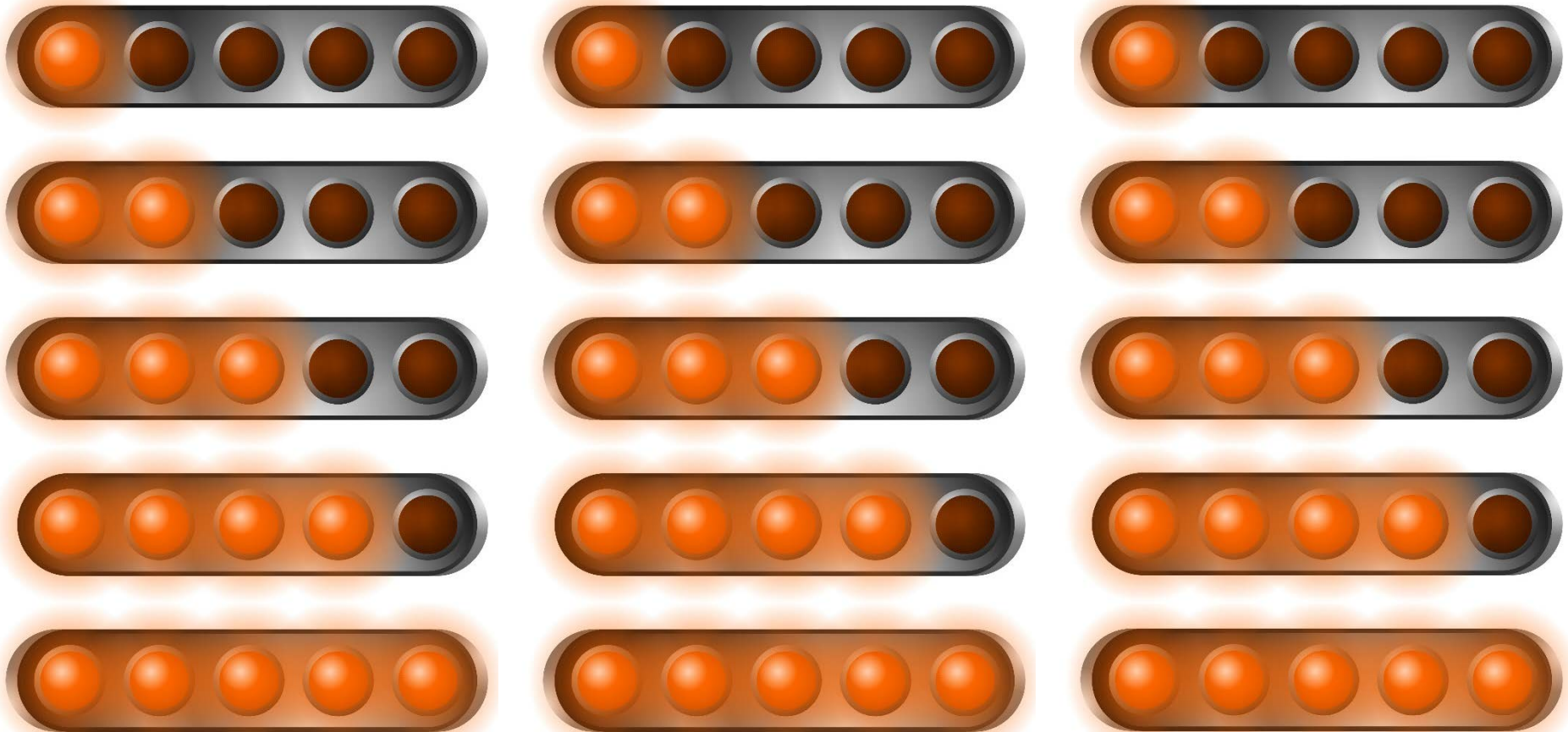
# Events and Performance



# Handling Events

Handling 1 Event Is Quick and Easy

Handling Many Events Requires Planning



# Knockout Click Binding

HTML

```
<ul id="people" data-bind="foreach: people">
  <li>
    <h3 data-bind="text: name,
      click: $parent.selectPerson">
    </h3>
  </li>
</ul>
```

Event Handler Repeated for Every Person

JavaScript

```
vm.selectPerson = function (p) {
  // Select the person
};
```

# jQuery Click Handler

HTML

```
<ul id="people" data-bind="foreach: people">
  <li>
    <h3 data-bind="text: name"></h3>
  </li>
</ul>
```

Still an Event Handler for Every Person

JavaScript

```
$('#people li h3').click(function () {
  var context = ko.contextFor(this);
  if (context) {
    context.$root.selectPerson(context.$data);
  }
});
```

# Event Handler with Delegation

HTML

```
<ul id="people" data-bind="foreach: people">
  <li>
    <h3 data-bind="text: name"></h3>
  </li>
</ul>
```

1 Event Handler

JavaScript

```
$('#people').on('click', 'li h3', function () {
  var context = ko.contextFor(this);
  if (context) {
    context.$root.selectPerson(context.$data);
  }
});
```

# Separation of Concerns

<http://jpapa.me/kotipsdelegatedeventhandler>

Want to Avoid  
jQuery in the  
ViewModel

Coupled to  
the DOM  
Structure

Fragile

Let's Use a  
Binding  
Handler

# Binding Handler with Delegation

HTML

```
<ul data-bind="foreach: people,  
    delegatedHandler: click">  
  <li>  
    <h3 data-bind="text: name"  
      data-click="selectPerson"></h3>  
  </li>  
</ul>
```

JavaScript

```
// Link to the delegatedHandler Binding Handler.  
// No additional code needed in your ViewModels!
```



# Harnessing Events



# Recap

Single Events  
are Fine Using  
a Standard  
Handler

Event  
Delegation  
Can Improve  
Performance

Maintain  
Separation of  
Concerns

Binding  
Handler can  
Wrap  
Delegation

# Event Delegation Resources

