



# jQuery hands on-Lab

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**.appendTo()**  
THE JQUERY COMPANY

Welcome to front-end jQuery training!

# What can we expect today?

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A ridiculous amount of information.

- jQuery Basics
- DOM Manipulation
- Chaining
- Events
- Ajax
- UI
- Advanced Concepts

Seriously, this is going to be nuts.

Ready?

```
//jQuery.fn.live
function (type, data, fn) {
    if (jQuery.isFunction(data)) {
        fn = data;
        data = undefined;
    }

    jQuery(this.context).bind(liveConvert(type, this.selector), {
        data: data,
        selector: this.selector,
        live: type
    },
    fn);

    return this;
}
```

# Who we are

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appendTo - The jQuery Company

Front-end training, consulting, and support services

We make any front-end rock - and we leave your team with the tools to continue to move forward

# jQuery

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jQuery Project - [jquery.org](http://jquery.org)  
(Software Freedom Conservancy)

jQuery Core

[jquery.com](http://jquery.com)

jQuery UI

[jqueryUI.com](http://jqueryUI.com)

Sizzle JS

[sizzlejs.com](http://sizzlejs.com)

QUnit

[qunitjs.com](http://qunitjs.com)



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[jquery.com](http://jquery.com) Downloading

[api.jquery.com](http://api.jquery.com) Documentation

[forum.jquery.com](http://forum.jquery.com) Community

[meetups.jquery.com](http://meetups.jquery.com) Local Community

[plugins.jquery.com](http://plugins.jquery.com) Extending

[jqueryui.com](http://jqueryui.com) UI Widgets and Effects

- 
- Download
    - jQuery.com
  - Locations
  - Self hosted Download and include in your project
    - CDN - Google, Microsoft, jQuery
  - Forms
    - Source vs. Minified

# How to start with jQuery

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- Most of the time, jQuery starts with a selection
  - A selection is DOM elements
  - A selection uses CSS selectors syntax
  - Note: 90% of the time, it uses CSS selectors every time

# How to start with jQuery

---

```
<div class="myClass foo bar"></div>
<div class="baz myClass"></div>
<div class="bar"></div>
```

```
//...
```

```
$( '.myClass' )
```

```
//...
```

```
<div class="myClass foo bar"></div>
<div class="baz myClass"></div>
<div class="bar"></div>
```

# Starting with jQuery - selections

---

Select by tag:

```
<ul>
<li>Apple</li>
<li>Pear</li>
</ul>
```

```
$("li");
```

<http://play.appendto.com/selectors-compound-1/2/edit>

# Starting with jQuery - selections

---

- There are 7,167 selection combinations
- You can find them all on <http://api.jquery.com/category/selectors/>

# Questions?

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“If you were waiting for the opportune moment, ... that was it.”

# Starting with jQuery - do something

---

```
<ul>  
<li>Apple</li>  
<li class="goodbye">Pear</li>  
</ul>
```

```
$ (".goodbye").hide();
```



# Starting with jQuery - do something

---

```
<p>One</p>
<p>Two</p>
<p>Three</p>
```

```
// Some methods take callback functions
$( 'p' ).each(function() {
    // Operates on each p individually
    var rand;
    rand = Math.floor( Math.random() * 1 );
    if(rand > 1) {
        $(this).hide();
    }
});
```

# Starting with jQuery - do something

---

```
// HTML  
<p>One</p>  
<p>Two</p>  
<p>Three</p>
```

```
$( 'p' ).click(function(event) {  
    $(this).css( 'color', 'red' );  
});
```

<http://play.appendto.com/otisi/edit>

# jQuery - DOM Manipulation

---

```
$( '<div>jQuery is the bees knees</div>' );
```

```
// Creates ...
```

```
<div>jQuery is the bees knees</div>
```

```
$( '<ul><li>Hello</li></ul>' );
```

```
// Creates ...
```

```
<ul>
```

```
  <li>Hello</li>
```

```
</ul>
```

# jQuery - DOM Manipulation - add it

---

```
$ ( '<ul><li>Hello</li></ul>' )  
  .appendTo ( 'body' ) ;
```

```
// still selecting something (brand new), then  
// doing something.  
// adds the element to the end of the body
```

<http://play.appendto.com/eyuso/2/edit>

# jQuery - DOM Manipulation - add it

---

```
// Before
```

```
<p>Apple</p>
```

```
<p>Orange</p>
```

```
// Attach immediately after the p
```

```
$('p').after('');
```

```
// After
```

```
<p>Apple</p>
```

```

```

```
<p>Orange</p>
```

```

```

# jQuery - DOM Manipulation - manip methods

---

```
// a whole lot of methods  
.before()  
.after()  
.prepend()  
.prependTo()  
.append()  
.appendTo()  
.wrap()  
.wrapInner()  
.wrapAll()  
.unwrap()
```

# jQuery - DOM Manipulation - editing

---

```
// Before
```

```
<div>
```

```
  <p><em>Red</em></p>
```

```
  <p><em>Green</em></p>
```

```
</div>
```

```
// Removing Elements Directly
```

```
$('p').empty();
```

```
// After
```

```
<div>
```

```
  <p></p>
```

```
  <p></p>
```

```
</div>
```

# jQuery - DOM Manipulation - editing

---

```
// Before
```

```
<div>
```

```
  <p>Red</p>
```

```
  <p>Green</p>
```

```
</div>
```

```
// Removing Elements Directly
```

```
$('p').remove();
```

```
// After
```

```
<div>
```

```
</div>
```



# Questions?

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No stupid movie quote this time.





Take A Break!



# jQuery - events

---

```
// Binding an event
$('a.tab').click(function() { // <--- anonymous function!!
    // event handling code
    $(this).css('color', 'red');
});
```

```
// Binding an event
$('a.tab').mouseover(function() {
    // event handling code
    $(this).css('color', 'red');
});
```

# jQuery - events

---

- click, dblclick, mouseover, mouseout
- mouseenter, mouseleave
- change, focus, blur
- keydown, keyup, keypress
- scroll, resize

# Events bubble!

---

```
<div>
  <p>
    <a href="#">Link</a>
  </p>
</div>
```

```
$( 'div' ).click(function() {
  alert( 'clicked div!' );
});
```

```
$( 'a' ).click(function() {
  alert( 'clicked!' );
});
```

# Events bubble!

---

```
<div>
  <p>
    <a href="#">Link</a>
  </p>
</div>
```

```
$('div').click(function() {
  alert('clicked div!');
});
```

```
$('a').click(function() {
  alert('clicked!');
});
```

# Events bubble!

---

```
<div>
  <p>
    <a href="#">Link</a>
  </p>
</div>
```

```
$('div').click(function() {
  alert('clicked div!');
});
```

```
$('a').click(function() {
  alert('clicked!');
});
```

# You can stop the bubbling!

---

```
<div>
  <p>
    <a href="#">Link</a>
  </p>
</div>
```

```
$('div').click(function() {
  alert('clicked div!');
});
```

```
$('a').click(function() {
  alert('clicked!');
  return false;
});
```



# jQuery events - bind

---

```
$( 'div' ).bind( 'mouseover', function() {  
    $(this).addClass( 'highlight' );  
});
```

```
$( 'div' ).bind( 'mouseout', function() {  
    $(this).removeClass( 'highlight' );  
});
```

```
$( 'div' ).trigger( 'mouseover' ); //whoa!
```

# jQuery events - bind

---

```
$( 'div' ).bind( 'mouseover mouseout',  
    function(e) {  
        if ( e.type == 'mouseover' ) {  
            $(this).addClass('highlight');  
        }  
        elseif ( e.type == 'mouseout' ) {  
            $(this).removeClass('highlight');  
        }  
    }  
);  
  
//unbinding  
$( 'div' ).unbind( 'mouseover mouseout' );
```

# jQuery Events - bind 'back to the future'

---

```
$( 'div' ).live( 'mouseover mouseout',  
    function(e) {  
        if ( e.type == 'mouseover' ) {  
            $(this).addClass('highlight');  
        }  
        elseif ( e.type == 'mouseout' ) {  
            $(this).removeClass('highlight');  
        }  
    }  
);  
  
//unbinding  
$( 'div' ).die( 'mouseover mouseout' );
```





Break! (and questions)





jQuery Ajax

We go to the API!

<http://api.jquery.com/jQuery.Ajax>



# jQuery & chaining

---

```
$ ( 'tr:odd' ) .addClass ( 'odd' )  
    .find ( 'td.company' )  
    .addClass ( 'companyName' ) ;
```

```
$ ( 'tr:odd' )  
    .addClass ( 'odd' )  
    .find ( 'td.company' )  
        .addClass ( 'companyName' )  
    .end ( )
```

# jQuery stack architecture

---

<code>\$ ( 'body' )</code>	<code>[body]</code>
<code>.find ( 'p' )</code>	<code>[p, p, p] =&gt; [body]</code>
<code>.find ( 'a' )</code>	<code>[a, a] =&gt; [p, p, p] =&gt; [body]</code>
<code>.addClass ( 'foo' )</code>	
<code>.end ( )</code>	<code>[p, p, p] =&gt; [body]</code>
<code>.end ( )</code>	<code>[body]</code>

# chain breakers

---

```
//Getters vs. Setters
```

```
$(...).html('Hello world').addClass('hello')
```

```
// Non breaking
```

```
var html = $(...).html().addClass('hello')
```

```
// Breaking
```



# jQuery UI

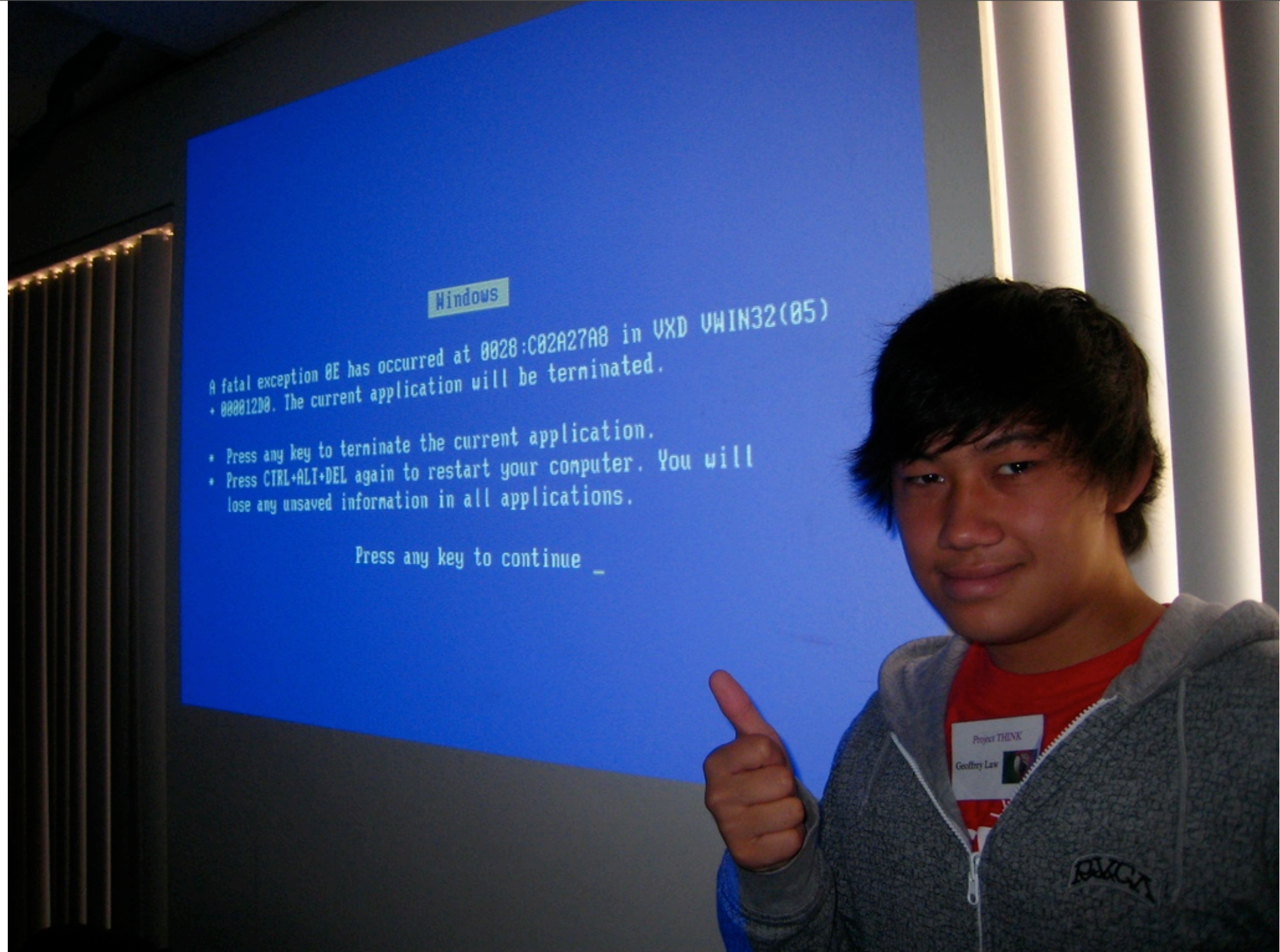
---

- Effects
  - Draggable, Droppable, Resizable, Selectable, Sortable
- Interactions
  - Show & Hide additions, Color Animation, Easings
- Widgets
  - Accordion, Autocomplete, Button, Datepicker, Dialog, Progressbar, Slider, Tabs

# jQuery UI

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- Everything is themeable!
- How easy is it to add widgets and effects



- Demo time! If I don't get this done in 5 minutes, Jonathan Sharp owes you \$50.

# Labs

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- Beginner
  - /share/beginner - designed to enhance basic concepts from the lessons.
- Intermediate
  - /share/intermediate - for those slightly familiar with jQuery.
- All-in poker players
  - build a task management app front end using jQuery best practices.

# Attributions

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- Trans-Mississippi Expo - <http://www.flickr.com/photos/smithsonian/2574825707/>
- Swimming Polar Bear - <http://www.flickr.com/photos/atvance/591643822/>
- Ajax - <http://www.flickr.com/photos/daveynin/1672745911/>
- Demo fail - <http://www.flickr.com/photos/billselak/849328944/>