

# Advanced CSS Techniques

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# Overview

- ⦿ Brief history of CSS (How did we get here)
- ⦿ Quirks Mode -VS- Strict Mode
- ⦿ Doctypes, and the Box Model
- ⦿ Hacking CSS support for IE
- ⦿ The future of CSS (Table layouts done right)
- ⦿ CSS Frameworks
- ⦿ Advanced Tips and Tricks

# History

- ⦿ CSS wasn't originally intended for layout. IE3
- ⦿ Look at a typical site and identify the grid
- ⦿ What was the easiest way to make the grid work?... Tables... so what's the problem?
- ⦿ HTML Tables are intended for the display of spreadsheet-like tables of data.
- ⦿ Designers stick the blocks of their pages into table cells, forming the two-dimensional grids they craved.

# History cont.

- Over time CSS support improved and when IE5 was released some bold developers created ways to achieve CSS layouts without the use of tables.
- IE 6 released in August 2001 further improving standards compliance which allowed for even more complex CSS layouts, and then... nothing.
- IE development stopped for almost 4 years. IE 7 beta released July 2005.
- Internet Explorer 7 was finally released to the public on October 18, 2007 (over 6 years after IE 6)

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# Quirks Mode -VS- Strict Mode

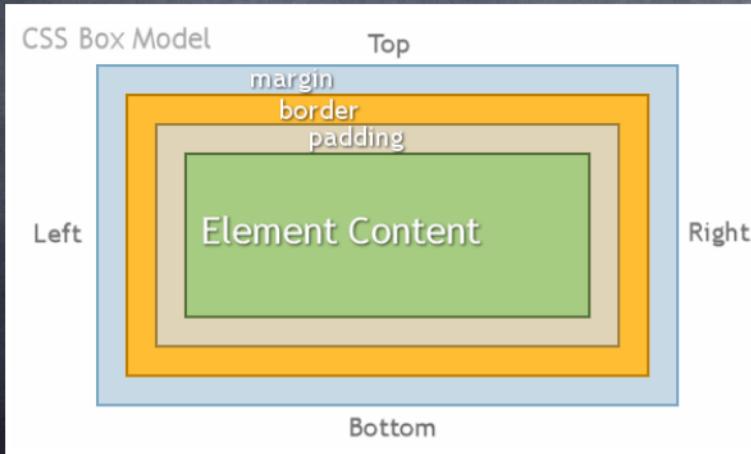
- ⦿ What is quirks mode and why does it exist?
  - ⦿ <http://www.quirksmode.org/css/quirksmode.html>
- ⦿ A browser feature that was implemented for IE6 and later browsers to continue rendering old sites according to the quirks (original proprietary) rules, if so desired. **Note:** IE 5 and earlier browsers are permanently locked in quirks mode.
- ⦿ Standards mode allows developers who “know what they are doing” to force the browser to be more standards compliant. How?

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# Doctypes, and the Box Model

- XHTML 1.0 Transitional (allows target) and forces the browser to render in almost strict or “A” mode.
- Detect your mode (<http://www.snippetstash.com/public/126>)
- Box Model Diagram (<http://www.w3.org/TR/CSS2/box.html>)



- Complication: almost strict mode
  - \*Images had bottom margin (not removable)
- In strict mode <img /> is an inline element, which means that some space should be reserved for possible descender characters like the letters g, j, or q. Of course an image doesn't have descender characters, so the space was never used, but it still had to be reserved.
- The solution was to explicitly declare images block level elements: img {display: block}.
- Nonetheless browser vendors, Mozilla especially, thought this was such a confusing situation that they introduced "almost strict mode". This was defined as strict mode, but with images continuing to be blocks, and not inline elements.
- Most common doctypes, trigger almost strict mode. The treatment of images is by far the most important difference between almost strict mode and really strict mode.
- <http://hsivonen.iki.fi/doctype/>

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# Hacking CSS support for IE

- ⦿ CSS Resets

- ⦿ Eric Meyer (<http://meyerweb.com/eric/thoughts/2007/05/01/reset-reloaded/>)

- ⦿ Yahoo CSS Reset (<http://developer.yahoo.com/yui/reset/>)

- ⦿ Reproduce Bugs ([http://css.tests.free.fr/en/debugging\\_css\\_msie.php](http://css.tests.free.fr/en/debugging_css_msie.php))

- ⦿ Hacks & Conditional Comments

- ⦿ <http://www.maratz.com/blog/archives/2005/06/16/essentials-of-css-hacking-for-internet-explorer/>

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# The Future of CSS

## A new era - IE 8

- ⦿ When IE 8 arrives we will finally have all major browsers supporting standards compliance according to the CSS2.1 spec.
- ⦿ IE 8 passes the Acid2 tests
  - ⦿ <http://www.webstandards.org/action/acid2/guide/>
- ⦿ One of the major features???
  - ⦿ CSS Tables for easy layout! (demo later)

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# CSS Frameworks

- What is it? - a predefined set of html and css that gives the user a grid upon which to place items for layout.
- Some popular flavors...
  - 960 Grid System (<http://960.gs/>)
  - Blueprint (<http://www.blueprintcss.org/>)
  - Elements (<http://elements.projectdesigns.org/>)

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# Advanced Tips & Tricks

- ➊ Tools of the trade
- ➋ Intro tips
- ➌ Pixels VS EM
- ➍ Positioning info
- ➎ 2 Column floated layout
- ➏ Footer stuck to the bottom of a page
- ➐ Styling forms and buttons

# Tools of the trade

- ⦿ A Virtual Machine (I prefer Windows XP still)
- ⦿ IE Tester - <http://www.my-debugbar.com/wiki/IETester/HomePage>
- ⦿ Firebug - inspect mode is really convenient
- ⦿ Firefox plugin - Web Developer (validating)
- ⦿ <http://riddle.pl/emcalc/>
- ⦿ <http://www.cleancss.com/>
- ⦿ <http://colorschemedesigner.com/>
- ⦿ **TIP!** :> Keep your CSS Neat and Alphabetized  
- <http://alphabetizer.flap.tv/index.php>

# Intro Tips

- ➊ Different ways to target elements  
(depends on where the indicator is specified)
  - ➋ `a.class_name` (can have multiple classes)
  - ➋ `ul#ul_id_name li` (rarely used)
  - ➋ `#ul_id_name li` (one ID per page)

# Pixels VS EM

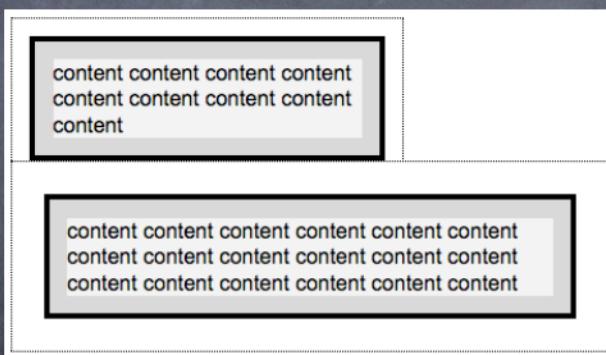
(who what where when why to resize)

- ➊ My friend Brian is partially blind and he says use Px not EM... people will resize with the computer not the browser
- ➋ What is an em? Classically, an em (pronounced emm) is a typographer's unit of horizontal spacing and is a sliding (relative) measure. One em is a distance equal to the text size. In 10 pixel type, an em is 10 pixels; in 18 pixel type it is 18 pixels. Thus 1em of padding is proportionately the same in any text size.
- ➌ <http://www.clagnut.com/blog/348/>

# Positioning

- ⦿ Normal flow is the default scheme used for positioning. It applies to any element that does not specify position:absolute or fixed and is not floated.
- ⦿ In this scheme, block boxes flow vertically starting at the top of their containing block with each placed directly below the preceding one. Inline boxes flow horizontally from left to right.

- You should note that vertical margins are collapsed in the normal flow. That is, instead of adding the bottom margin of a box to the top margin of the one immediately below it, only the larger of the two values is used, as illustrated here.



<http://www.brainjar.com/css/positioning/default.asp>

# 2 Column Floated Layout

## ❶ Requirements

- ❷ Explicit widths of each column
- ❸ One of the 2 column's background's needs to be a solid color

# Footer Stick!

- ➊ Define all heights as 100% up through “body” and “html” for container elements.
- ➋ Have a footer outside the “container”
- ➌ Define a “push” area
- ➍ Make sure the heights and negative margins are the same.
- ➎ Advanced tip... show full expanding header and footer

# Styling Forms

- ⦿ Make the large and consistent across a large set of browsers.
- ⦿ <http://www.thechoppr.com/blog/2008/01/07/applying-css-to-forms/>
- ⦿ Border: <http://www.tizag.com/cssT/border.php>

# Styling Buttons

- ➊ Icon set from FamFamFam
  - ➎ <http://www.famfamfam.com/>
- ➋ Tutorial
  - ➎ <http://particletree.com/features/rediscovering-the-button-element/>

# CSS Menus

- ➊ Drop down

- ➋ <http://www.seoconsultants.com/css/menus/horizontal/>

- ➋ Horizontal expanding

- ➋ [http://green-beast.com/experiments/css\\_menu\\_descriptions.php](http://green-beast.com/experiments/css_menu_descriptions.php)

# IE 8 CSS Tables

- Checkout sitepoint.com and look for  
“Everything you know about CSS is wrong”
- Demo

# General Web Info

## ④ General Web Design Guidelines

- ④ <http://psd.tutsplus.com/designing-tutorials/9-essential-principles-for-good-web-design/>

## ④ Web Safe Fonts

- ④ <http://www.ampsoft.net/webdesign-l/WindowsMacFonts.html>
- ④ Convert to Image first for safe display on the web  
(<http://www.fonts500.com/>)

## ④ Useful resources

- ④ CSS/Design - <http://www.alistapart.com/>
- ④ General Web Development - <http://sitepoint.com>
- ④ Most complete CSS resource - <http://reference.sitepoint.com/css>
- ④ <http://www.webcredible.co.uk/user-friendly-resources/css/css-tricks.shtml>