

CSS: Beyond Bootstrap

Cheri Allen for Ada Developers Academy

Today's Agenda

1- Introductions	10 mins
2- CSS Foundation	20 mins
4- Box Model	10 mins
5- Selectors	25 mins
6- Floating	25 mins
6- Resources/Questions	20 mins

Hi My Name Is

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I'm About

- Learning new things every day
- Supporting people in succeeding on their terms
- Building applications that I and my client are proud of
- Making dinosaur noises

I Do

- Rails & Javascript development at NIRD
- Teaching for UW PCE, Girl Develop It!, and King County Library YA programs
- Volunteering at Gay City's LGBT Library, including building a new library management app for them!
- Watch a lot of cat gifs

We Will

- Learn some CSS foundations.
- Do several small practice items.
- Have an afternoon CSS assignment.
- Answer any questions you have about me potentially teaching for Ada.

And You Are?



CSS

- HTML is for organizing information, CSS is for displaying it.
- CSS is kept in its own files, which are included in the HTML, allowing universal styles to be defined in one canonical location.

CSS3

- Replaced images as backgrounds, via curved borders, gradients, shadows.
- Replaced much js with animations, which are faster & more accessible.

Inline vs Block Elements

Inline elements sit politely next to each other.

Block elements take up the whole row with their weird clown accessories.



Inline

- Flows along with text content
- Is subject to [white-space](#) settings in CSS
- Will ignore top and bottom margin settings, but will apply left and right margins, and any padding
- Will ignore the **width** and **height** properties
- If floated left or right, will automatically become a block-level element, subject to all block characteristics

Block

- If no width is set, will expand naturally to fill its parent container
- Can have margins and/or padding
- If no height is set, will expand naturally to fit its child elements (assuming they are not floated or positioned)
- By default, will be placed below previous elements in the markup (assuming no floats or positioning on surrounding elements)

Inline vs Block Examples

Inline	Block
<code></code> <code><sub></code> <code></code> <code><button></code> <code><small></code> <code><input></code> <code><label></code> <code><select></code>	<code><p></code> <code><h*></code> <code><div></code> <code><article></code> <code><section></code> <code><footer></code> <code><nav></code> <code><figure></code>

Inline vs Block

The distinction of block-level vs. inline elements is used in HTML specifications up to 4.01. In HTML5, this binary distinction is replaced with a more complex set of [content categories](#). The "block-level" category roughly corresponds to the category of [flow content](#) in HTML5, while "inline" corresponds to [phrasing content](#), but there are additional categories.

Color Units

Name	red, aliceblue, papayawhip find more: http://www.w3schools.com/html/html_colornames.asp
Hexidecimal	#D5EBAC find more: http://colorpicker.com/
RGB, RGBA	rgb(92, 213, 235) rgba(92, 213, 235, 0.4) find more: http://colorpicker.com/ , http://hslpicker.com/
HSL, HSLA	hsl(285, 36%, 45%) hsla(285, 36%, 45%, 0.96) find more: http://hslpicker.com/

Size Units

Pixels- an absolute size	33px
Percentage- of parent element's size	33%
em- equal to the font-size of the element	3em
rem- equal to the root font size	3rem

Which Rule is Strongest?

If there are conflicting styles applied to an element, the browser gives the most weight to rules that are more **recently defined** and ones that are more **specific**.

Resource

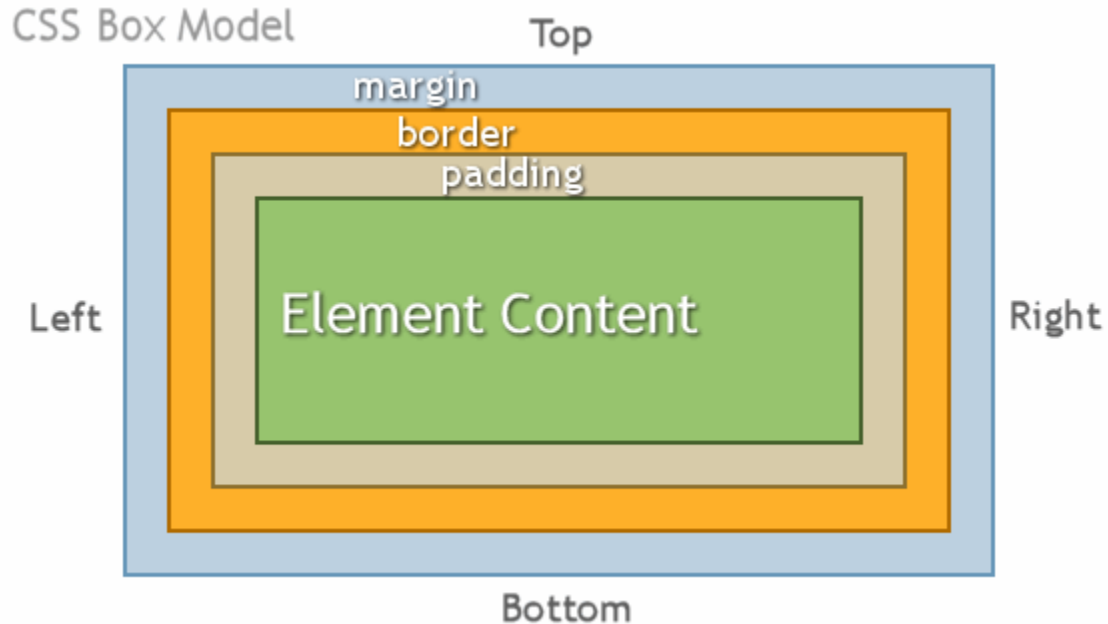
https://github.com/cherimarie/css_exercises

<http://www.w3schools.com/css>

Exercises

- Apply background color to 3 different areas, using 3 different color units
- Make all paragraph elements except ones inside asides orange
- Make the h3 element twice its normal font size

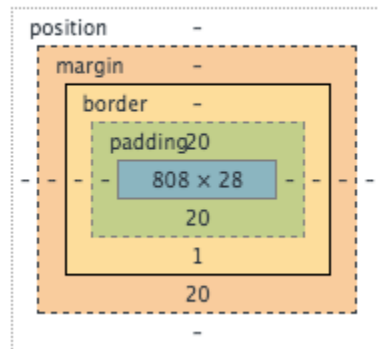
Box Model



Box Model

Use Chrome's "inspect element" function to explore.

```
▶ <div class="header header-logged-in true" role="banner">...</div>
  <div id="start-of-content" class="accessibility-aid"></div>
▼ <div class="site" itemscope itemtype="http://schema.org/WebPage">
  ▶ <div id="js-flash-container">...</div>
  ▶ <div class="pagehead repohead instapaper_ignore readability-menu ">...</div>
  ▼ <div class="container">
    ::before
    ▼ <div class="repository-with-sidebar repo-container new-discussion-timeline">
      ::before
      ▶ <div class="repository-sidebar clearfix">
        ...
```



Sizing an Element

Remember, sizes you apply are to the element's content only. Additional margin, padding, and border values will make the overall size bigger than you had anticipated.

Box Model Simplification Hack

Shhh....

```
element {box-sizing: border-box;}
```

Tells the browser what should be included in height & width of element (in this case, everything in border box) .

Selectors

- Limit use of IDs on elements.
- Instead, use super specific selectors.

nope:

```
#header_image_of_cows {border: 1px red solid;}
```

yep:

```
header img .brand {border: 1px red solid;}
```

CSS Selector Type	Examples
HTML Element Name	p {} img {}
Class or ID	.class-name {} #id-name {}
Pseudo-Class or -Element	a:hover {} input:focus{} p::first-letter {} li::first-child {}
Element by Attribute	a[target] {} a[target="_blank"] {}

Exercises

- Add a border and padding to the aside element
- Turn preformatted text red when user hovers over it
- Add padding to the footer, and change the color of the link in it

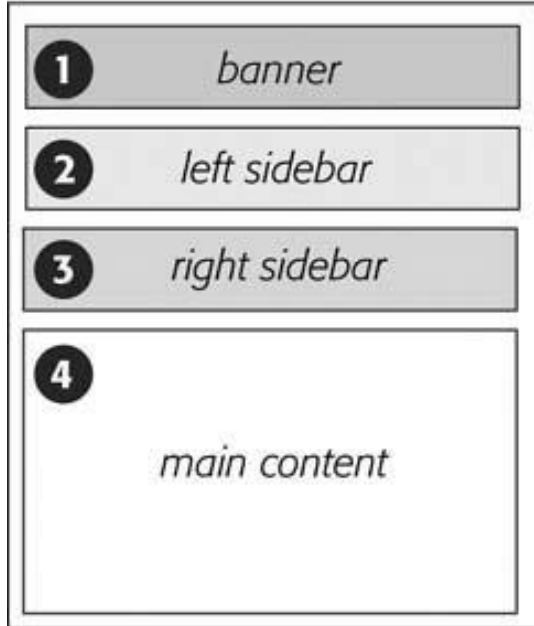
Floating

A floated element is removed from the normal flow of the page. Other elements flow around it.

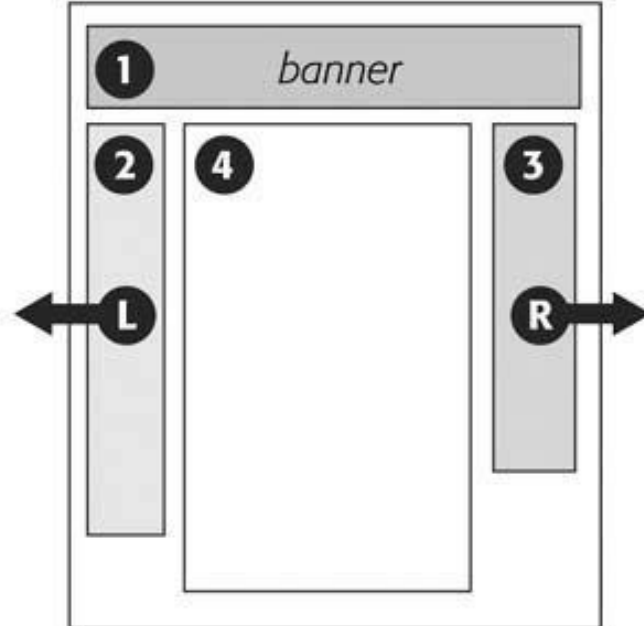


Floating

HTML Source Order



CSS Layout



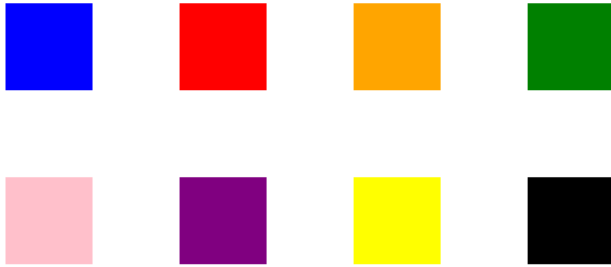
End the Float

Apply a clear style to an element when you want it & later ones to stop flowing around floated elements.

```
.on-the-next-line {clear: both;}
```

Value can be “left”, “right”, or “both”. “Both” is most common.

Float Practice



Float Practice



Float Practice



Afternoon Assignment

Style the provided index.html file to your liking. Must use >50 lines of CSS, and at least 5 styles we did not discuss in class.

Learn More

<https://developer.mozilla.org/en-US/docs/Web/Guide/CSS>

<http://adamschwartz.co/magic-of-css>

<http://webdesign.about.com/od/beginningcss/p/aacss9layout.htm>

Questions?