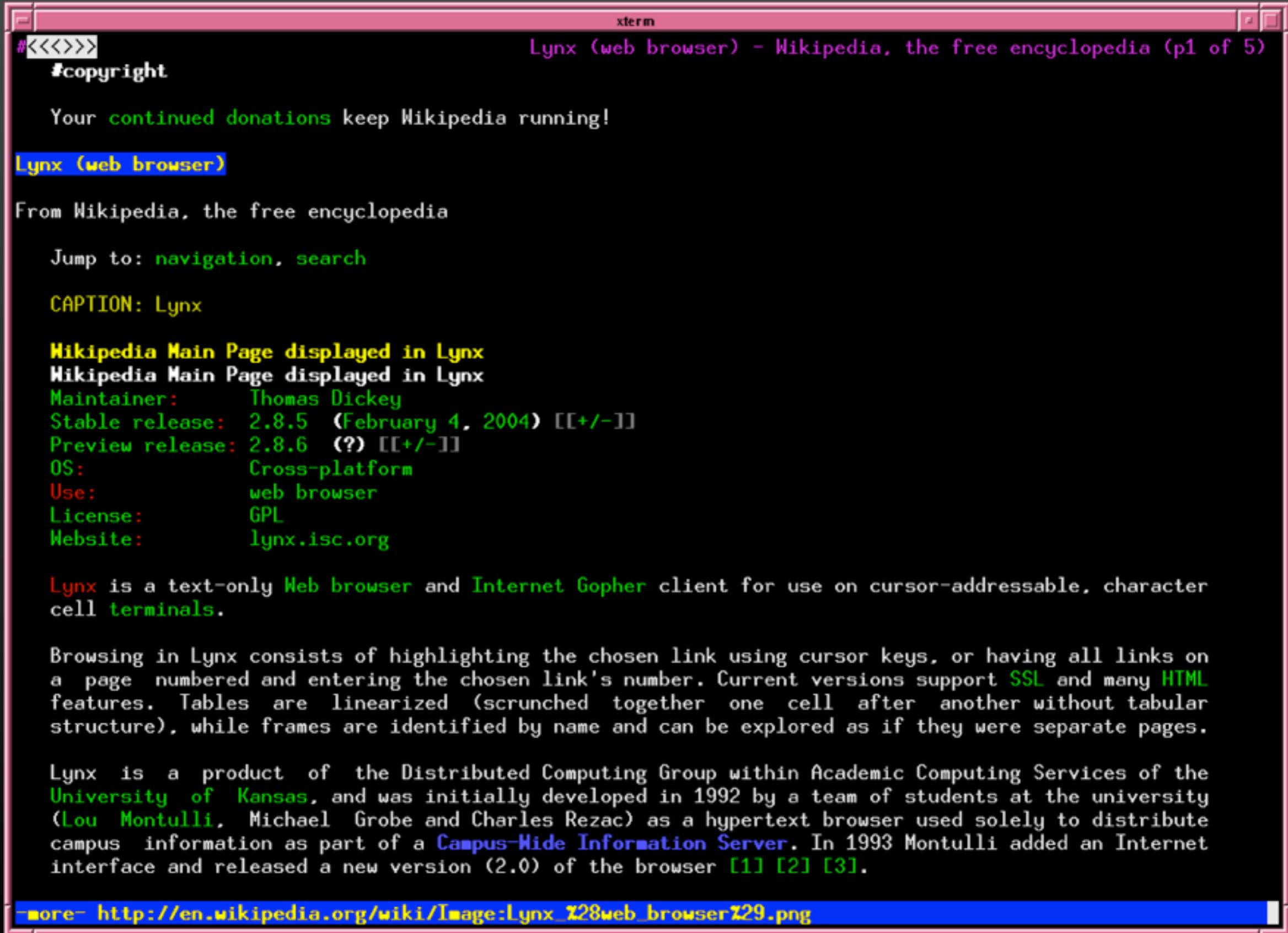


# PROGRESSIVE ENHANCEMENT & MOBILE

Aaron Gustafson  
[@aarongustafson](https://twitter.com/aarongustafson)  
[slideshare.net/AaronGustafson](http://slideshare.net/AaronGustafson)

**BROWSERS ARE A  
PAIN IN THE ASS**







N



O











**AND THEN THERE'S  
MOBILE**

THIS IS NOT  
THE WEB.



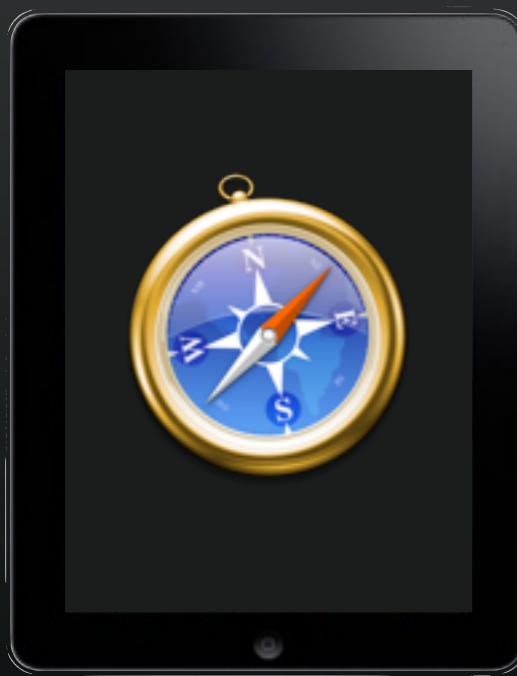
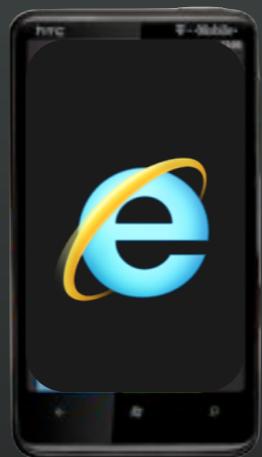
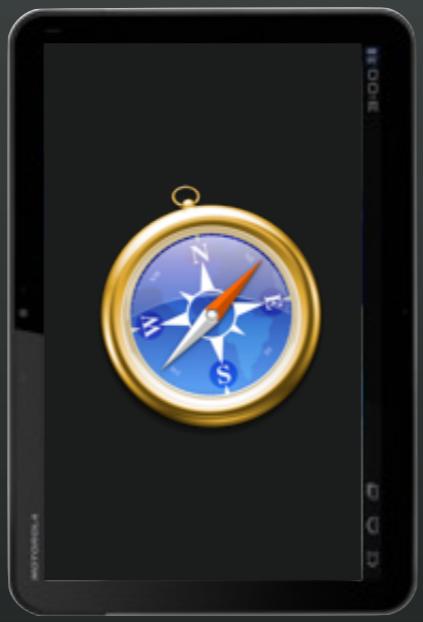
# THIS IS THE WEB.



# WHAT IS MOBILE?



# WHAT IS MOBILE?



**“There is no WebKit  
on Mobile”**

— Peter-Paul Koch

# WebKit *v.s.* Acid3

Test	Symb 1	Symb 2	Symb 3	S40	iOS 2.2	iOS 3.1	iOS 4.2	And 1.0	And 1.6	And 2	And 3	Dolphin	BB 6	BB PB	Phantom	Palm 2.0	Palm 2.1	Bolt 1.5	Ozone 0.9	Obigo 10	WeTab
Acid3 Test	fail	47	fail	74	100	72	92	93	100	98	100	91	69	92	76	93	93	100			

Score in the [Acid3 test](#)  
90 points

Android 1.6 scores 93 points instead of 92.

1. 100 : Yes
2. 91-99 : Almost
3. 71-90 : Alternative
4. 51-70 : Incomplete
5. 31-50 : Incorrect
6. 11-30 : Minimal
7. 0-10 : No

- Obigo WK encounters an unsupported media type after getting 69 points. Remove the error message, wait for a few seconds, and it will resume the test and end up at 93 points.
- Palm 2.1 does something similar, although you don't have to remove the error message.

[http://www.quirksmode.org/webkit\\_mobile.html](http://www.quirksmode.org/webkit_mobile.html)

**Surely there's  
platform  
consistency?!**

**“There is no Android**  
— Stephanie Rieger

17.	Android	993x1688	6	1.50	00:00:46	100.00%	50.00%
18.	Android	480x679	2	1.50	00:00:15	100.00%	50.00%
19.	Android	993x1574	4	2.00	00:01:20	100.00%	50.00%
20.	Android	993x1537	1	1.00	00:00:00	100.00%	100.00%
21.	Android	320x201	3	1.33	00:00:04	100.00%	66.67%
22.	Android	993x663	1	2.00	00:00:33	100.00%	0.00%
23.	Android	600x937	1	3.00	00:03:23	100.00%	0.00%
24.	Android	800x1125	21	1.19	00:00:20	80.95%	85.71%
25.	Android	480x369	1	1.00	00:00:00	100.00%	100.00%
26.	Android	320x473	45	2.09	00:00:30	64.44%	66.67%
27.	Android	369x628	2	5.50	00:02:34	100.00%	0.00%
28.	Android	800x447	1	6.00	00:03:14	100.00%	0.00%
29.	Android	993x514	9	1.44	00:00:53	88.89%	88.89%
30.	Android	993x616	1	1.00	00:00:00	100.00%	100.00%
31.	Android	1025x508	1	2.00	00:00:28	100.00%	0.00%
32.	Android	993x444	4	2.00	00:00:36	100.00%	75.00%
33.	Android	480x762	525	4.53	00:02:47	87.81%	6.86%
34.	Android	320x320	1	1.00	00:00:00	100.00%	100.00%
35.	Android	470x725	1	1.00	00:00:00	100.00%	100.00%
36.	Android	993x1149	2	1.50	00:00:15	100.00%	50.00%
37.	Android	600x1024	2	13.00	00:18:31	100.00%	0.00%
38.	Android	480x700	1	8.00	00:01:34	100.00%	0.00%

<http://yfrog.com/z/ob5kndj>

BUT ANDROID  
IS NOT UNIQUE  
IN THIS

# THE CULPRITS? **SCREEN SIZE**

# THE CULPRITS? EMBEDDED VIEWS

# THE CULPRITS? BROWSER CHROME

# THE CULPRITS? ZOOM LEVEL

# THE CULPRITS? ZOOM LEVEL

(Ok, this one's on Android)

# WHAT IS MOBILE?





A photograph of a zombie walk or costume event on a city street. Numerous people are dressed in zombie makeup, including fake blood and pale skin. They are walking in a group, some carrying bags. In the background, there are palm trees, buildings, and a red double-decker bus. A "NO SKATEBOARDING" sign is visible on a pole. The scene is set during the day.

**"The commoditization of smartphone hardware is just the beginning ... of a huge new wave of cheap devices about to invade our lives—a zombie apocalypse of electronics, if you will.**

**— Scott Jenson**

Um... I think I'll just  
build an iPhone app.  
**kthxbye.**

# NATIVE *v.s.* WEB



# THIS IS THE WEB.



# THIS WILL BE THE WEB.



**WE DON'T KNOW**



EVEN WHEN  
WE THINK  
WE KNOW,  
WE ARE  
PROBABLY  
WRONG

**SO HOW DO WE  
COPE?**

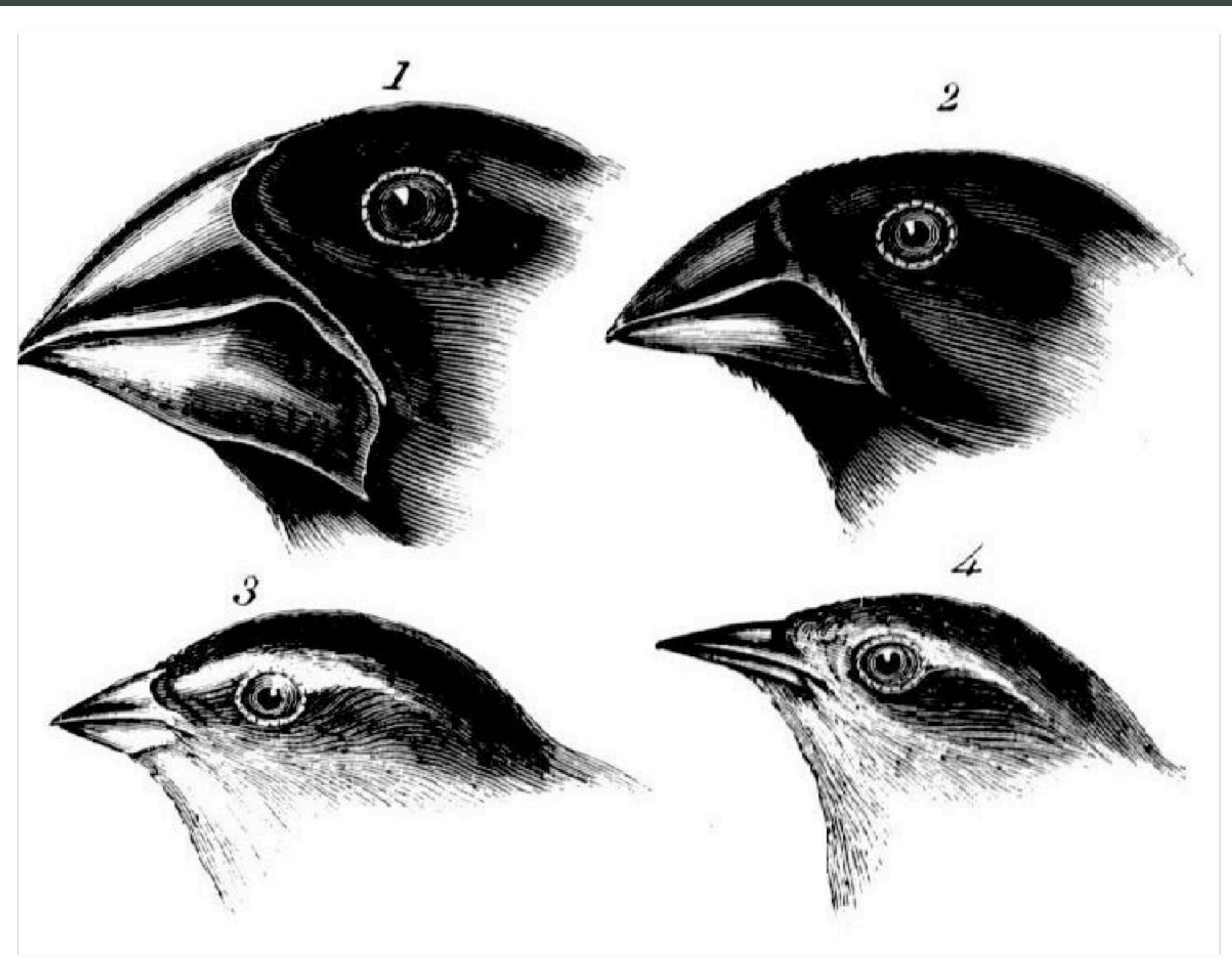
# PROGRESSIVE ENHANCEMENT

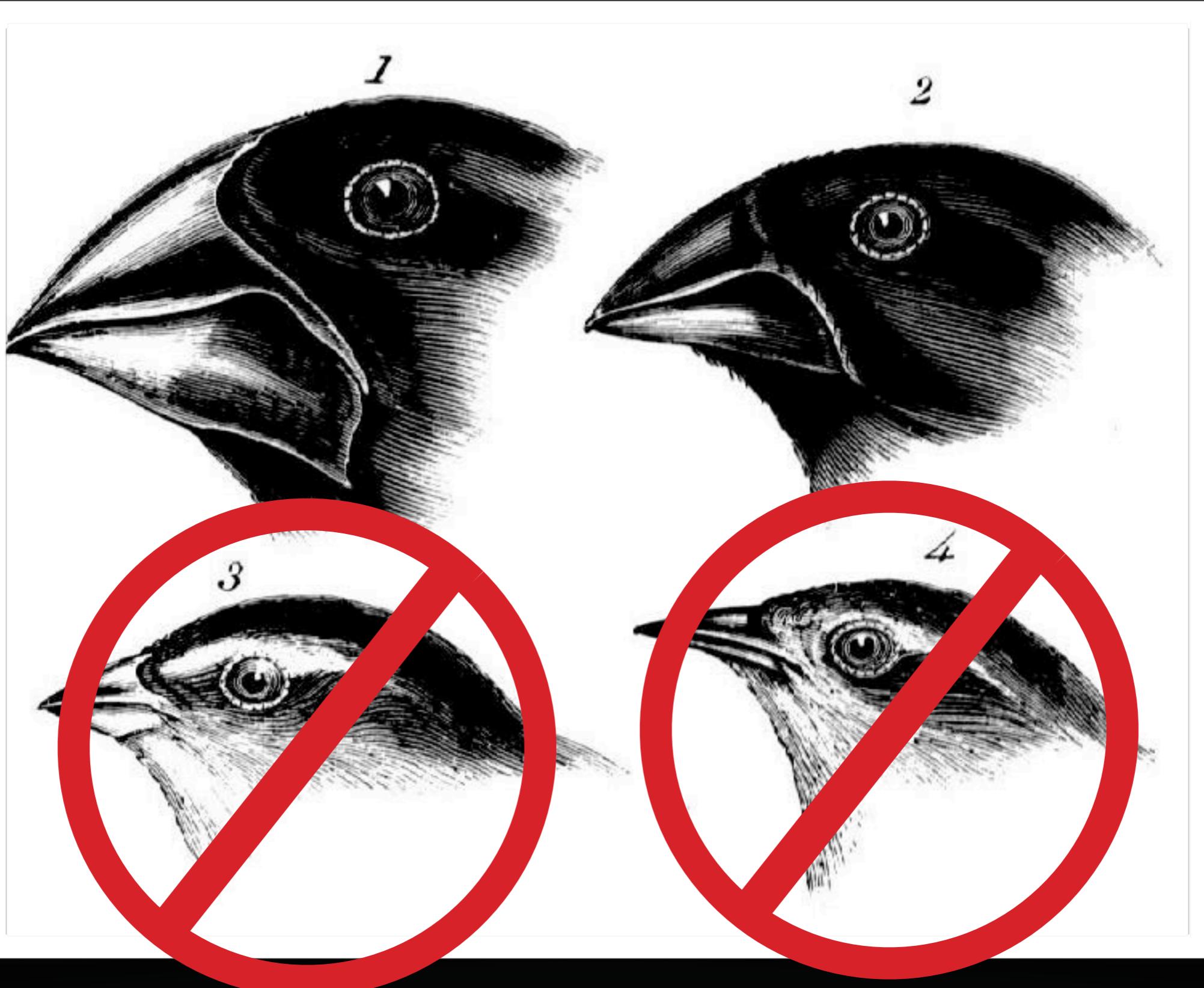
**TECHNOLOGICAL  
RESTRICTIONS**



MCM~~LXXVII~~  
**(that's 1977)**









HTML



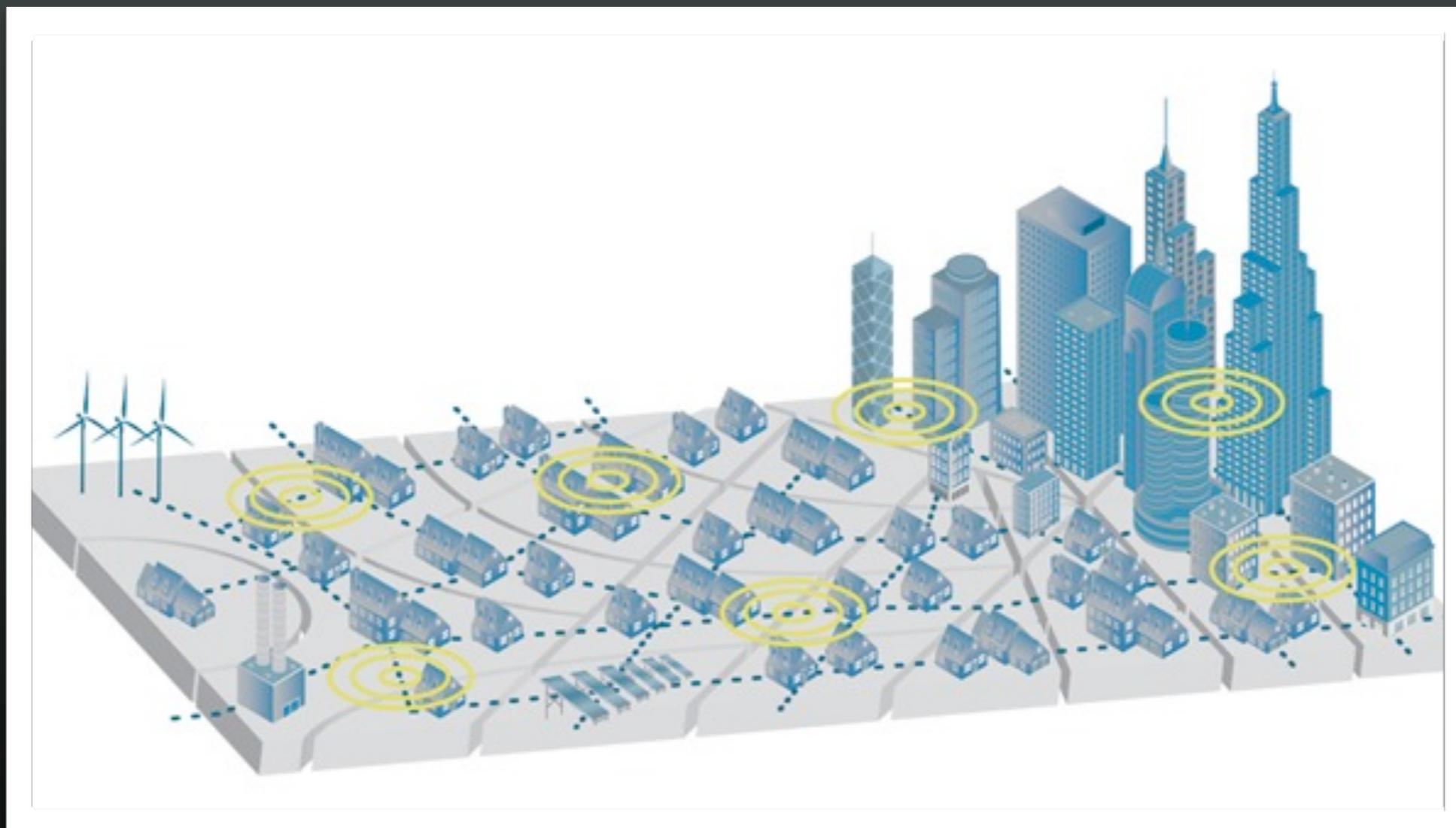
CSS

# **fault tolerance**

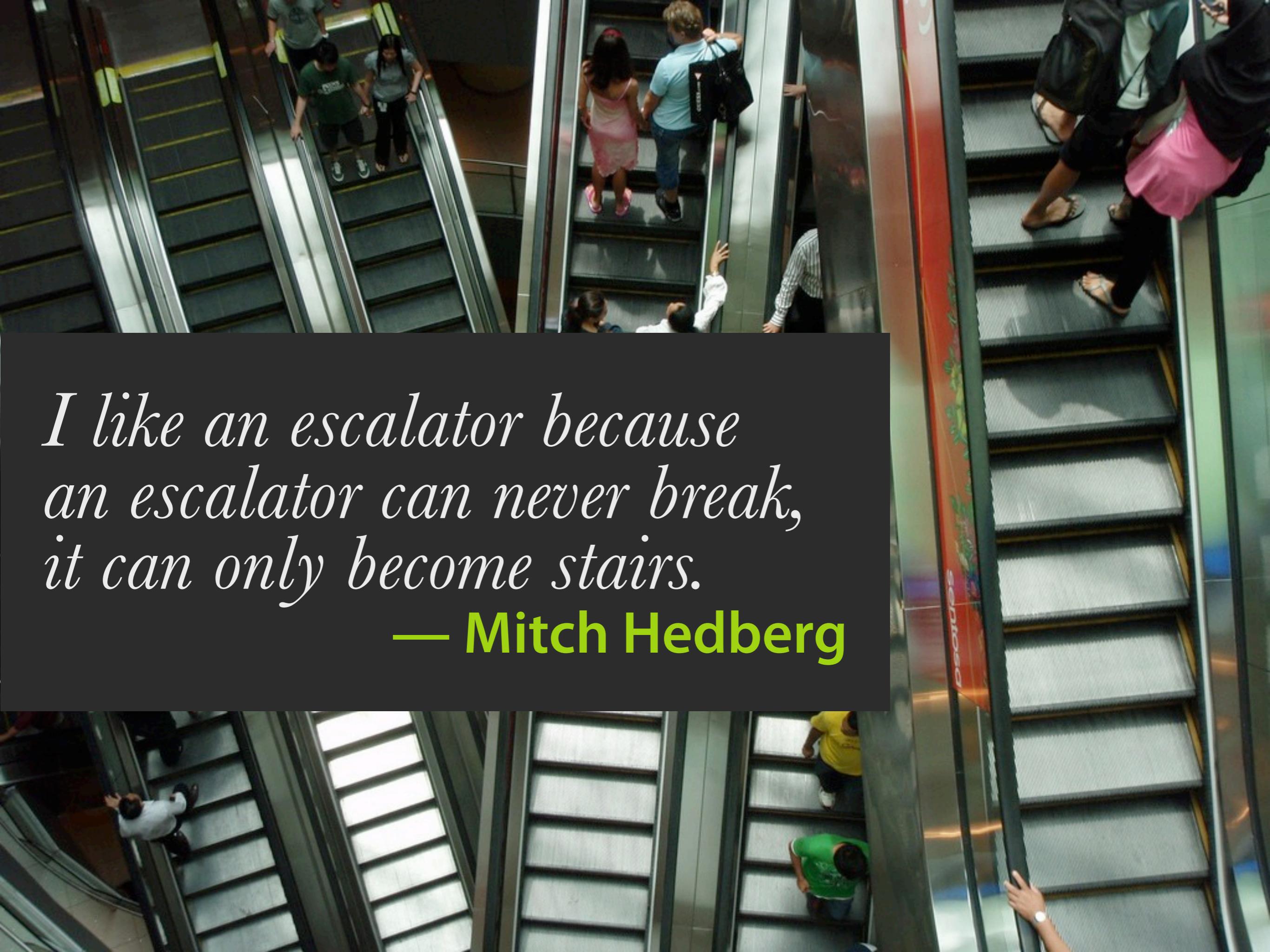
*n.* a system's ability to continue to operate when it encounters an unexpected error.







BROWSERS  
**IGNORE WHAT**  
THEY DON'T  
UNDERSTAND



*I like an escalator because  
an escalator can never break,  
it can only become stairs.*

— Mitch Hedberg

*an electric toothbrush  
can never break, it  
can only become a  
toothbrush.*





## WEEKENDHACKER

### WEEKENDHACKER

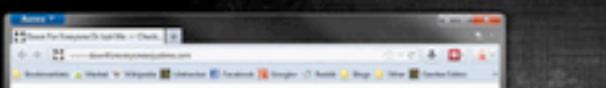
## Make the Best of Your Travel Plans This Weekend

The holidays are upon us, and if you're going to spend them you're probably going to be dealing with the stress that is travel tips for making travel as pain-free as possible. [More »](#)

### RELATED STORIES

- Avoid a Weekend of Boredom
- Discover Some New Music This Weekend
- Find Yourself Some Great Deals This Weekend

### WEB SITES



### TAXES



...you'll find it waiting in your basket online.



**£10 OFF**  
your first  
online shop\*

Start saving

[www.tesco.com](http://www.tesco.com)

\*When you spend £50 or more. Excludes delivery charge. Terms here.



### WEEKENDHACKER

Make the Best of Your Travel Plans This Weekend



### FOR WHAT IT'S WORTH

Remains of the Day: Ice Cream

*a dynamic web page can never break, it can only become a web page.*

[» The Ultimate Black Friday Gadget](#)

### MORE STORIES...

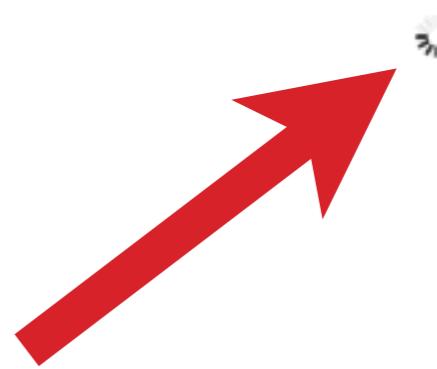
[App Deals](#)

[» The Ultimate Black Friday Gadget](#)

TIPS AND DOWNLOADS FOR  
GETTING THINGS DONE

---

[MORE STORIES...](#)





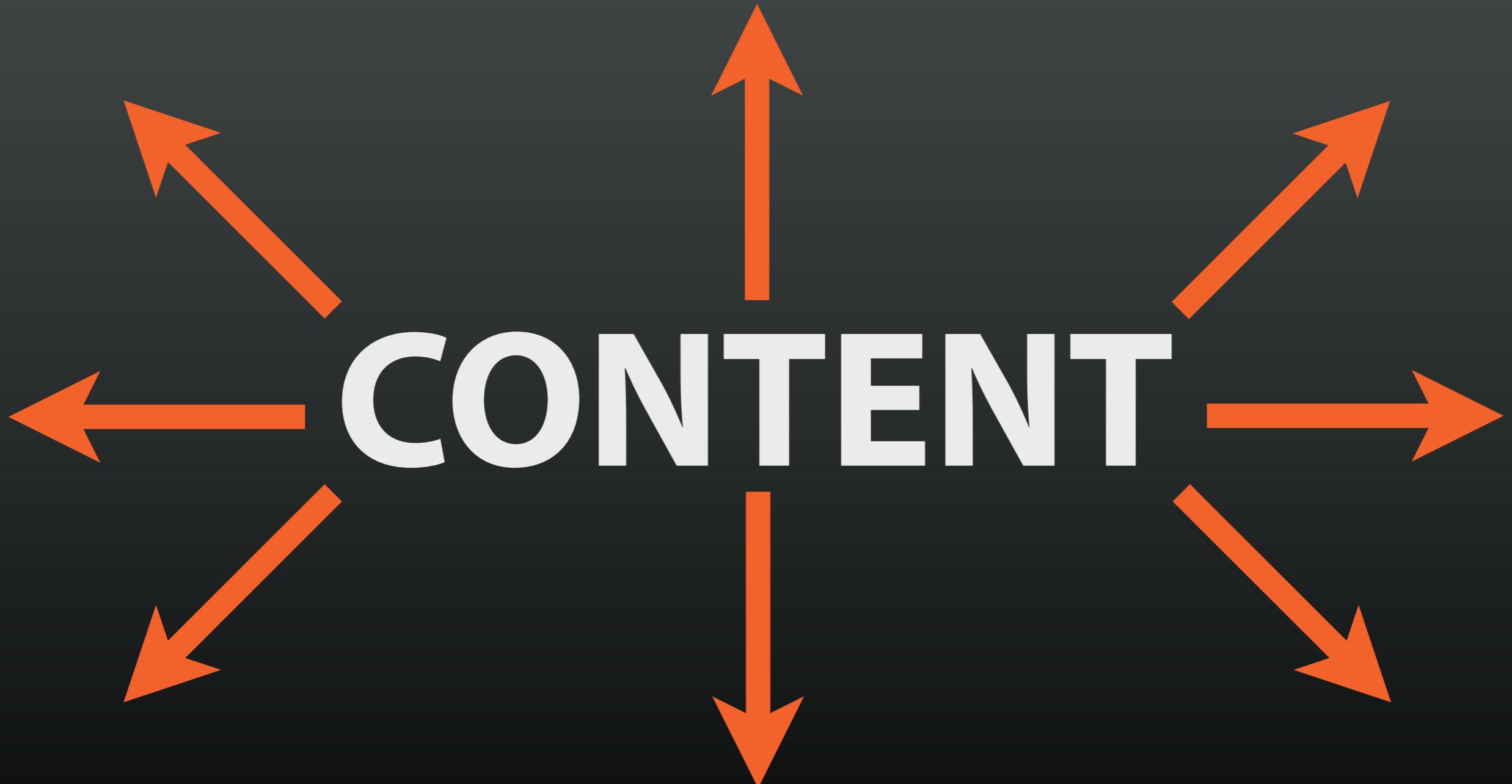
# GRACEFUL DEGRADATION

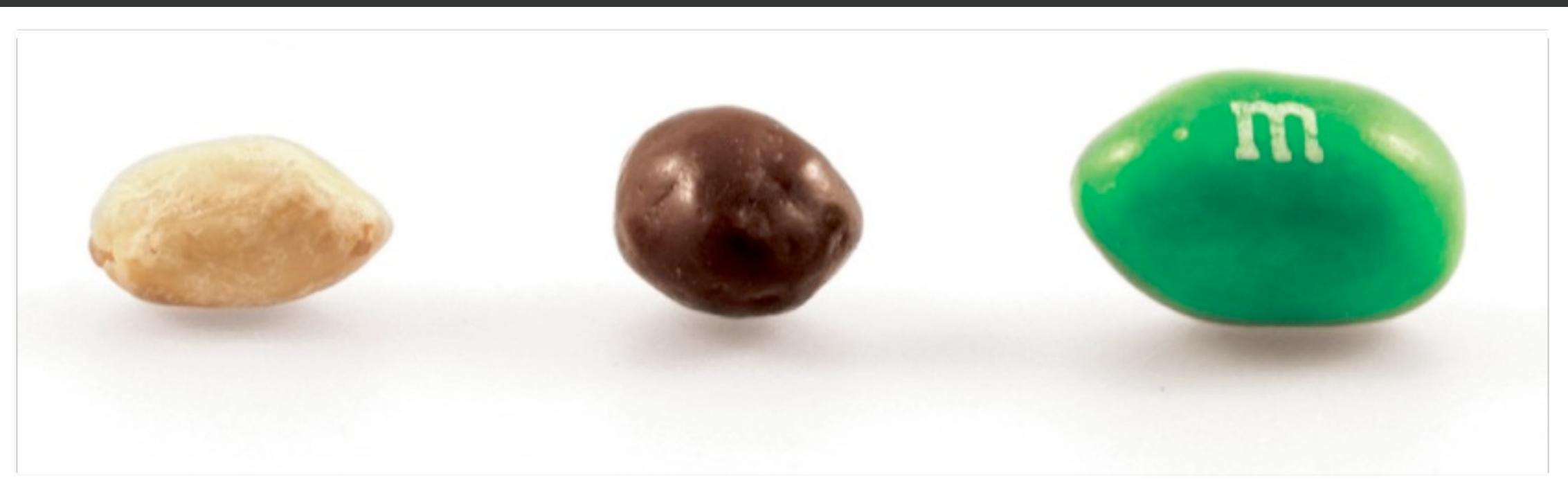
# MODERN BROWSERS



OLD R BROWSERS

# PROGRESSIVE ENHANCEMENT





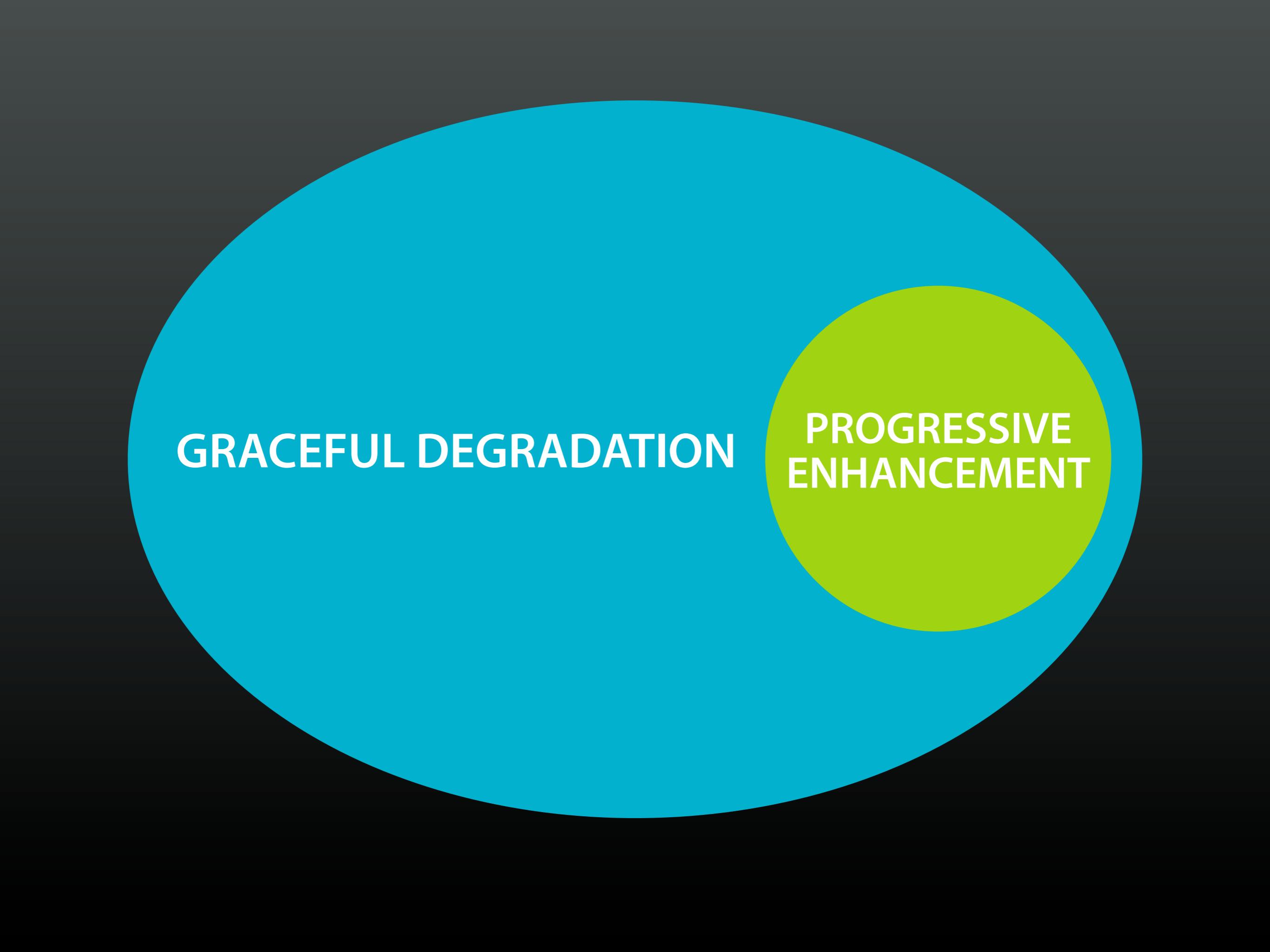
# ACCESSIBILITY

**“SPECIAL NEEDS”**

**“SPECIAL NEEDS”  
CAN BE  
CONTEXTUAL.**

**YOU MUST BE THIS TALL  
TO RIDE WITH AN ADULT**





GRACEFUL DEGRADATION

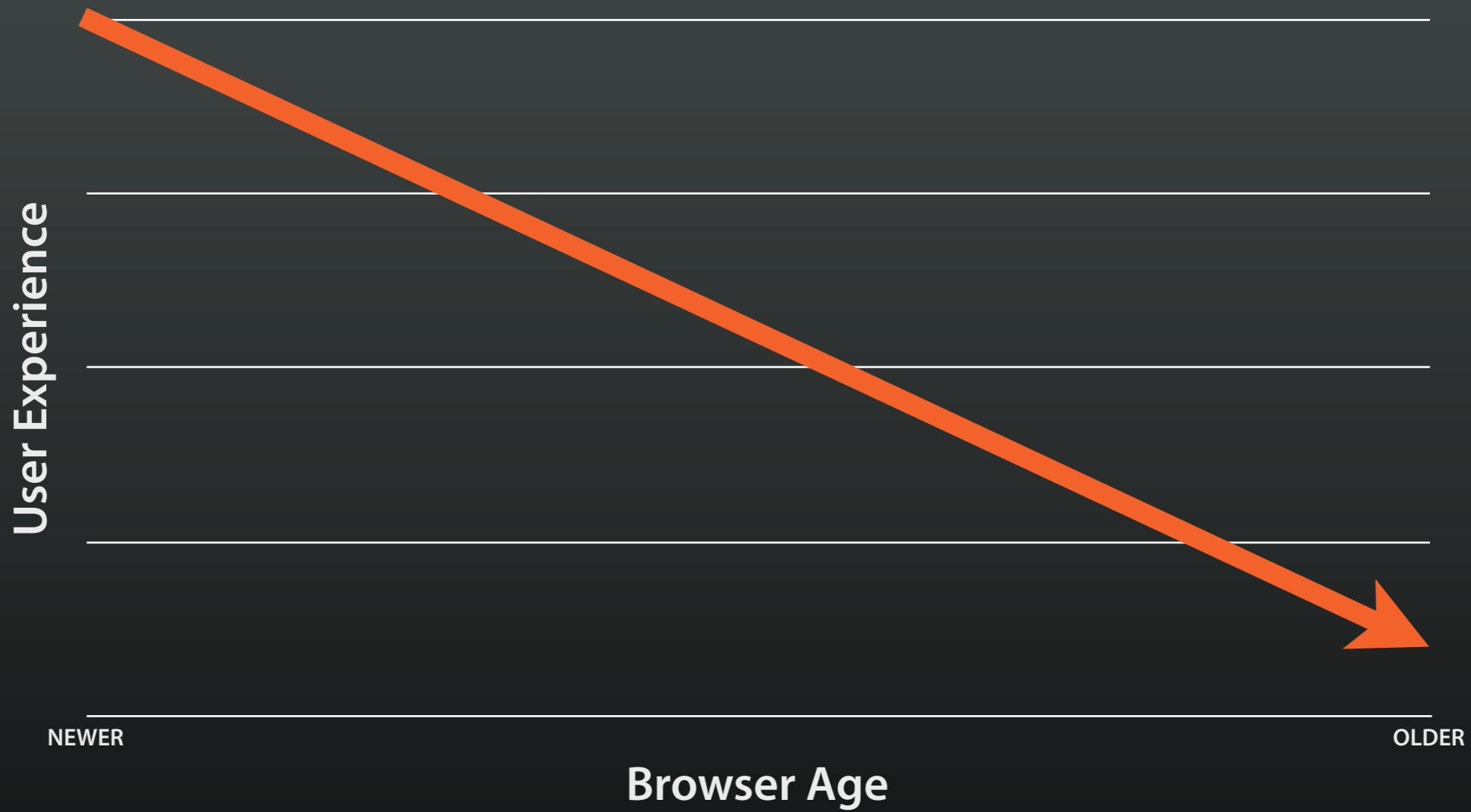
PROGRESSIVE  
ENHANCEMENT

OOOH, SHINY!

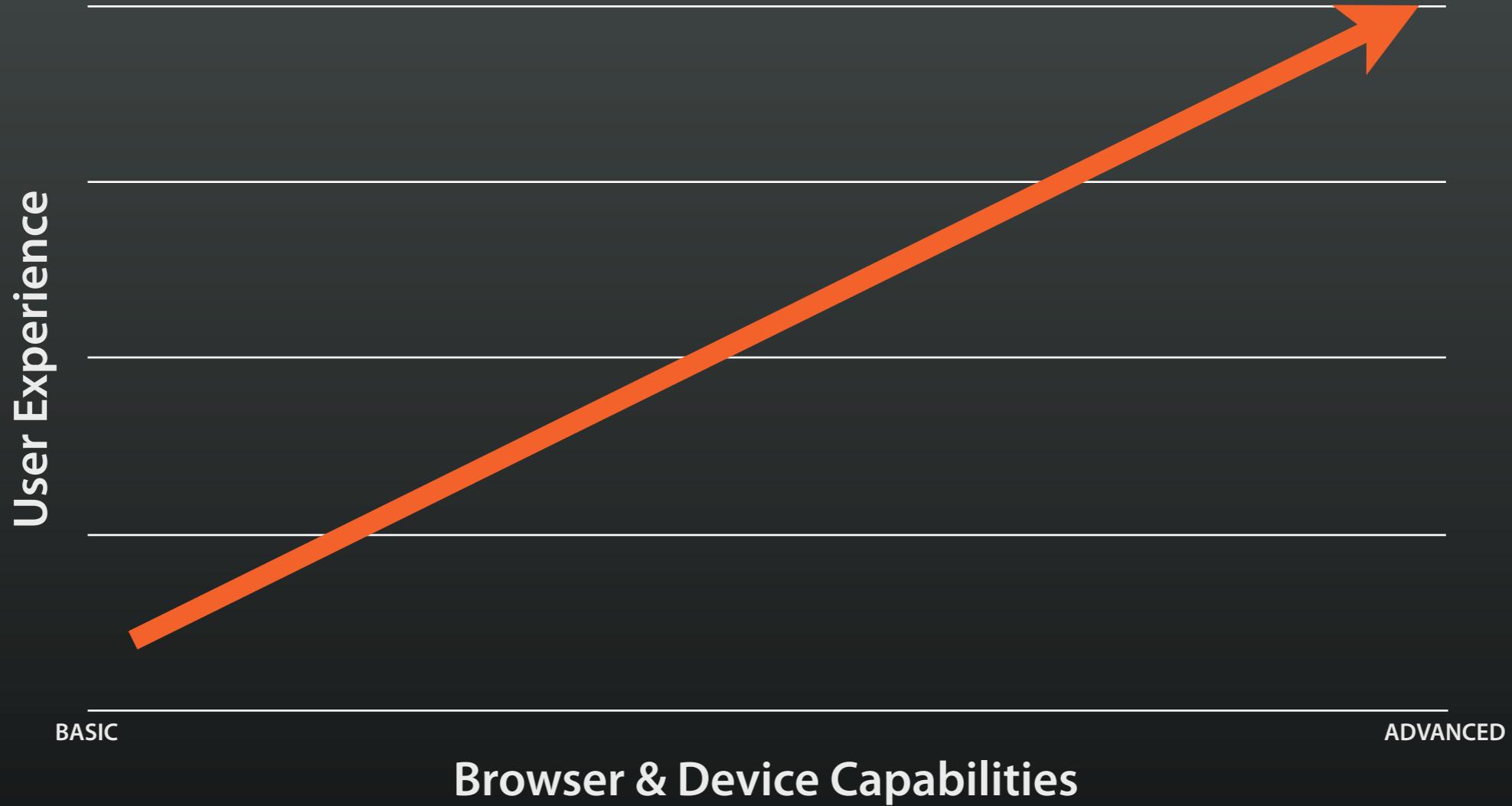
PROGRESSIVE  
ENHANCEMENT  
**ISN'T ABOUT**  
BROWSERS

**BROWSERS AND  
TECHNOLOGIES  
COME AND GO**

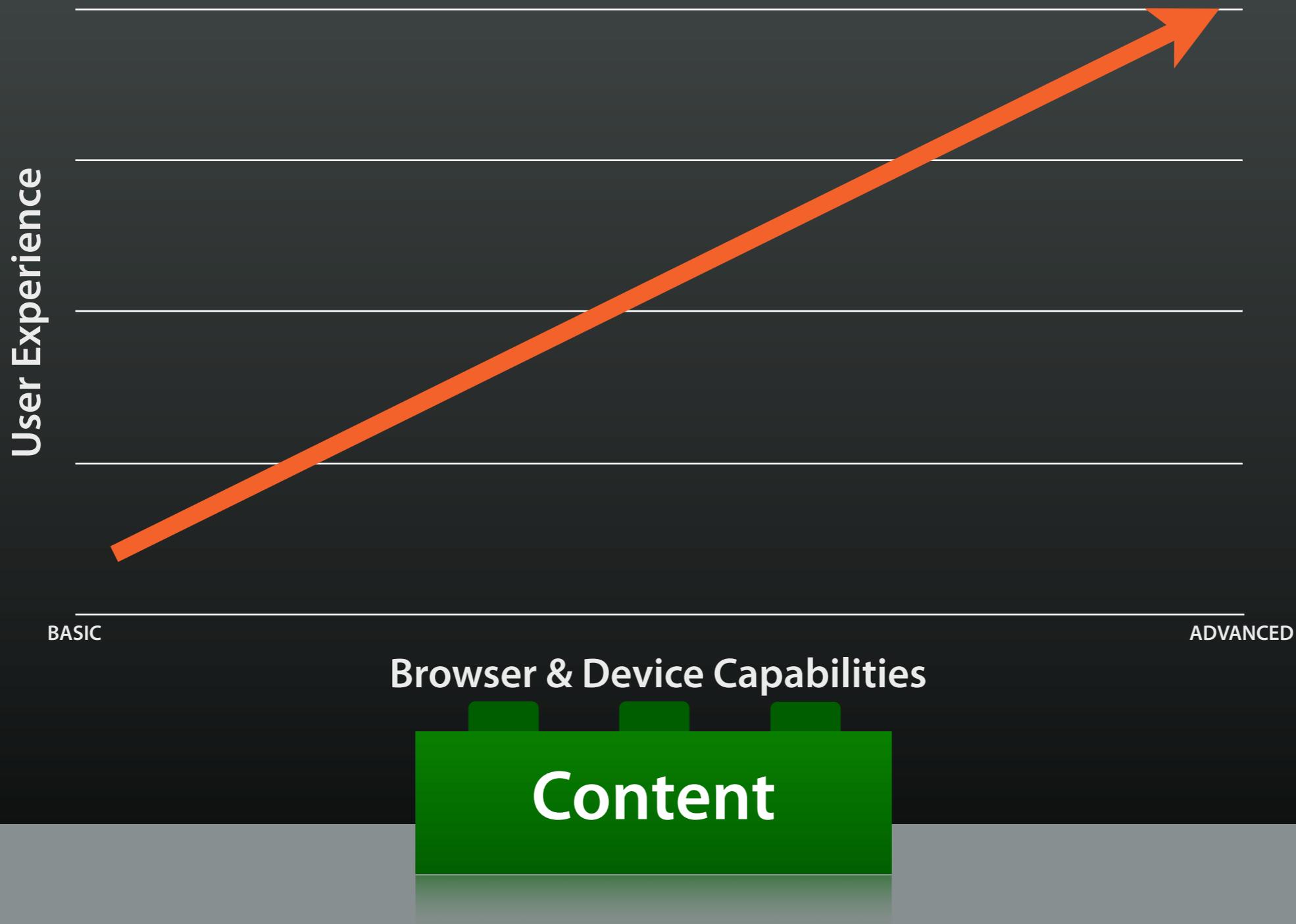
DON'T LOSE SIGHT  
OF YOUR USERS

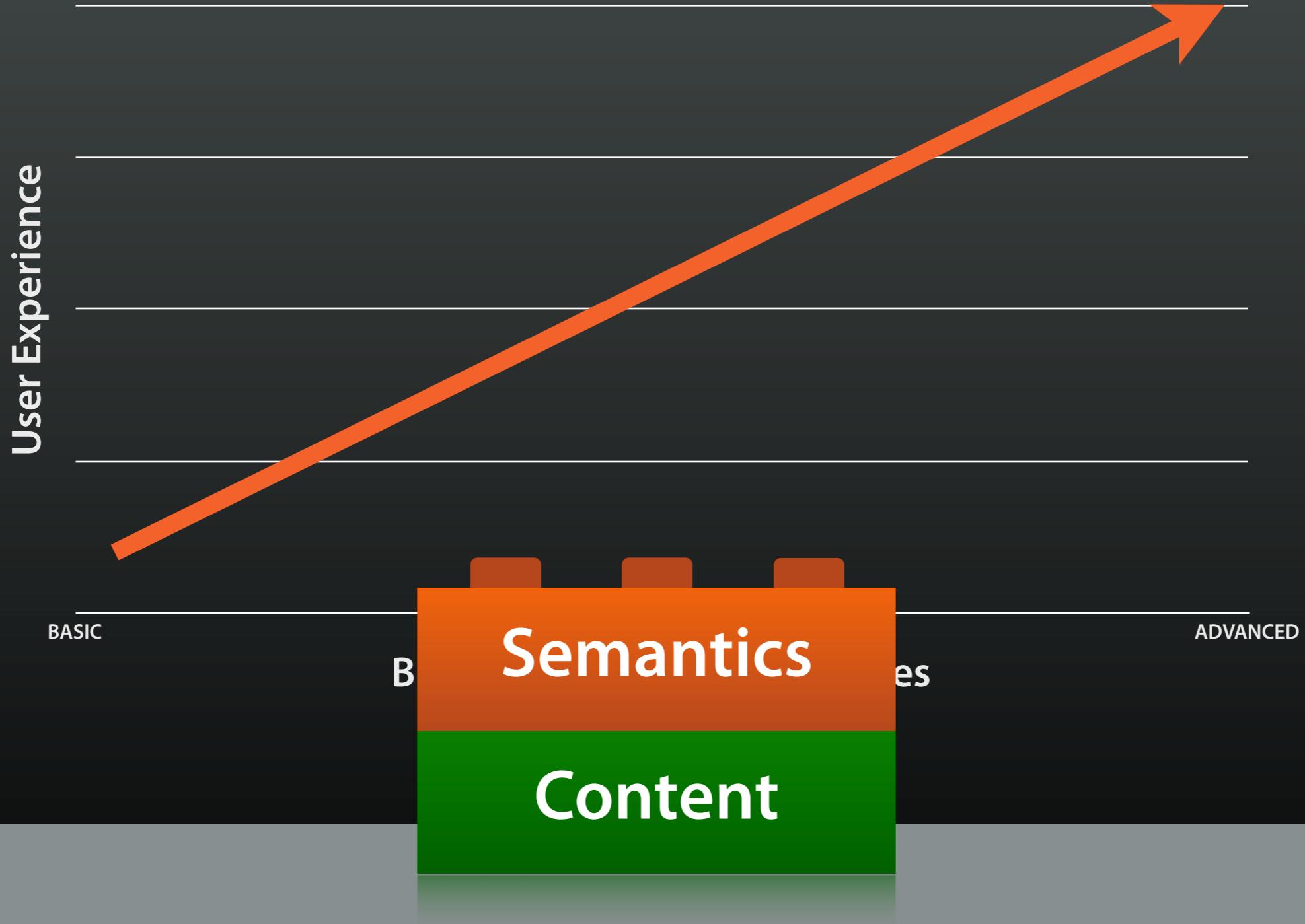


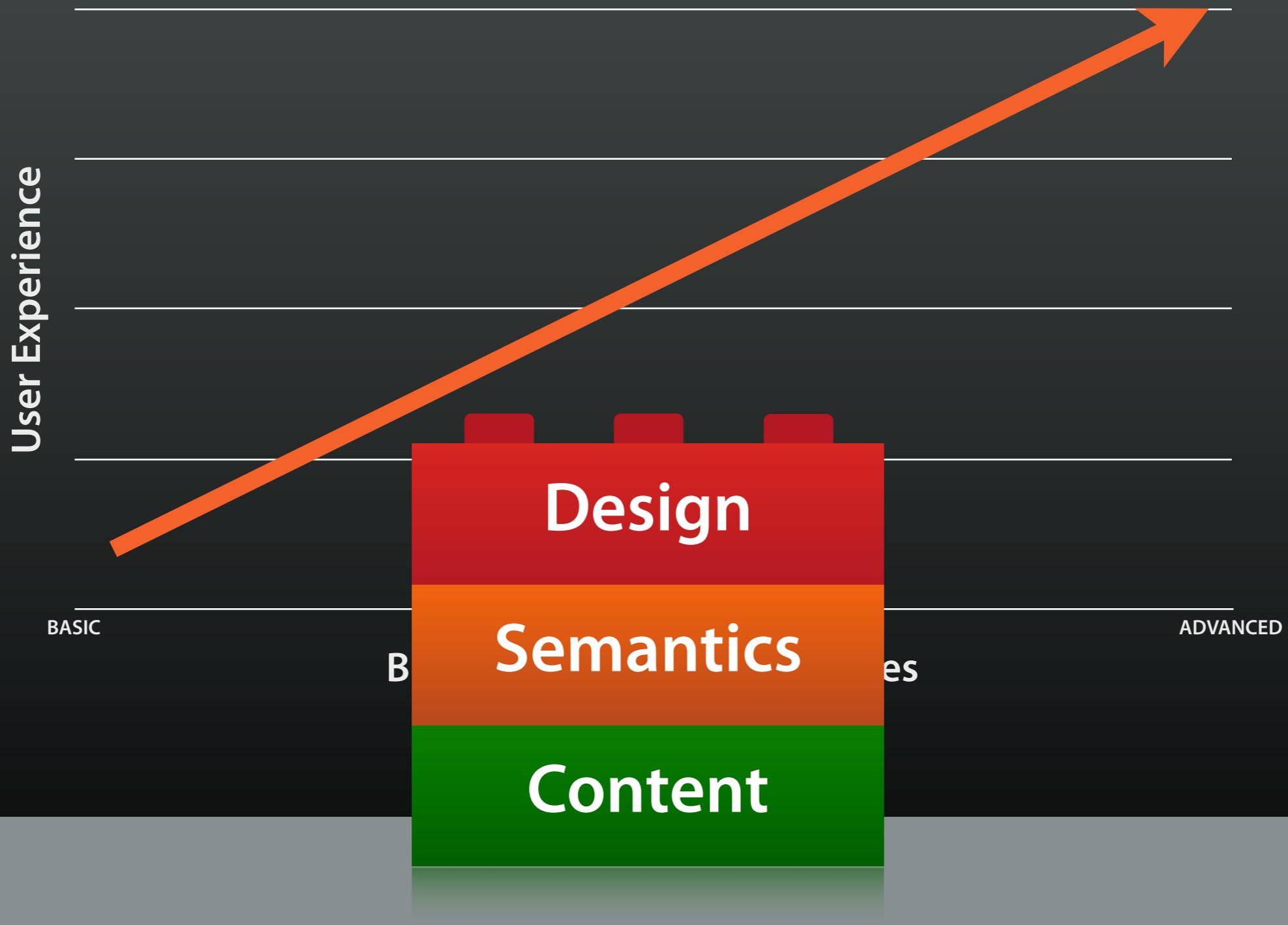
Graceful Degradation

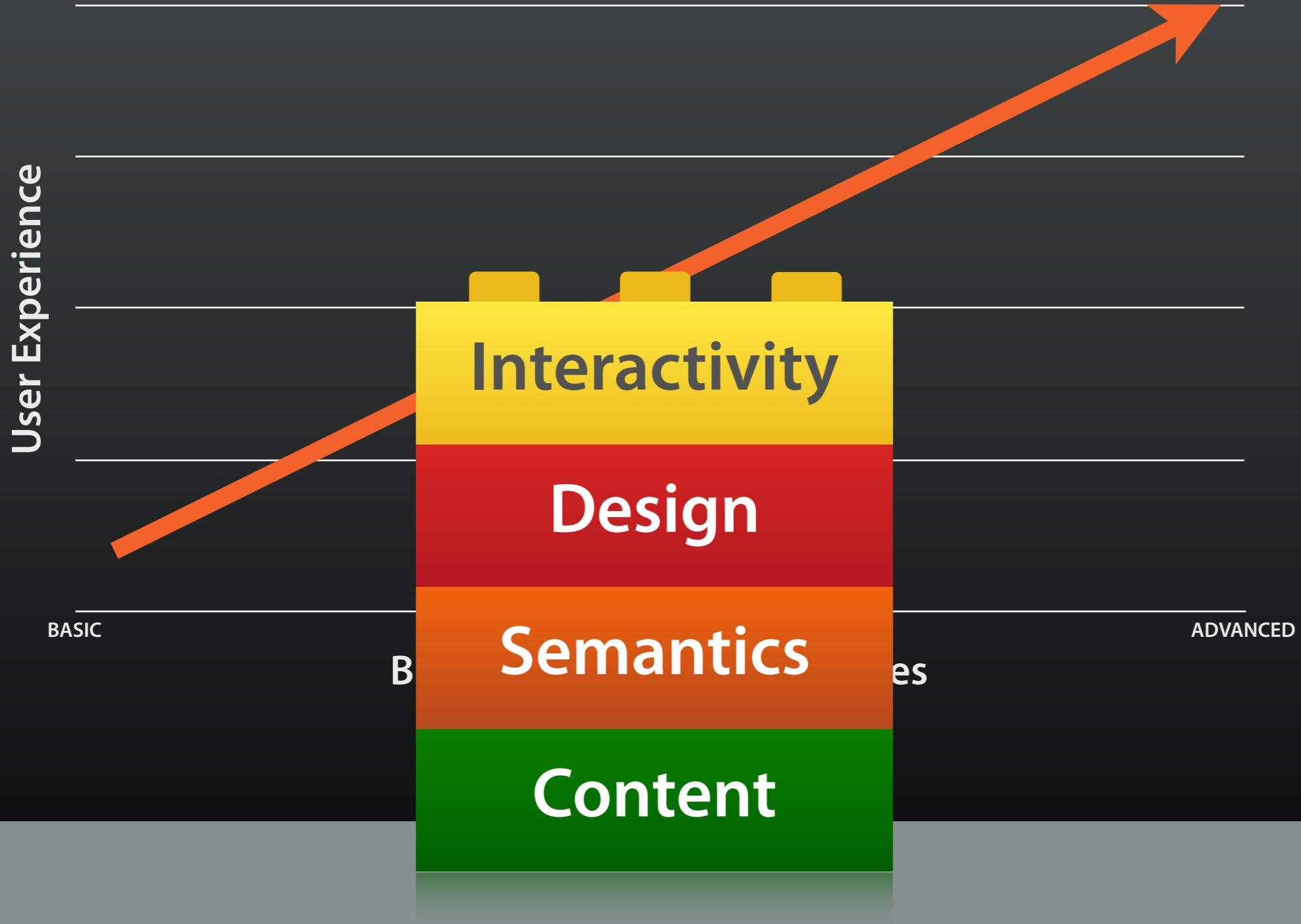


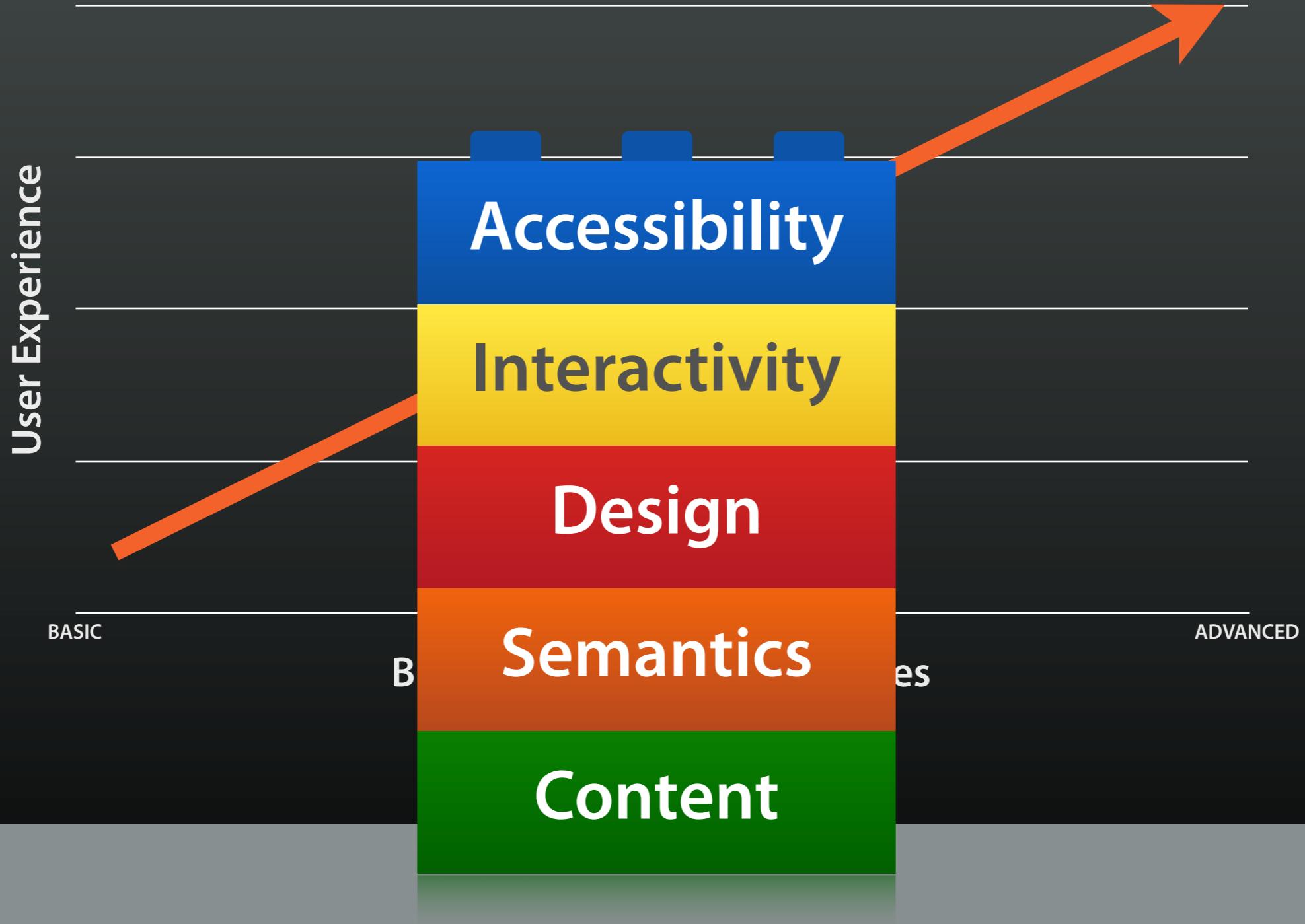
Progressive Enhancement

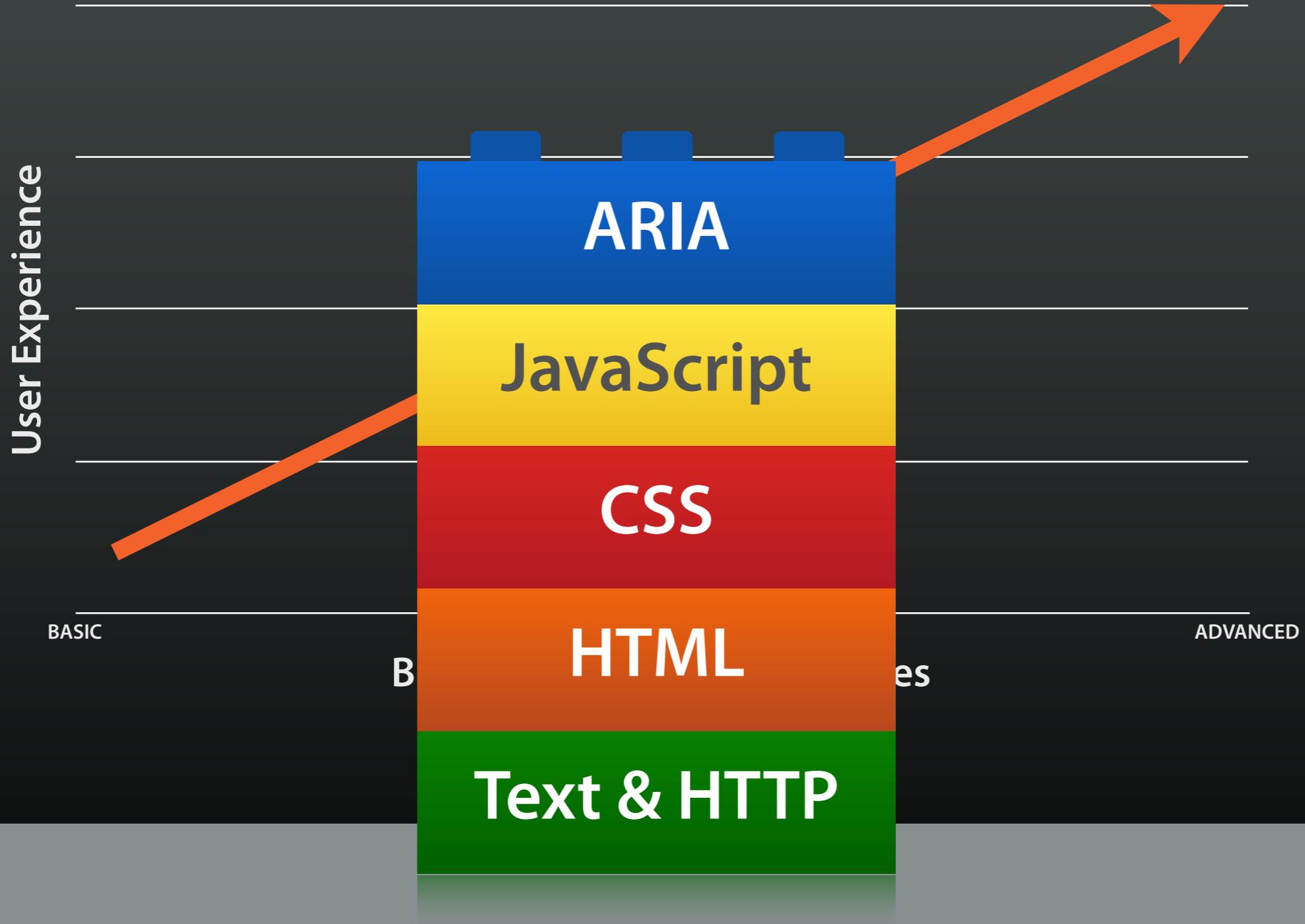














**HTML**

HTML5

The diagram consists of three horizontal orange bars of increasing height from bottom to top. The top bar contains the text 'HTML5'. The middle bar contains the text 'Microformats'. The bottom bar contains the text 'HTML4'. Each bar is separated by a thin black horizontal line. Above the top bar, there are three smaller orange rectangular blocks of decreasing width from left to right.

Microformats

HTML4

# EXAMPLES



# Semantics 101

```
<p>HTML5 introduces several <em>really</em>  
useful elements and a ton of new APIs.</p>
```

```
<p>Please fill out the form below.  
<strong>Note: all fields are required.</strong></p>
```

```
<p>I like to work with markup languages because  
<strong>they are simple and easy to read</strong>. They also have that certain <i lang="fr" title="I don't know what">je ne sais quoi</i>.</p>
```

# PE with HTML

```
<video poster="poster.png">
  <source src="video.m4v"/>
  <source src="video.webm"/>
  <source src="video.ogv"/>
  
  <ul>
    <li><a href="video.m4v">Download MP4</a></li>
    <li><a href="video.webm">Download WebM</a></li>
    <li><a href="video.ogv">Download Ogg</a></li>
  </ul>
</video>
```

# PE with HTML

```

<ul>
  <li><a href="video.m4v">Download MP4</a></li>
  <li><a href="video.webm">Download WebM</a></li>
  <li><a href="video.ogv">Download Ogg</a></li>
</ul>
```

# PE with HTML

```
<input type="date" name="dob"/>
```

I get it!



I don't get it :-(



# PE with Microformats

```
<section class="vcard">
  <figure>
    
  </figure>
  <h1 class="fn">Aaron Gustafson</h1>
  ...
  <p>Aaron ... is <b class="role">Group Manager</b> of the
    <a class="org" href="http://webstandards.org">Web
      Standards Project (WaSP)</a> ....</p>
</section>
```

In his personal time, [Eric](#) is a List Chaperone for the very active [css-discuss](#) mailing list, enjoys a good meal whenever possible, and considers almost no type of music to be worthless. He lives in Cleveland Heights with his wife and daughters.

**Aaron Gustafson**

Aaron has been working on the web for nearly 15 years and, in that time, has cultivated a love of web standards and an in-depth knowledge of website strategy and architecture, interface design, and numerous languages (including XHTML, CSS, JavaScript, and PHP). Aaron and his wife, Kelly, own [Easy! Designs](#), a boutique web consultancy based in Chattanooga, TN. When not neck deep in code, Aaron is usually found evangelizing his findings and sharing his knowledge and passion with others in the field.

Aaron has trained professionals at *The New York Times*, Gartner, and the US Environmental Protection Agency (among others), and has presented at the world's foremost web conferences, such as An Event Apart and Web Directions. He is Group Manager of the [Web Standards Project \(WaSP\)](#) and serves as an Invited Expert to the World Wide Web Consortium's [Open Web Education Alliance \(OWEA\)](#). He created [eCSStender](#), serves as Technical Editor for [A List Apart](#), is a contributing writer for [.net Magazine](#), and has filled a small library with his technical writing and editing credits. His next book, *Adaptive Web Design: Crafting Rich Experiences with Progressive Enhancement*, is due out in early 2011.

Looking for a detailed curriculum or more information to help sell your boss on this event? [Download the HTML5 & CSS3 fact sheet](#) or view our [frequently asked questions](#). Ready to attend? [Register now](#).

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REGISTRATION IS NOW OPEN

**RETREATS 4 GEEKS**

Details   Schedule   Lodging   Location   Instructors

In his personal time, Eric also lists Chape

Events • ½ mi

About • ¾ mi

Contact • ¼ mi

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Registration Sold Out

**Details**   **Schedule**   **Instructors**   **Lodging**   **Location**

In his personal time, Eric also lists Chapeau as a member of the highly active [css-discuss](#) mailing list, enjoys a good meal, and loves to play golf.

**Aaron Gustafson**

Aaron has been working on the web for nearly 15 years and, in that time, has cultivated a love of web standards and an in-depth knowledge of website strategy and architecture, interface design, and web development technologies, including XHTML, CSS, JavaScript, and boutique web frameworks. He is well known for his deep interest in and sharing of knowledge in these areas.

**Aaron Gustafson**  
Web Standards Project (WaSP)  
Group Manager  
<http://easy-designs.net/>

and the US Environmental Protection Agency. He has spoken at many web conferences, such as An Event Apart and Web Directions. He is Group Manager of the [Web Standards Project \(WaSP\)](#) and serves as an Invited Expert to the World Wide Web Consortium's [Open Web Education Alliance \(OWEA\)](#). He created [eCSStender](#), serves as Technical Editor for [A List Apart](#), is a contributing writer for [.net Magazine](#), and has filled a small library with his technical writing and editing credits. His next book, *Adaptive Web Design: Crafting Rich Experiences with Progressive Enhancement*, is due out in early 2011.

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Registration Sold Out

# PE with HTML & ARIA

```
<header role="banner">
  <h1></h1>
  <nav role="navigation">
    <ol>
      <li><a href="#details">Details</a></li>
      <li><a href="#schedule">Schedule</a></li>
      <li><a href="#instructors">Instructors</a></li>
      <li><a href="#lodging">Lodging</a></li>
      <li><a href="#location">Location</a></li>
    </ol>
  </nav>
</header>
```

# These *are* the droids you seek

```
<span role="button">0K</span>
```

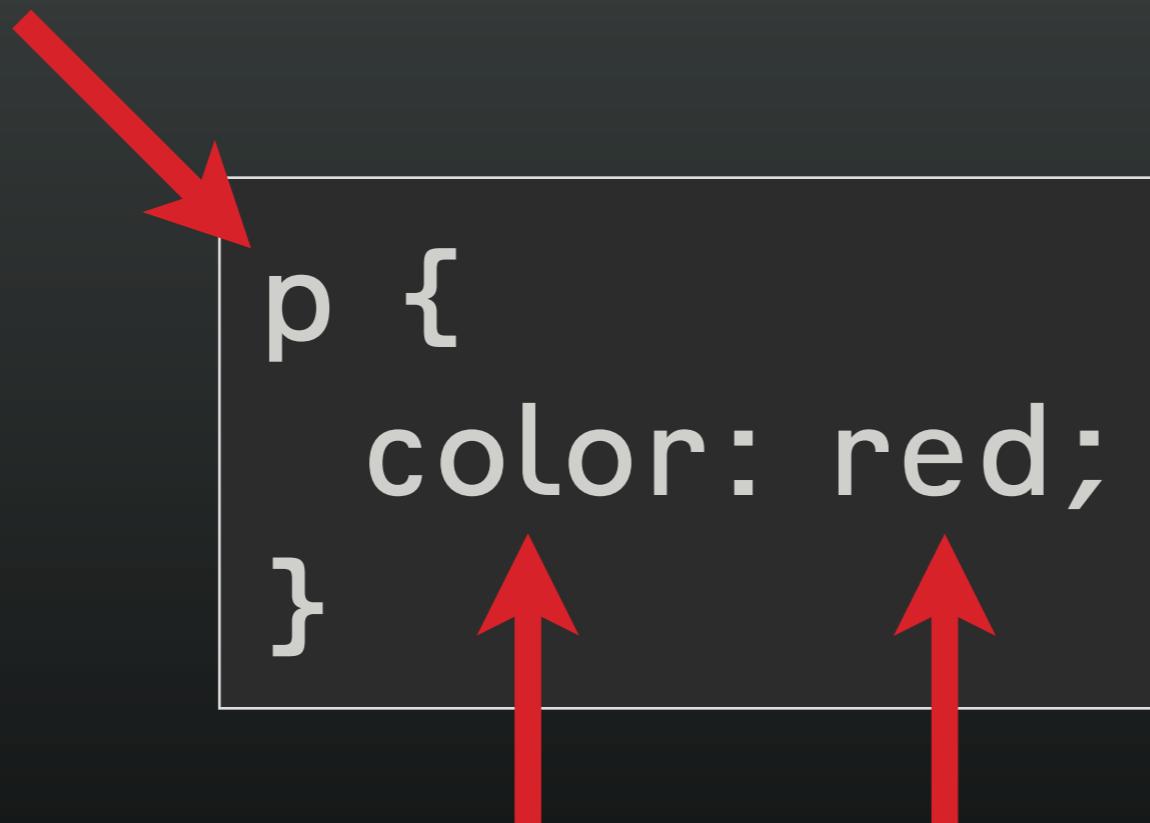
```
<div role="alert">
  <p>Something went wrong.</p>
</div>
```

```
<div role="alertdialog">
  <p>Something went wrong.</p>
  
</div>
```

# Parsing errors

```
p {  
  color: red;  
}
```

# Parsing errors



# Parsing errors

```
p {  
  color: red;  
  font-weight: bold;  
}
```

# Parsing errors



# Parsing errors

```
p {  
  color: #ccc;  
  color: rgba( 0, 0, 0, .5 );  
}
```

# Parsing errors

```
html[lang] p {  
  color: #ccc;  
  color: rgba( 0, 0, 0, .5 );  
}
```

# Parsing errors

```
@-moz-document url-prefix() {  
    html[lang] p {  
        color: #ccc;  
        color: rgba( 0, 0, 0, .5 );  
    }  
}
```

```
#intro {
    /* Basic Layout */
}

/* ... */

body[id=css-zen-garden] #intro {
    /* Advanced Layout */
}
```

**CSS ZEN GARDEN**  
FOCUSING THE MIND... "BY DESIGN"

**the road to enlightenment**

Untiring a dark and dreary road lay the past  
relics of browser-specific tags, incompatible DOCTYPEs,  
and broken CSS support.

Today, we must clear the mind of past practices.  
Web enlightenment has been achieved thanks to  
the tireless efforts of folk like the W3C, WebP and  
the major browser creators.

The CSS Zen Garden invites you to relax and  
meditate on the important lessons of the masters.  
Begin to see with clarity. Learn to use the (yet to  
be) time-honored techniques in new and  
innovating fashion. Become one with the web.

**SO WHAT IS THIS ABOUT?**

There is clearly a need for CSS to be taken  
seriously by graphic artists. The Zen Garden aims  
to excite, inspire, and encourage participation. To  
begin, view some of the existing designs in the list.  
Clicking on any one will load the style sheet into this  
very page. The code remains the same, the only thing  
that has changed is the external.css file. Yes, really.

CSS allows complete and total control over the style  
of a hypertext document. The only way this can be  
illustrated in a way that gets people excited is by  
demonstrating what it can truly be, once the reins are  
placed in the hands of those able to create beauty  
from structure. To date, most examples of neat tricks  
and hacks have been demonstrated by structureheads  
and coders. Designers have yet to make their mark.  
This needs to change.

**PARTICIPATION**

Graphic artists only please. You are modifying this  
page, so strong CSS skills are necessary, but the  
examples that are commented well enough that even  
CSS novices can use them as starting points. Please  
see the [CSS Resource Guide](#) for advanced tutorials  
and tips on working with CSS.

You may modify the style sheet in any way you wish,  
but not the HTML. This may seem daunting at first if  
you've never worked this way before, but follow the  
linked links to learn more, and use the sample files  
as a guide.

Download the sample [index.html](#) and [css.css](#) to work on  
a copy locally. Once you have completed your  
masterpiece (and please, don't submit half-finished work)  
upload your .css file to a web server under your  
control. [Send us a link](#) to the file and if we choose to  
use it, we will spider the associated images. Final  
submissions will be placed on our server.

**BENEFITS**

Why participate? For recognition, inspiration, and a  
resource we can all refer to when making the case for  
CSS-based design. This is surely needed, even  
today. More and more major sites are taking the leap,  
but not enough have. One day this gallery will be a  
historical curiosity; that day is not today.

**REQUIREMENTS**

We would like to see as much CSS1 as possible.  
CSS2 should be limited to widely-supported  
elements only. The CSS Zen Garden is about  
functional, practical CSS and not the latest bleeding-  
edge tricks viewable by 2% of the browsing public.  
The only real requirement we have is that your CSS  
validates.

Unfortunately, designing this way highlights the flaws  
in the various implementations of CSS. Different  
browsers display differently, even completely valid  
CSS at times, and this becomes maddening when a  
fix for one leads to breakage in another. View the  
[Resources](#) page for information on some of the fixes  
available. Full browser compliance is still sometimes  
a pipe dream, and we do not expect you to come up  
with pixel-perfect code across every platform. But do  
test as many as you can. If your design doesn't  
work in at least IE5-Vista and Mozilla (run by over 90%  
of the population), chances are we won't accept it.

© 2002 Brad Frost without editorial permission. [Dissent](#)

more information, contribute, buy me a beer, receive free personal consultation

```
#intro { /* Basic Layout */
}

/* ... */

[foo], #intro { /* Advanced Layout */
}
```

**zen Garden**

**the road to enlightenment**

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and broken CSS support.

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placed in the hands of those able to create  
beauty from structure. To date, most examples of neat tricks  
and hacks have been demonstrated by structureheads  
and coders. Designers have yet to make their mark.  
This needs to change.

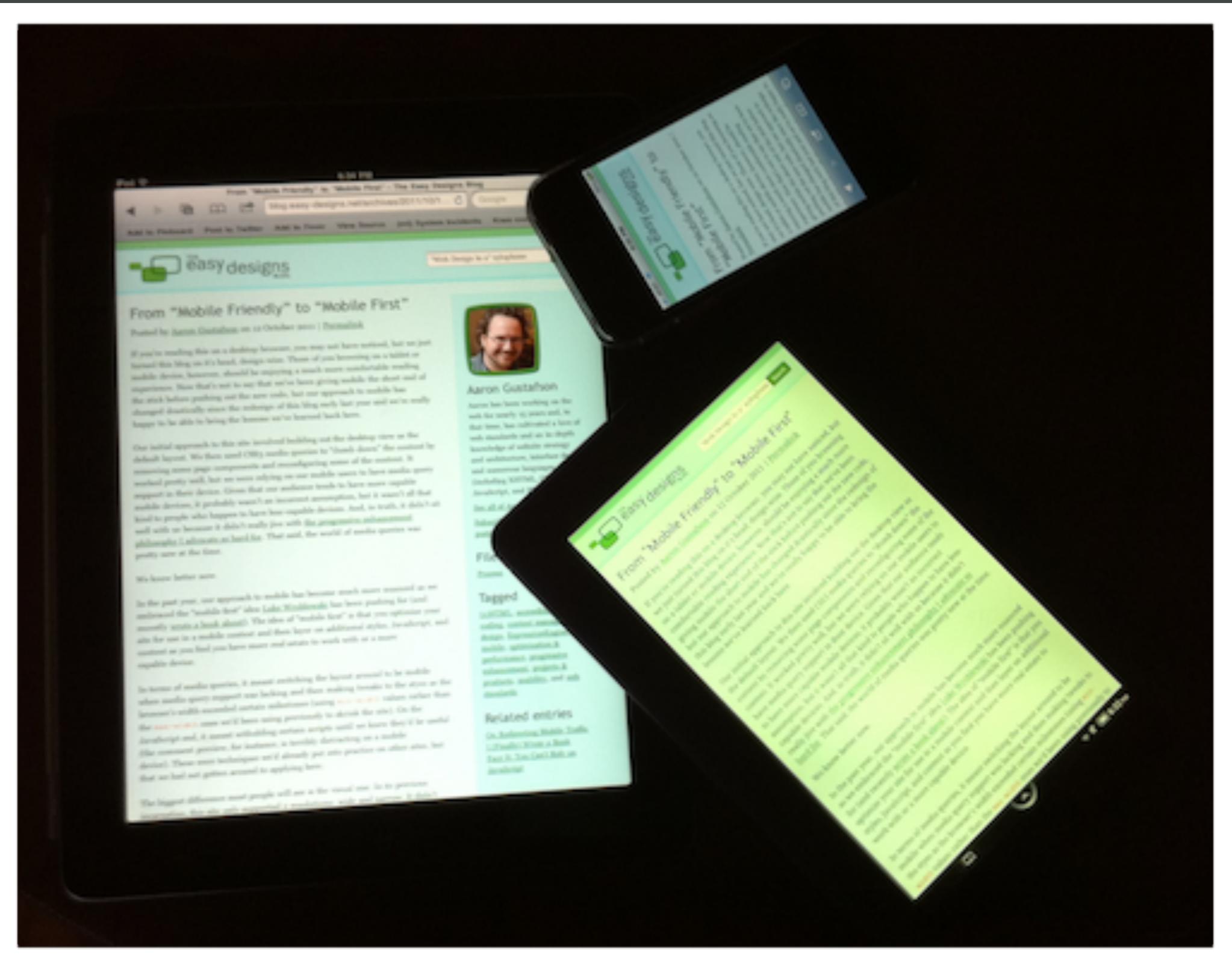
**participation**

**dutchcatt**

zen Garden

# Parsing errors

```
@import 'not-for-IE7-or-below.css' screen;  
  
@media screen, print, refrigerator {  
    /* IE will get these rules */  
}
```



# @Media blocks

```
@media screen {  
  /* Styles for screen media only */  
}
```

# @Media blocks+

```
@media screen and (max-width:450px) {  
    /* Styles for screen media when browser  
       is 450px wide or below */  
}
```

# Don't do this

```
@media  
  screen and (min-device-width:1024px)  
    and (max-width:989px),  
  screen and (max-device-width:480px),  
  screen and (max-device-width:480px)  
    and (orientation:landscape),  
  screen and (min-device-width:481px)  
    and (orientation:portrait) {  
    /* Layout for narrower desktop (below 990px)  
     or  
     iPhone running iOS 3 (or equivalent)  
     or  
     iPhone running iOS 4 (or equivalent) in "landscape" view  
     or  
     iPad (or equivalent) in "portrait" view */  
}
```

# Mobile First w/ media queries

```
/* Universal Layout */  
  
@media screen {  
    /* Styles for all screens */  
}  
  
@media screen and (min-width:481px) {  
    /* Styles for all screens 480px+ width */  
}  
  
@media screen and (min-width:754px) {  
    /* Styles for all screens 754px+ width */  
}
```



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knowledge about things  
inside the office and out in  
the cloud we can assist  
your team with just about  
anything. [Download our  
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## Services

What we can provide.

Content Management  
Support  
[Support](#)



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## Services

What we can provide.



### Content Management Support

We can install the appropriate CMS software on the server so you can manage the content of your site with ease.



### Load Balancing

Do you anticipate a high volume of users on your site? Using custom software, we can direct a large flux of visitors to various servers so that your site doesn't crash.



### Email Configuration

We can help you work with basic email services that come with most hosting solutions. If you need more from these types of

services, we can work with more advanced email solutions like Microsoft Exchange.

# UPFRONT SUPPORT

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Load balancing

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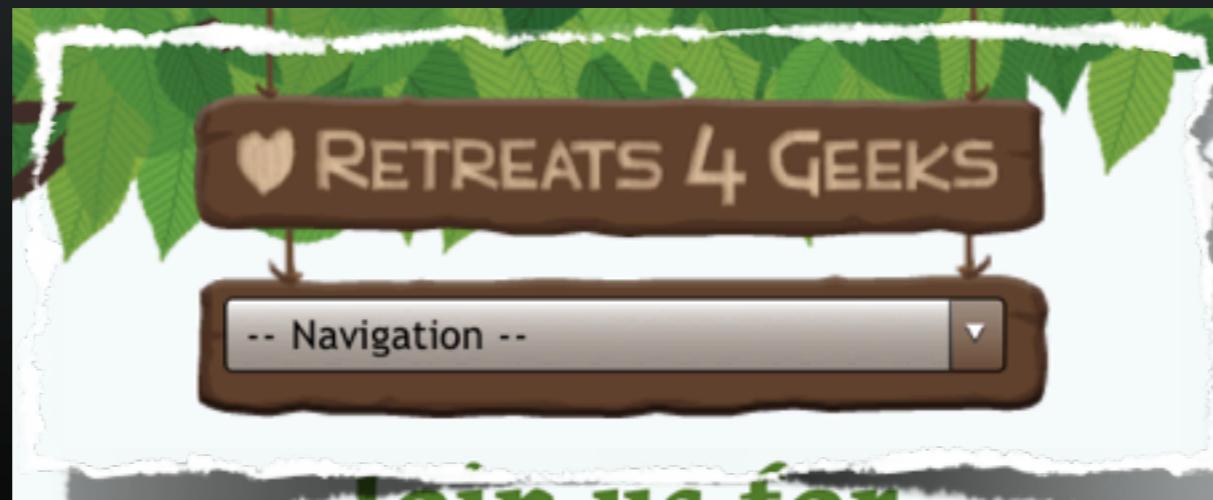
Office Hours

Monday thru Friday  
9 a.m. – 5 p.m. Pacific

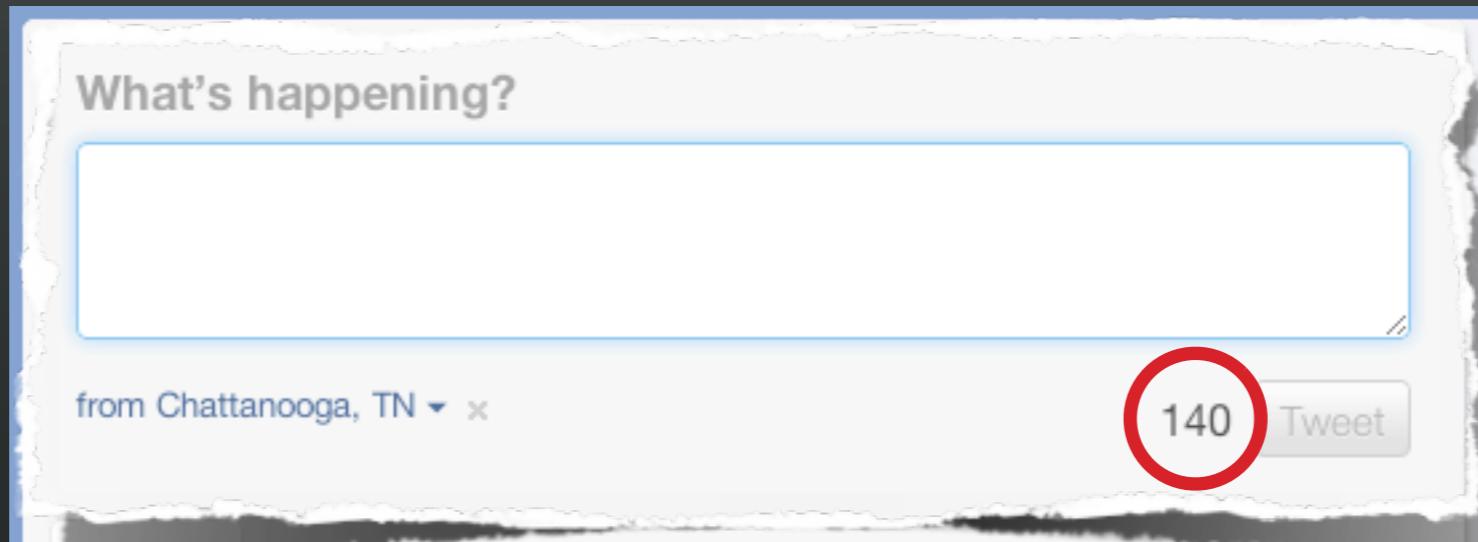
# Mobile First w/ media queries

```
#hd {  
  background: url(hd-bg-small.png) repeat-x 50% 50%;  
}  
  
#hd .logo a {  
  background: url(logo-small.png) no-repeat 50% 0;  
  display: block;  
  width: 240px;  
  height: 109px;  
  /* ... */  
}  
  
@media screen and (min-width: 481px) {  
  #hd {  
    background: url(hd-bg.png) no-repeat 50% 52px;  
  }  
  
  #hd .logo a {  
    background-image: url(logo.png);  
    width: 342px;  
    height: 155px;  
  }  
}
```

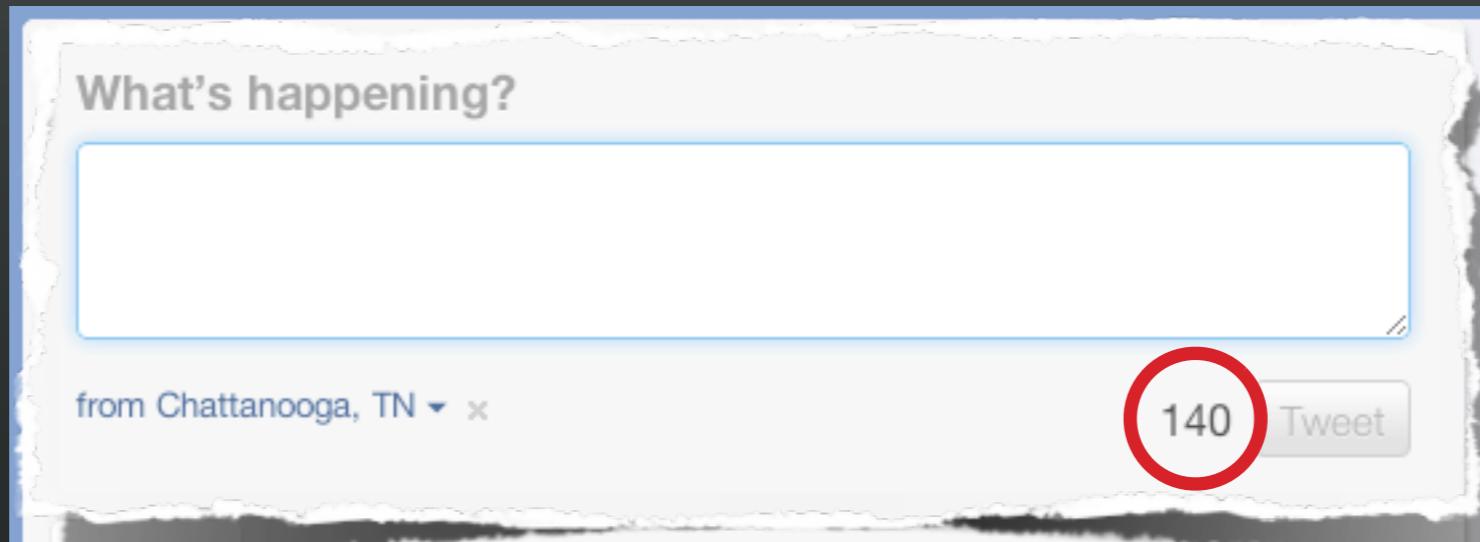
# PE with JavaScript



# PE with JavaScript

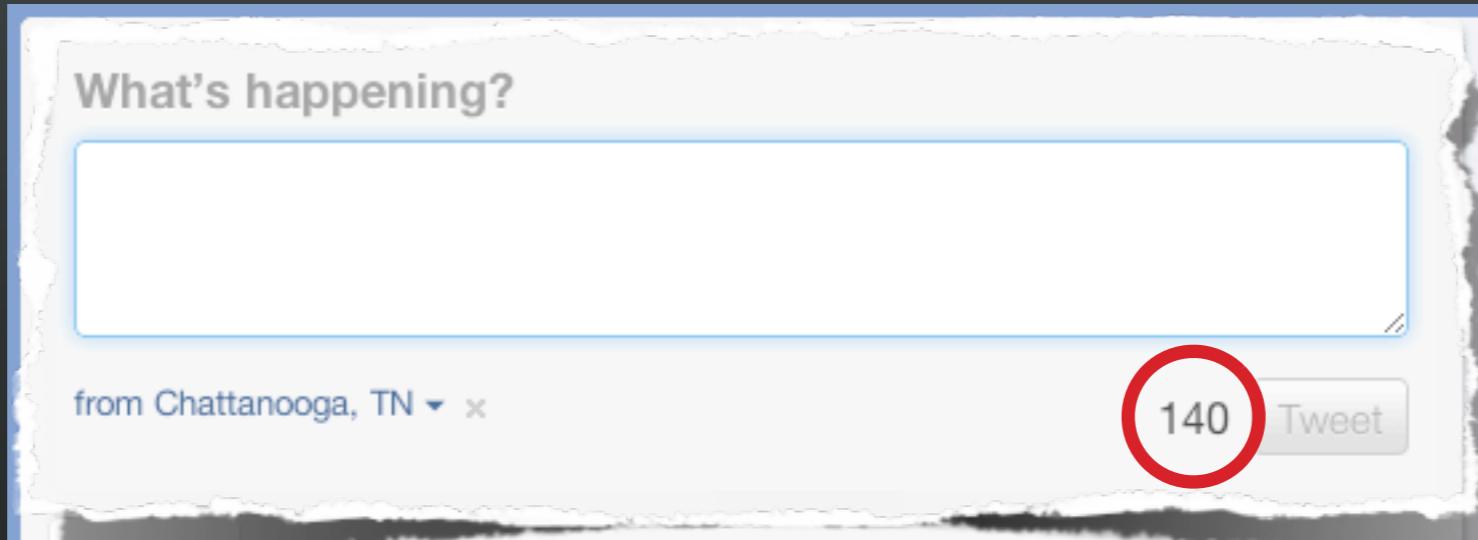


# PE with JavaScript



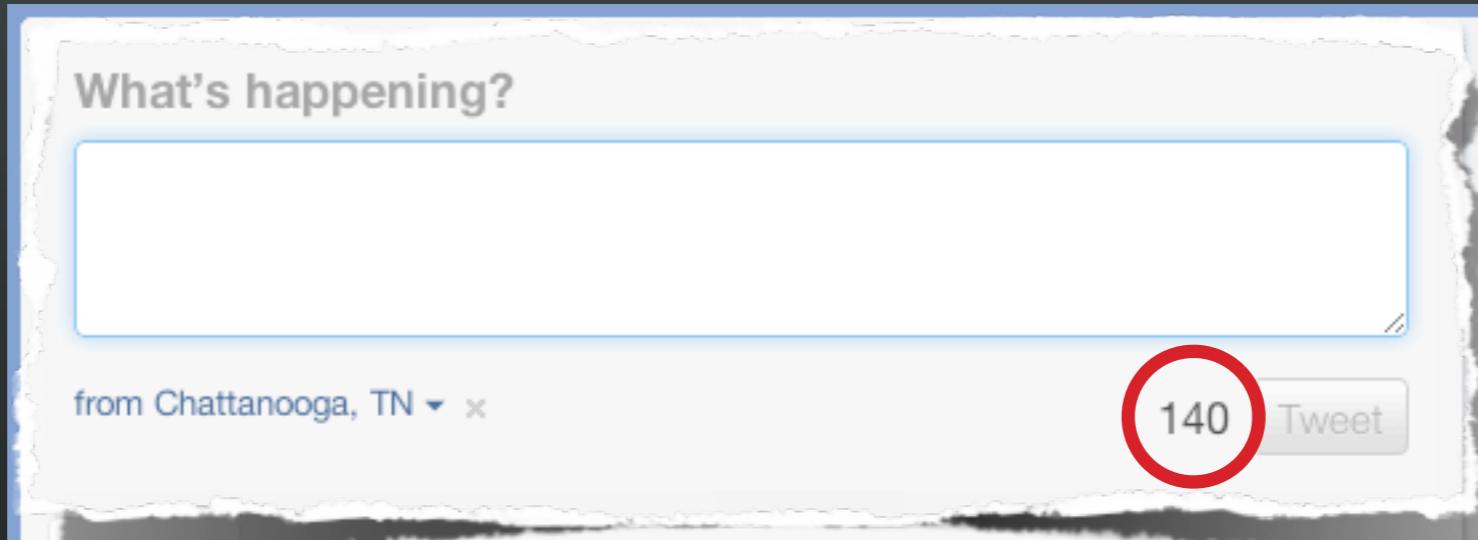
```
<input class="tweet-counter" value="140" disabled="disabled">
```

# PE with JavaScript



```
<span id="chars_left_notice" class="numeric">
  <strong id="status-field-char-counter"
    class="char-counter">140</strong>
</span>
```

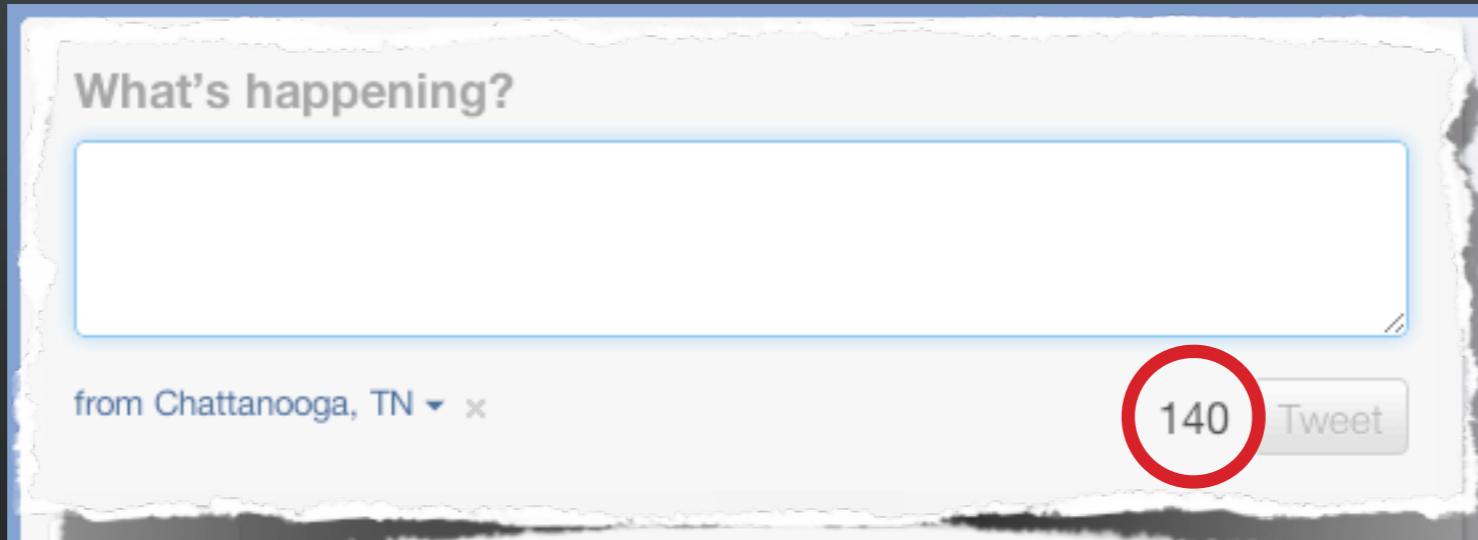
# PE with JavaScript



```
<span class="tweet-counter">140<br/><b class="hidden"> characters remaining</b></span>
```

```
.hidden {<br/>  position: absolute;<br/>  left: -999em;<br/>}<br/>}
```

# PE with JavaScript

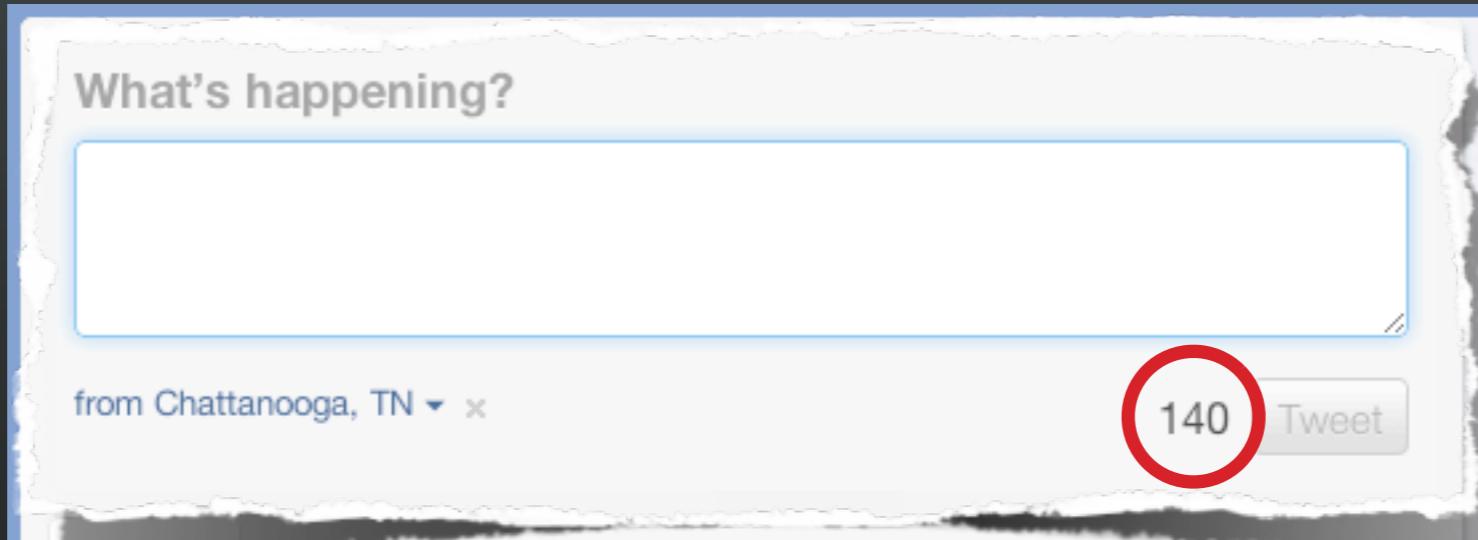


```
<span class="tweet-counter">maximum of 140 characters</span>
```



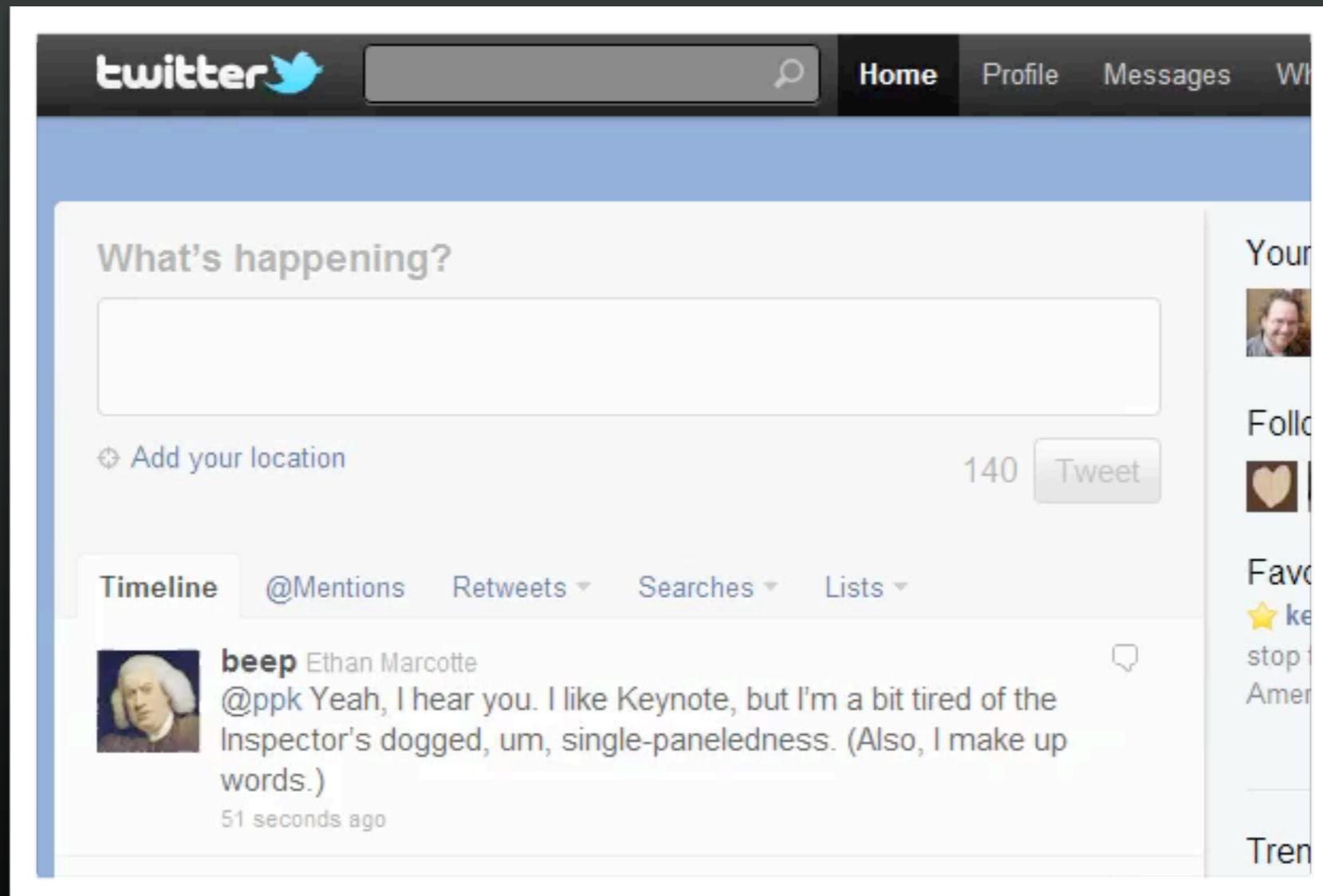
```
<span class="tweet-counter">140
<b class="hidden"> characters remaining</b></span>
```

# PE with JavaScript & ARIA



```
<span aria-live="polite" aria-atomic="true"  
      class="tweet-counter">140<b class="hidden">  
      characters remaining</b></span>
```

# PE with JavaScript & ARIA



# PE with JavaScript & ARIA

## Pumpkin Pie

### OVERVIEW

Whether you're hosting a festive party or a casual get-together with friends, our Pumpkin Pie will make entertaining easy!

**Original recipe yield:** 1 × 9-inch deep dish pie

**Prep Time:** 10min

**Cook Time:** 1hr

**Ready In:** 1hr 10min



### INGREDIENTS

1 (9in) unbaked deep dish pie crust  
½ cup white sugar  
1 tsp ground cinnamon  
½ tsp salt  
½ tsp ground ginger  
¼ tsp ground cloves  
2 eggs  
1 can (15oz) pumpkin puree  
1 can (12fl oz) evaporated milk

### DIRECTIONS

1. Preheat oven to 425°F
2. Combine sugar, salt, cinnamon, ginger and cloves in small bowl.
3. Beat eggs lightly in large bowl.
4. Stir in pumpkin and sugar-spice mixture.

# PE with JavaScript & ARIA

**Pumpkin Pie**

OVERVIEW    INGREDIENTS    DIRECTIONS    NUTRITION

Whether you're hosting a festive party or a casual get-together with friends, our Pumpkin Pie will make entertaining easy!

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**Cook Time:** 1hr  
**Ready In:** 1hr 10min



**role="application"**  
**aria-activedescendant="folder-1"**

# PE with JavaScript & ARIA

role="tablist"

## Pumpkin Pie

OVERVIEW    INGREDIENTS    DIRECTIONS    NUTRITION

Whether you're hosting a festive party or a casual get-together with friends, our Pumpkin Pie will make entertaining easy!

**Original recipe yield:** 1 × 9-inch deep dish pie

**Prep Time:** 10min

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**Ready In:** 1hr 10min



# PE with JavaScript & ARIA

role="tab"  
aria-selected="true"  
aria-controls="folder-1"

**Pumpkin Pie**

**OVERVIEW**   **INGREDIENTS**   **DIRECTIONS**   **NUTRITION**

Whether you're hosting a festive party or a casual get-together with friends, our Pumpkin Pie will make entertaining easy!

**Original recipe yield:** 1 × 9-inch deep dish pie

**Prep Time:** 10min  
**Cook Time:** 1hr  
**Ready In:** 1hr 10min



# PE with JavaScript & ARIA

role="tab"  
aria-selected="false"  
aria-controls="folder-4"

**Pumpkin Pie**

OVERVIEW INGREDIENTS DIRECTIONS NUTRITION

Whether you're hosting a festive party or a casual get-together with friends, our Pumpkin Pie will make entertaining easy!

**Original recipe yield:** 1 × 9-inch deep dish pie

**Prep Time:** 10min  
**Cook Time:** 1hr  
**Ready In:** 1hr 10min



# PE with JavaScript & ARIA

## Pumpkin Pie

OVERVIEW INGREDIENTS DIRECTIONS NUTRITION

Whether you're hosting a festive party or a casual get-together with friends, our Pumpkin Pie will make entertaining easy!

**Original recipe yield:** 1 × 9-inch deep dish pie

Prep Time: 10min  
Cook Time: 1hr  
Ready In: 1hr 10min



```
role="tabpanel"
aria-hidden="false"
aria-labelledby="folder-1-tab"
```

# PE with JavaScript & ARIA

## Pumpkin Pie

**OVERVIEW**   **INGREDIENTS**   **DIRECTIONS**   **NUTRITION**

Whether you're hosting a festive party or a casual get-together with friends, our Pumpkin Pie will make entertaining easy!

**Original recipe yield:** 1 x 9-inch deep dish pie

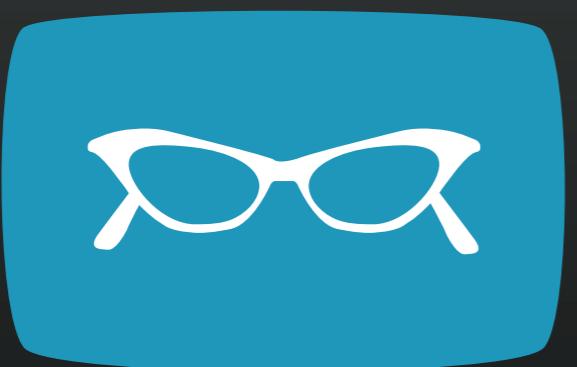
**Prep Time:** 10min  
**Cook Time:** 1hr  
**Ready In:** 1hr 10min



**Pumpkin pie Mozilla Firefox**  
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# Progressive Enhancement & Mobile

by Aaron Gustafson  
@AaronGustafson

Further reading:

<http://adaptivewebdesign.info>

<http://blog.easy-designs.net>

<http://mobilewebbestpractices.com>

Slides available at

<http://slideshare.net/AaronGustafson>

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