

# Creating Perfect CSS Layouts

Stephanie Sullivan



# Agenda

- ▶ Basic principles of CSS placement
- ▶ Positioning vs. Floating
- ▶ Choosing a layout type
- ▶ Tricks and Tips
- ▶ Q&A

# Stephanie Sullivan

- ▶ Founder/Principal - W3Conversions - Web Standards and Accessibility Company
- ▶ Corporate Trainer, Consultant & sub-contractor for XHTML/CSS development
- ▶ Adobe Community Expert
- ▶ Co-Lead Adobe Task Force for Web Standards Project (WaSP)
- ▶ Partner - CommunityMX.com
- ▶ Author - DW MX 2004 Magic, Web Developer's & Designer's Journal (formerly MXDJ), Adobe's DevNet Center, and other web publications
- ▶ List Mom for WebWeavers & moderator for SEM 2.0
- ▶ Coming soon - Mastering CSS with Dreamweaver CS3 by New Riders - authored with Adobe's Greg Rewis
- ▶ Contact - [stef@w3conversions.com](mailto:stef@w3conversions.com)

# Basic Principles

# Logical Markup

- ▶ Content should be marked up relating to its inherent meaning
- ▶ A heading should be an h1, h2, h3, h4...
- ▶ Text should be in P elements
- ▶ Lists should be used (ordered, unordered and definition)
- ▶ This is called semantic markup. It's simply the logical meaning of the element itself.

# Document Flow

- ▶ The “flow” is the natural order of occurrence of the elements within the HTML
- ▶ When working with CSS for page layout, the document flow impacts the visual position of page elements – depending upon the method of floating or positioning
- ▶ Don't fight the flow, use it!

# The Display Property

HTML elements, by nature, have one of two renderings:

- ▶ Inline
  - ▶ Inline-level elements render horizontally until they run out of space, then wrap to the next line.
  - ▶ They only take as much space as they need  
Examples: `img`, `span`, `a`, `em`, `strong`
- ▶ Block
  - ▶ Block-level elements render vertically as if there's a line break above and below them
  - ▶ They take up 100% of their parent container  
Examples: `p`, `div`, `h1`, `ul`, `blockquote`

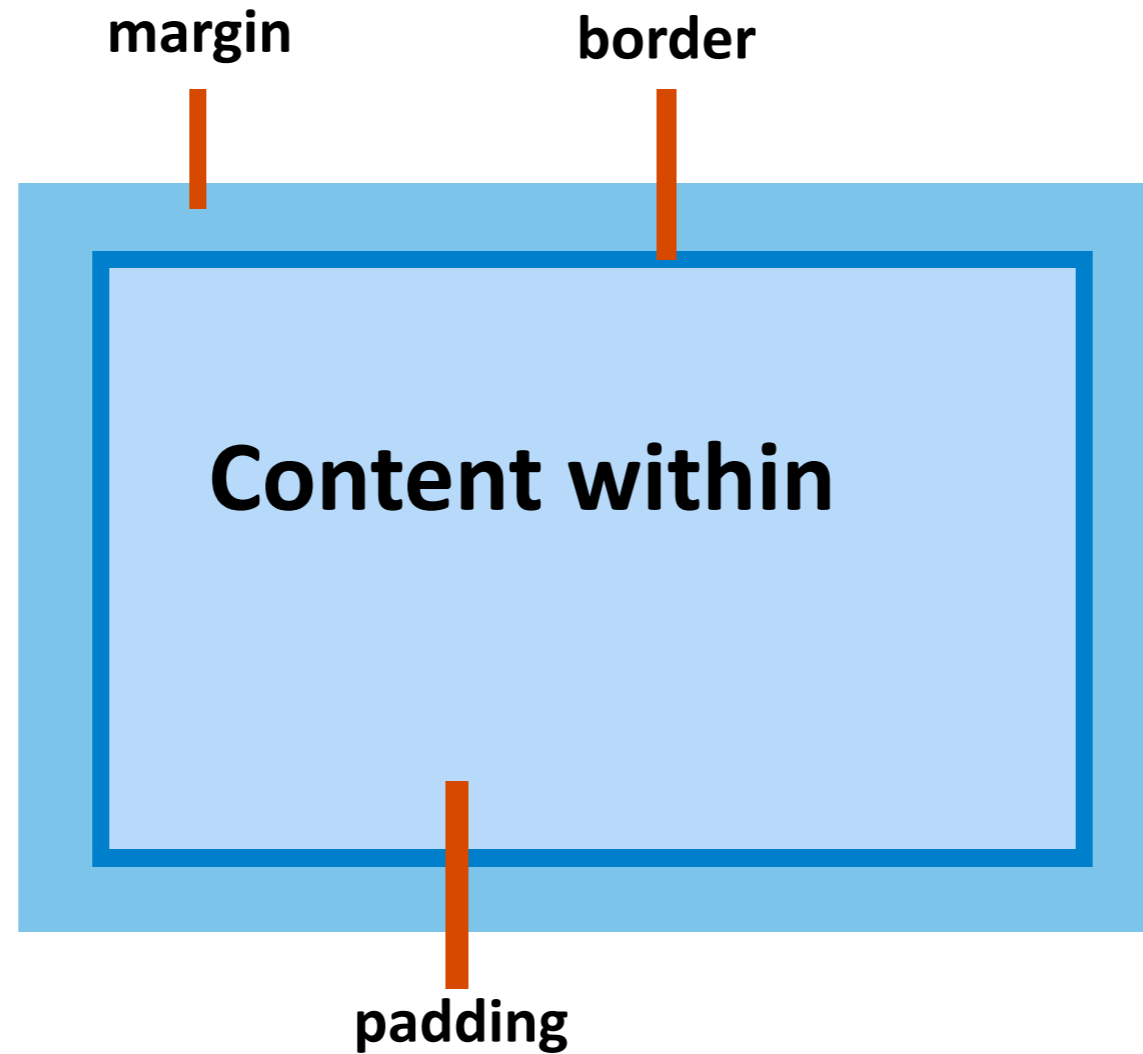
# The Display Property

CSS can be used to change the display property of an element

- ▶ **display: block** can be given to a span or an image to make them stack vertically
- ▶ **display: inline** is sometimes used as a fix for Internet Explorer's 3 px bug (added to your math)
- ▶ **display: none** causes a block to render no box at all
- ▶ Changing the display property of an element changes its presentation, but not the nature of the element itself.



# Understanding the Box Model



# Types of Positioning

- ▶ The four types of positioning available using CSS:
- ▶ Static
  - ▶ The default location of the element in the document flow
- ▶ Relative
  - ▶ The element's position is relative to its position in the document flow
- ▶ Absolute
  - ▶ A "XY" coordinate based upon its parent container
- ▶ Fixed
  - ▶ A "XY" coordinate based on the viewport

# Principles of Floating

- ▶ A float must be given a width
- ▶ A float must be given a directional value of left or right (there is no top or bottom)
- ▶ If you want a float to appear alongside a non-floated element, it must precede that element in the source order of the document
- ▶ A float never covers text or inline images
- ▶ A float will appear next to another element until there is not enough space, then it will drop down to the next line

# Principles of Clearing

- ▶ Since a float is taken "out of the flow" of the document, floats inside another container must be cleared in order for their parent container to enclose them completely
- ▶ A clearing element in a *non-floated* div will clear **all** floated elements
- ▶ A clearing element within a *floated* div will clear **only** within that div
- ▶ There are a variety of ways to clear:
  - ▶ clearfix on div itself
  - ▶ break or empty div with clearing class

# Float Drop

- ▶ Evident when one div starts below the level of the div next to it
- ▶ **Causes:**
- ▶ An element, like an image, that is wider than can fit in the space provided. The div will move down until it can fit next to the floats. (Make sure clients who are editing their own sites are aware of their size specs and limitations.)
- ▶ Bad math or the 3px text jog in Internet Explorer (unaccounted for in your math)

# Five Types of Layouts

- ▶ Absolute Positioning
- ▶ Fixed
- ▶ Liquid
- ▶ Elastic
- ▶ Hybrid

# Absolutely Positioned

- ▶ Fixed, pixel-based width
  
- ▶ Pros / Cons
  - ✓ Float drop not a problem since there is no floating
  - ✓ Headers and footers are simple due to set width
  - ⊙ Columns are absolutely positioned and taken out of the flow of the document - footer will not “see” them

## Fixed

- ▶ Specific pixel width - centered
- ▶ Pros / Cons
  - ✓ Full background color on columns is easy to achieve (faux columns)
  - ✓ Easy to know exact dimensions for elements within the main content area and avoid float drop\*
  - ⊙ Columns do not expand with increased text size



## Liquid

- ▶ Overall width and columns based on percentage of user's viewport
- ▶ Pros / Cons
  - ✓ Allows for creative use of headers - repeat on X axis or show more when browser is wider
  - ⊙ Background column color more challenging (liquid faux columns)
  - ⊙ More difficult to know exact dimensions for elements to avoid float drop - use min-width

## Elastic

- ▶ Width based on user's default text size
- ▶ Pros / Cons
  - ✓ Layout and columns expand with text size changes not browser width
  - ✓ Allows for creative use of headers - repeat on X axis or show more when browser is wider
  - ⊙ More difficult to know exact dimensions for elements to avoid float drop - use min-width

## Hybrid

- ▶ Overall width based on percentage, while the side columns are based upon em's
  
- ▶ Pros / Cons
  - ✓ Column widths expand with increased text size
  - ✓ Allows for creative use of headers - repeat on X axis or show more when browser is wider
  - ⊙ Still challenging to know exact dimensions for elements to avoid float drop - use min-width

# Q&A

# Resources

- ▶ David Powers - Strip Comments RegEx  
<http://foundationphp.com/tools/>
- ▶ Adobe CSS Advisor beta  
<http://www.adobe.com/go/cssadvisor>
- ▶ Community MX  
<http://www.communitymx.com>
- ▶ W3Conversions  
<http://www.w3conversions.com>
- ▶ Amazon.com (for preorder)  
Mastering CSS with Dreamweaver CS3  
Stephanie Sullivan & Greg Rewis

**Thank You**  
**Danke schön**  
**Dank u wel**  
**Merci beaucoup**