Text

jQuery hands on-Lab

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.appendTo()
THE JQUERY COMPANY

Welcome to front-end jQuery training!

What can we expect today?

A ridiculous amount of information.

jQuery Basics
DOM Manipulation
Chaining
Events
Ajax
UI
Advanced Concepts

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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

![appendTo — THE jQUERY COMPANY]

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

jQuery Project - jquery.org
(Software Freedom Conservancy)

jQuery Core

jquery.com

jQuery UI

jqueryUI.com

Sizzle JS

sizzlejs.com

QUnit

qunitjs.com

jquery.com Downloading

api.jquery.com Documentation

forum.jquery.com Community

meetups.jquery.com Local Community

plugins.jquery.com Extending

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

- 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?

"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('<img src="logo.png" />');

// After
<p>Apple</p>
<img src="logo.png />
<p>Orange</p>
<img src="logo.png />
```

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?

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!

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

```javascript
$('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!

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

```javascript
$('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

```
$('body')              [body]

  .find('p')           [p, p, p] => [body]

    .find('a')         [a, a] => [p, p, p] => [body]

      .addClass('foo')

    .end()             [p, p, p] => [body]

  .end()               [body]
```

chain breakers

```
//Getters vs. Setters

$(...).html('Hello world').addClass('hello')
// Non breaking

var html = $(...).html().addClass('hello')
// Breaking
```
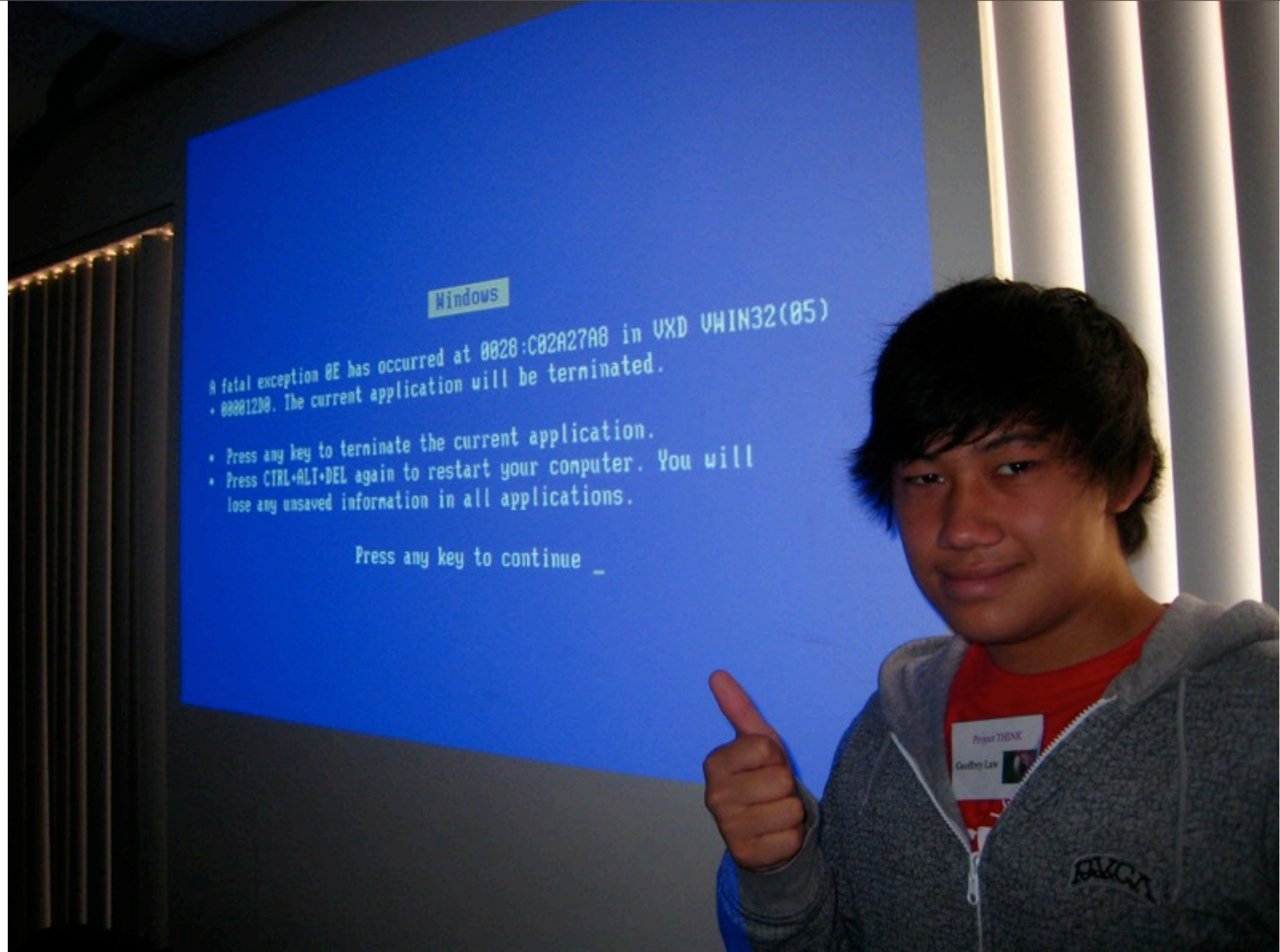
jQuery UI

- Effects

  - Draggable, Droppable, Resizable, Selectable, Sortable

- Interactions

  - Show & Hide additions, Color Animation, Easings

- Widgets

  - Accordian, Autocomplete, Button, Datepicker, Dialog, Progressbar, Slider, Tabs

jQuery UI

- 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

- 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.

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Attributions

- 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/