What Is (And How Do I Use)

## **Progressive Enhancement**

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### ♥ Who, What, When,

Where, and Why?



Oxford comma!



### Glad Wrap Hats!



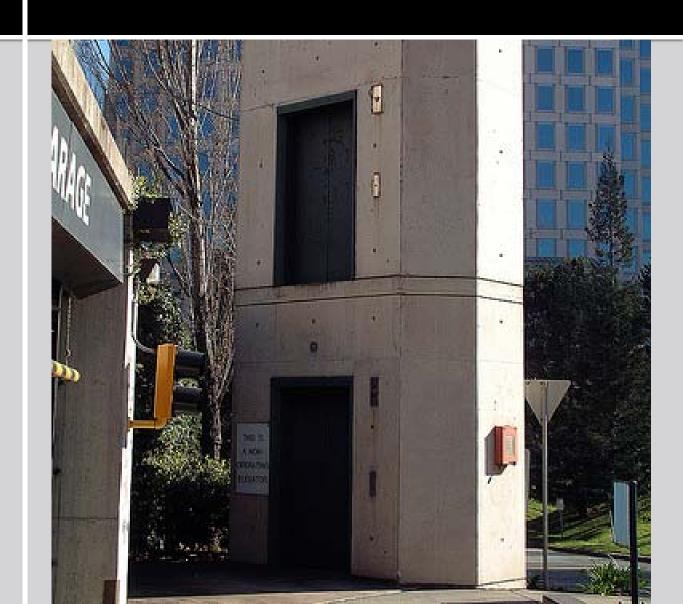


#### **Escalators!**





### Elevators!



# **Progressive Enhancement**

- Target baseline
  - No CSS?
  - No JS?
  - Broken support?
- Enhance for better UAs
- CSS is PE!

- Strictly additive
  - No regression!

# **Graceful Degradation**

- Target high-end
- Degrade for other UAs
  - Rounded corners
  - Client-side validation

- Lots of 'degrade' targets
  - High regression

## PE vs. GD

### **PROGRESSIVE ENHANCEMENT**

- Accessibility
  - Rich UAs still benefit
  - No alienation
- JS disabled
- CSS compromised

### **GRACEFUL DEGRADATION**

- Here's hoping!
  - Here's hoping!
  - Here's hoping!
- Here's hoping!
- Here's hoping!



#### Escalators?



## **The Basic Pieces**

RIAs are for later. They are interesting as a counterpoint to the PE vs. GD debate, but they're a different animal.



## Semantic Markup

- Semantic Markup
  - HTML4 is reasonable
  - HTML5 standardizes semantics

# **Element Targeting**

### CSS

Present semantics

- jQuery(...), \$\$(...)
  - Enrich semantics

# **Functional Targeting**

- if (navigator.geolocation)
- jQuery.support.XXX
- Modernizr

# **Additive Approach**

Start simple

- Enhance where possible
  - Client-side manipulation

## **Client-Side Manipulation**

DOM manipulation

Partial-page injection



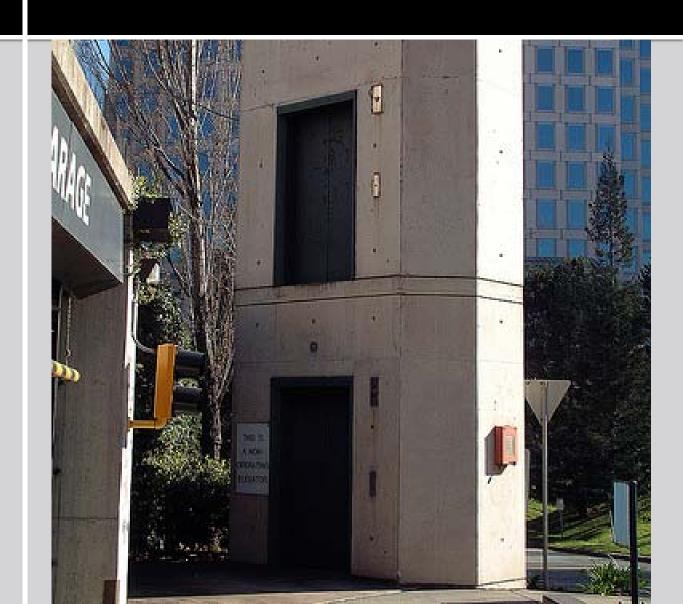
### RIAs

Platform specific

### Holistic approach



### Elevators!





# Code!

Because codeless presentations are for boring old people who couldn't manage to walk through the snow uphill both ways in time to write the code.



### Geolocation

```
<form method="post" action="submit.cfm" class="locate-form">
<input type="submit" value="Save Location" />
</form>
```

```
if (navigator.geolocation) {
   navigator.geolocation.getCurrentPosition(
        function(pos) {
            jQuery('form.locate-form')
                .append('<input name="location" value="' + pos.latitude + ',' + pos.longitude + '" />')
        },
        function(err) {
            jQuery('form.locate-form')
                .append('<div>geolocation errored</div>')
        },
        Ł
            timeout: 5000
        ł
} else {
   jQuery('form.locate-form')
        .append('<div>no geolocation support</div>')
}
```

### **Username Validation**

```
<form method="post" action="submit.cfm">
    Add Username:<br />
    <input name="username" value="#url.username#" class="check-username" autocomplete="off" /><br />
    <input type="submit" value="Submit" />
</form>
var checkTimeout:
jQuery('input.check-username').keyup(function() {
 var $this = jQuery(this)
 clearTimeout(checkTimeout);
 checkTimeout = setTimeout(function() {
   jQuery.ajax({
     url: 'exists.cfm',
     data: { username: $this.val() },
      success: function(data) {
       $this.parent().find('.check-username-status').remove();
       if (jQuery.trim(data) == 'false') {
         $this.after('<span style="color:green" class="check-username-status">Username available!</span>');
         $this.parents('form').find('input[type=submit]').removeAttr('disabled')
       } else {
```

\$this.parents('form').find('input[type=submit]').attr('disabled', 'disabled')

}
}
}
}
}
}
}

})

\$this.after('<span style="color:red" class="check-username-status">Username already taken</span>');



### **Other Use Cases**

### Semantic form validation



- Semantic form validation
- Increasing widget usability



- Semantic form validation
- Increasing widget usability
- Collapse multi-pageload process



- Semantic form validation
- Increasing widget usability
- Collapse multi-pageload process
- No-reload paging



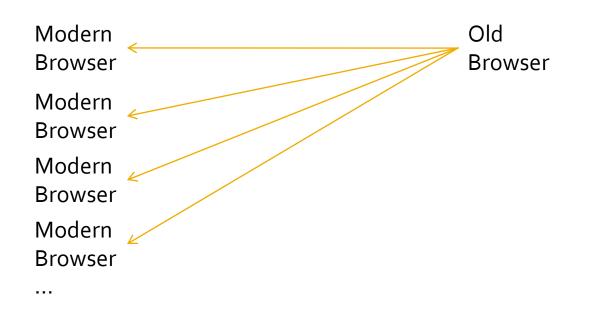
- Semantic form validation
- Increasing widget usability
- Collapse multi-pageload process
- No-reload paging
- No-reload sequential submission

# Testing

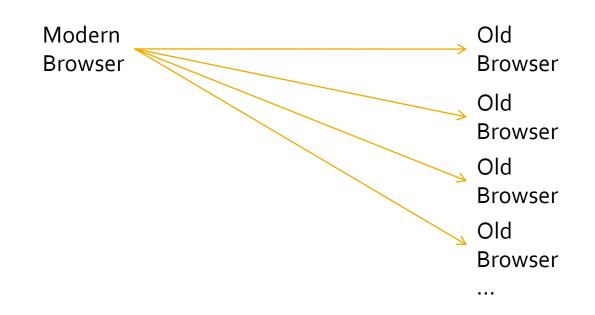
Can there be enough? Never. Can we try? Yes. Should we? Probably. Should we follow that up with a Scotch? Yep. Or three? YES!



## **Progressive Enhancement**



# **Graceful Degradation**



### **Development Mindset**

GD == build awesome, pray it works
PE == build working, make it awesome



# Conclusion

For without a conclusion, the sounds from my mouth were but a pointless disturbance of air molecules.



#### Ę

### Which One Are They?



### **Other Sessions**

- Sandra Clark
  - WAI-ARIA (in 15 minutes, right here)
- Adrian Pomilio
  - Building HTML5 Applications (Friday @ 3 pm)

## Soapbox\*

- If you're not using version control, start.
   Before you write another line of code.
- If you don't use a Front Controller framework, start. (I like FB3Lite, but then I wrote it)
- Learn about your tools. They're all far more powerful than you believe.

### Contact

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