CSS Styles

CS/IT 490 WD, Fall 2013

Breakdown

- Style Notes

- Colors

- Text

- Dimensions

- Layout

- Miscellaneous

Style Notes

- As we go through different styles, you'll notice that some styles can be broken up or shoved together.

- For example, you could specify a **background image** and **background color** with the "background:" style, or specify them separately with "background-image" and "background-color"

Background

- Properties of a Background:

  – Image

  – Position

  – Repeating

  – Size

  – Color

Background

.myItem { background-image: url("path"); }

Specify a path to a background image, relative to the .css file.

http://www.w3schools.com/cssref/

Background

.myItem { background-position: center center; }

The position can contain (x,y) coordinates as units, x% y% shifted, or simple values like "left top", "center center", "right bottom".

Background

.myItem { background-position: 20px 40px; }

(X,Y) Coordinates:

- This can be in pixels (px)

- This can be in em (unit of font size)

- This can be % of the page

- This can be inches/centimeters (in, cm)

http://www.w3schools.com/cssref/

Background

.myItem { background-position: left top; }

If you use the shortcut positions:

- Horizontally, you can have:
  - left, center, right
- Vertically, you can have:
  - top, center, bottom

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http://www.w3schools.com/cssref/

Background

.myItem { background-repeat: no-repeat; }

Whether or not a background image repeats. You can set this to:

- repeat (both directions)

- repeat-x (repeat horizontally only)

- repeat-y (repeat vertically only)

- no-repeat (no repeating)

Background

.myItem { background-size: 100%; }

Allows you to scale the background image.

- Can specify x,y separately, or together. If only one number is given, then
x = y = value.

- Setting it to "cover" means the image may be cut off but it will scale the full width.

- Setting it to "contain" means the full image will be shown. (Scaled for height to fit)

Background

.myItem { background-color: rgba(0, 0, 0, 0.5); }

Allows you to specify the background color.

- Can use hex code: #FF00FF

- Can specify RGB: (0-255, 0-255, 0-255);

- Can specify RGBA (255, 255, 255, 0.5);

    – Note the last number is a float between 0 and 1 to specify transparency/alpha.

http://www.w3schools.com/cssref/

Background

.myItem {

background: url("img.png") #FF00FF no-repeat;

}

Specify multiple background properties all at the same time.

http://www.w3schools.com/cssref/

Border

- Properties of a Border:
  - Border color
  - Border width
  - Border style
  - Border radius

- You can specify these as separate edges (i.e., border-left-color) or all at once (i.e., border-color, border)

http://www.w3schools.com/cssref/

Border color

.myItem { border-color: #000000; }

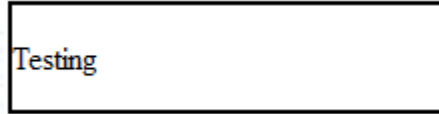Set the border's color. Use hex, RGB, or RGBA. Can specify different edges:

.myItem {
border-left-color: #FF0000;
border-right-color: #00FF00;
border-top-color: #0000FF;
border-bottom-color: #FF00FF;
}

Testing

Border width

.myItem { border-width: 2px; }

Sets thickness of the border.

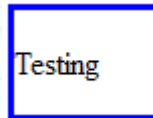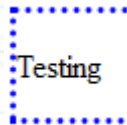| Testing | | Testing | | Testing |

http://www.w3schools.com/cssref/
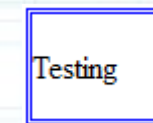
Border style

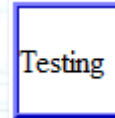.myItem { border-style: solid; }

Can choose different border styles:

- Solid
- Dotted
- Dashed
- Double

- Ridge
- Inset
- Outset
- Groove

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http://www.w3schools.com/cssref/
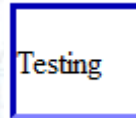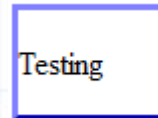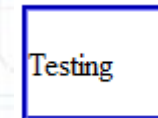
Border radius

.myItem { border-radius: 15px; }

Can make the border have rounded corners (CSS3 feature)

Testing

http://www.w3schools.com/cssref/

Border

.myItem { border: solid 2px #000000; }

Can specify multiple properties at once!

Testing

http://www.w3schools.com/cssref/

Color

.myItem { color: #AAFFEE; }

The Color property changes text color.

- Hex, RGB, RGBA

http://www.w3schools.com/cssref/

Opacity

- Can set an element to be semi-transparent.

- Note that this will cause all children to also be semi-transparent.

- If you just want a semi-transparent background, set the color with RGBA.

Opacity

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- Note that this will cause all children to also be semi-transparent.

- If you just want a semi-transparent background, set the color with RGBA.

http://www.w3schools.com/cssref/

Opacity

```
div.one {
background: rgba( 0, 0, 0, 0.5 );
color: rgb( 255, 0, 255 );
}
```


Background is
semi-transparent but text
is completely magenta.

```
div.two {
background: rgb( 0, 0, 0 );
color: rgb( 255, 0, 255 );
opacity: 0.5;
}
```


Text is semi-transparent

Shadows

- Text Shadow

- Box Shadow

http://www.w3schools.com/cssref/

Text Shadow (CSS3)

.myItem { text-shadow: -2px 4px 5px #000000; }

- Adds shadowing to text

- Shadow horizontal placement

- Shadow vertical placement

- Blur amount (px)

- Color

http://www.w3schools.com/cssref/

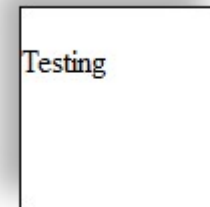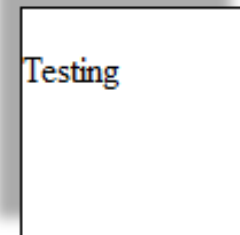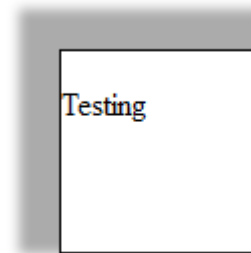# Box Shadow (CSS3)

.myItem { box-shadow: -2px 4px 5px #000000; }

- Create a shadow around a box object

- Horizontal Placement

- Vertical Placement

- Blur

- Spread

- Color

Spread = 10px

Testing

Testing

Testing

Text

- Font Family
- Font Size
- Text Decoration
- Font Style
- Font Weight
- Line Height

- Letter Spacing
- Word Spacing
- Direction
- Text Align
- Text Indent
- Text Outline

Font Family

.myItem { font-family: "arial"; }

- Sets the font of the text. Can set to several values in case the web browser doesn't support one chosen.

- Set by family-name or generic-name:

    - "arial" is a family-name

    - "sans-serif" is a generic-name

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http://www.w3schools.com/cssref/
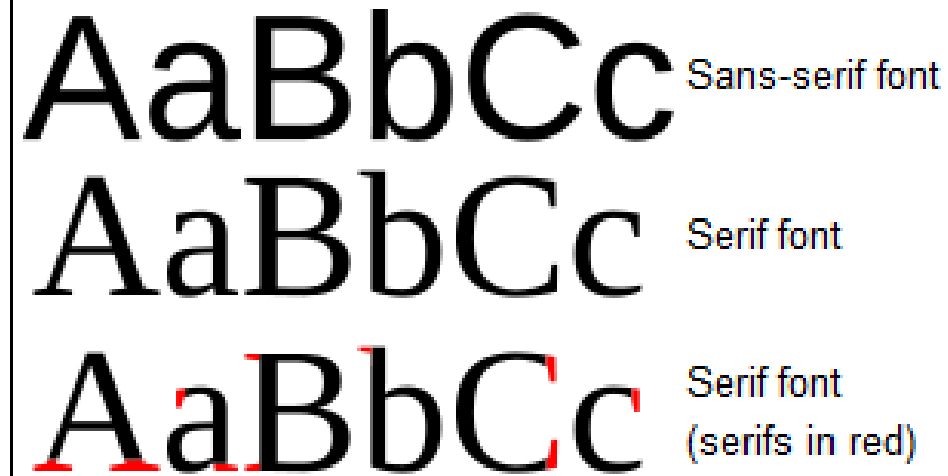
Font Family

.myItem { font-family: "arial", sans-serif; }

- Generic Names:
  - serif, sans-serif, cursive, fantasy, monospace

- Web-safe Fonts:
  - Georgia, Times, Arial, Helvetica, Comic Sans (NO), Impact, Tahoma, Verdana, Courier New, Ludica Console
  - More listed here:
    http://www.w3schools.com/cssref/css_websafe_fonts.asp

http://www.w3schools.com/cssref/
http://www.w3schools.com/cssref/css_websafe_fonts.asp

Font Family

.myItem { font-family: "arial"; }

- Serif vs. Sans-Serif (From Wikipedia)

http://en.wikipedia.org/wiki/Sans-serif

Font Family

.myItem { font-family: "arial"; }

- http://www.google.com/fonts

- Has special fonts you can use on your webpage – gives you a .css file to link to and a family name to use.

```
<link href='http://fonts.googleapis.com/css?family=Kavoon' rel='stylesheet'
type='text/css'>

font-family: 'Kavoon', cursive;
```

Grumpy wizards make toxic brew j

Font Size

.myItem { font-size: 20px; }

- Set the font size

  – Length in pixels (px), cm, …

  – % - percent of parent's size

  – small, medium, large, ...

http://www.w3schools.com/cssref/

Text Decoration

.myItem { text-decoration: underline; }

- Various line properties
  - none
  - underline
  - overline
  - line-through

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http://www.w3schools.com/cssref/

Font Style

.myItem { font-style: italic; }

- Font styles:
  - normal
  - italic
  - oblique

http://www.w3schools.com/cssref/

Font Weight

.myItem { font-weight: bold; }

- Adds boldness
    - normal
    - bold
    - older
    - lighter
    - 100 – 900 (thin – thick)

http://www.w3schools.com/cssref/

Line Height

.myItem { line-height: 20px; }

- Sets the height of the line
    - 2 – will double the font-size
    - 2px – will be 2 pixels high
    - 2% - will be 2% of the current font size

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http://www.w3schools.com/cssref/

Letter Spacing

.myItem { letter-spacing: 5px; }

- Sets the spacing between letters
    - Specify either *normal* or a length in pixels/cm
    - Negative values are allowed

Testing   Testing   T e s t i n g

http://www.w3schools.com/cssref/

Word Spacing

.myItem { word-spacing: 5px; }

- Set the spacing between words
  - *normal* or length in px, cm, etc.

normal

5px

-5px

http://www.w3schools.com/cssref/

Direction

.myItem { direction: 5px; }

- Set text-flow direction
    - ltr – Left to right
    - rtl – Right to left

One Two Three

One Two Three

http://www.w3schools.com/cssref/

Text Align

.myItem { text-align: center; }

- Set horizontal alignment
  - left, right, center, justify

One Two Three

One Two Three

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec a diam lectus. Sed sit amet ipsum mauris. Maecenas congue ligula ac quam viverra nec consectetur ante hendrerit. Donec et mollis dolor.

http://www.w3schools.com/cssref/

Text Indent

.myItem { text-indent: 50px; }

- Affects amount of indent

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec a diam lectus. Sed sit amet ipsum mauris. Maecenas congue ligula ac quam viverra nec consectetur ante hendrerit. Donec et mollis dolor.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec a diam lectus. Sed sit amet ipsum mauris. Maecenas congue ligula ac quam viverra nec consectetur ante hendrerit. Donec et mollis dolor.

Dimensions

.myItem { width: 100px; height: 50px; }

- Set an object's width and height

.myItem { min-width: 100px; min-height: 50px; }

- Set an object's minimum width/height

.myItem { max-width: 100px; max-height: 50px; }

- Set an object's maximum width/height

Dimensions

- Setting the width/height does not take into account padding or the borders – if you add these, your item's dimensions will increase!

- Width can be % (relative to its parent), a length in px, cm, or set to *auto*.

Dimensions

- Different elements have different *display* types and may not be affected.

- For example, using the *width* style on a span tag <span>

  – Unless you change the *display* of the span tag, width won't do anything.

Types of Display

Elements have different categories they fit in for how they behave:

- none – does not display

- inline – does not have its own line by default (no line-breaks before or after)

- block – does not allow elements next to it.

- There are more types, but these are the main ones. http://www.w3schools.com/cssref/pr_class_display.asp

Display

.myItem { display: block; }

- Set the display of an element

Paragraph

- Paragraph wants its own line, but two images sit next to each other if we don't add line breaks (<br/>).

Display

- Say that we want to center an image on the page.

  - First we need to set the display to block.

Display

- Then we need to set the margins (we haven't gone over this yet).

Display

- Without setting display: block, it wouldn't work!
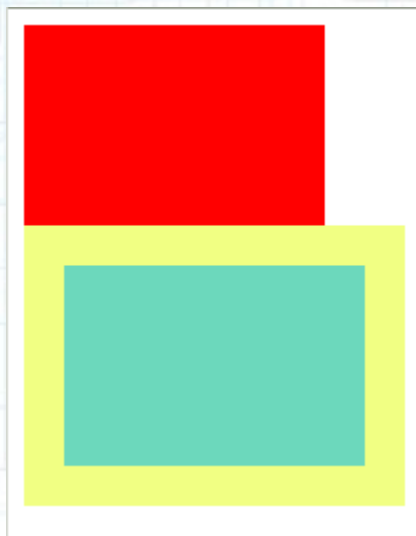
Layout

- Margins

- Padding

- Float

- Clear

- Position

- Top, Left, Bottom, Right

- Z-Index

Margins

- Margins affect the area **outside** of an element.

- The margin doesn't affect the element's internal size.

The yellow here shows the margin

Margins

- You can set every direction at once, vertical and horizontal separately, or top/right/bottom/left in one.

.myItem { margin: 20px; }

All directions

.myItem { margin: 20px 10px; }

Vertical is 20, Horizontal is 10

.myItem { margin: 2px 3px 4px 5px; }

Top is 2, right is 3, bottom is 4, and left is 5

Margins

- You can also set them separately

.myItem { margin-left: 20px; }

.myItem { margin-right: 20px; }

.myItem { margin-top: 20px; }

.myItem { margin-bottom: 20px; }

Margins

- Margins can be:

    - Length (px, cm, etc.)

    - Percent, with respect to parent element

    - Auto, automatically places it.

- If you set *left* and *right* margins to *auto*, and your element has a *block* display, it will be centered on the page!

- I know we all miss the <center> tag, but it's deprecated now so don't use it!

Margins

- Centering an element:

```
div { width: 150px; height: 100px; }

div.one { background: #ff0000; }
div.two { background: #00ff00; margin: 5px auto; }
```

Set the CSS

```html
<body>

    <div class="one"></div>

    <div class="two"></div>

</body>
```
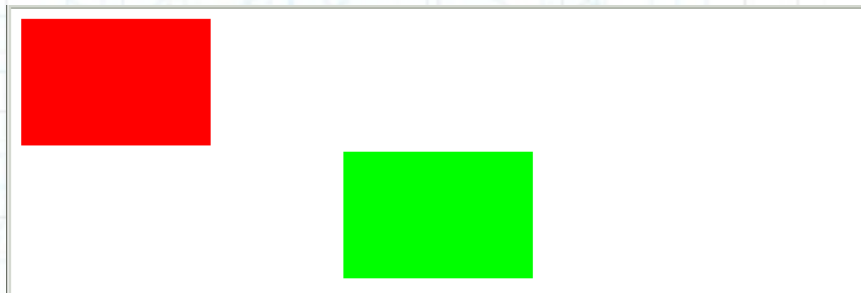
Result

Padding

- Padding affects the *inside* of your element, and adds spacing.

- This *will* affect the width of your element, so beware on pages with very exact positioning!
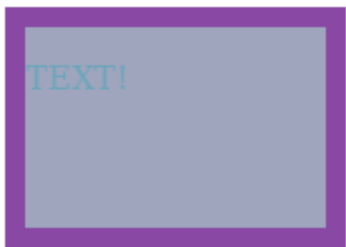
No padding

TEXT!

The border is the padding here.

TEXT!

Padding – box is bigger, text doesn't stick to the corner

TEXT!

Clear

- You can use the Clear style to enforce no elements are neighboring in a certain direction...

  – clear: left;

  – clear: right;

  – clear: both;

  – clear: none;

Float

- Float allows you to stick an object to the *left* or *right* side.

- This also makes them stack against each other horizontally.

- This can cause rendering problems on your webpage! This is why "clearfix" exists!

Float

- Floats are really useful:

```
.three { float: left; background: #a0abff; }
.four { float: left; background: #ffc4a0; }
.five { float: right; background: #ffa0f3; }
```

Float

- But can cause problems:

My Webpage

Navigation:

- ITEM1
- ITEM2
- ITEM3

Stuff:

I like turtles

Gee this page is swell. But the navigation takes up a lot of vertical space. Let's make those List Items float left!

Float

- But can cause problems:

```
ul li { float: left; }
```

```
<h2>Navigation:</h2>
<ul>
    <li><p>ITEM1</p></li>
    <li><p>ITEM2</p></li>
    <li><p>ITEM3</p></li>
</ul>
```

Now I should have a nice, horizontal nav bar!

Float

- But can cause problems:

My Webpage

Navigation:

- ITEM1 ITEM2 ITEM3 **Stuff:**

I like turtles

What the heck?!

Our floating List Items are contained within an Unordered List, but mess up the markup position coming afterwards!

Float Fix #1

- Fix #1: create a "clear" class:

```
<style type="text/css">
    ul li { float: left; }

    .clear { clear: both; }
</style>
```

```
<h2>Navigation:</h2>
<ul>
    <li><p>ITEM1</p></li>
    <li><p>ITEM2</p></li>
    <li><p>ITEM3</p></li>

    <div class="clear"></div>
</ul>
```

Add an element with the "clear" class after any floating items.

My Webpage

Navigation:

- ITEM1ITEM2ITEM3

Stuff:

I like turtles

Now it's OK

Float Fix #2

- Fix #2: Google "clearfix"

APRIL 21, 2011

A new micro clearfix hack

The clearfix hack is a popular way to contain floats withou resorting to using presentational markup. This article presents an update to the clearfix method that further reduces the amount of CSS required.

```
/**
 * For modern browsers
 * 1. The space content is one way to avoid an Opera bug w
 *    contenteditable attribute is included anywhere else
 *    Otherwise it causes space to appear at the top and I
 *    that are clearfixed.
 * 2. The use of `table` rather than `block` is only nece
 *    `:before` to contain the top-margins of child eleme
 */
.cf:before,
.cf:after {
    content: " "; /* 1 */
    display: table; /* 2 */
}

.cf:after {
    clear: both;
}
```

Put the code into your CSS file

http://nicolasgallagher.com/micro-clearfix-hack/

Float Fix #2

- Fix #2: Google "clearfix"

```css
.cf:before,
.cf:after {
    content: " "; /* 1 */
    display: table; /* 2 */
}

.cf:after {
    clear: both;
}
```

Add the Clearfix CSS

```html
<!-- Fix 2 -->
<ul class="cf navList">
    <li><p>ITEM1</p></li>
    <li><p>ITEM2</p></li>
    <li><p>ITEM3</p></li>
</ul>
```

Add the "cf" class to the
Container Element

My Webpage

Navigation:

- ITEM1ITEM2ITEM3

Stuff:

I like turtles

Position

- Elements can be positioned according to different rules:

    - Static (default)

    - Absolute

    - Fixed

    - Relative

Position

- If you need to review in the future, this tutorial is really helpful:

- http://www.barelyfitz.com/screencast/html-training/css/positioning/

Position

.myItem { position: static; }

- Static Positioning
    - Elements are rendered in order of the markup.

http://www.w3schools.com/cssref/

Position

.myItem { position: absolute; }

- Absolute Positioning
  - Elements are rendered at your specified coordinates relative to any non-static parents.
  - Specify left, right, top, or bottom to position.

http://www.w3schools.com/cssref/

Position

.myItem { position: fixed; }

- Fixed Positioning

    - Position is fixed at the same position, no matter the scrolling.

    - Is with respect to the browser window.

http://www.w3schools.com/cssref/

Position

.myItem { position: relative; }

- Relative Positioning
    - The element is positioned relative to its default position.
    - Can specify left, right, top, or bottom.
    - So new position would be x_default + left

http://www.w3schools.com/cssref/

Top, Left, Bottom, Right

- Specify locations for non-static elements.

.myItem { top: 5px; }

.myItem { bottom: 5px; }

.myItem { left: 5px; }

.myItem { right: 5px; }

Z-Index

- Z-index allows you to specify which elements are ahead of or behind others.

- It is the "Z-axis".

  – But this is *index*, so you only specify an ordering number.

  – The higher the number, the more on-top it is.

.myItem { z-index: 3; }

http://www.w3schools.com/cssref/

List Style

- You can remove or changed the bulleted list appearance with list-style.

  - list-style-type

    - Circle, square, katakana
    - View full list here:
      http://www.w3schools.com/cssref/pr_list-style-type.asp

  - list-style-position

    - inside or outside, based on the margin

  - list-style-image

    - Specify a url for the list bullets.

http://www.w3schools.com/cssref/

List Style

- Can set multiple items with just list-style

.myItem { list-style: url("bullet") inside; }

Cursor

.myItem { cursor: pointer; }

- Can change what the mouse looks like when it hovers over the element.

  - Auto (default)

  - Crosshair

  - Pointer

  - Wait

  - See full list here:

    http://www.w3schools.com/cssref/pr_class_cursor.asp

http://www.w3schools.com/cssref/

Overflow

.myItem { overflow: hidden; }

- When you have a container element that is a fixed size, text within may overflow.

- You can specify whether to allow it to scroll horizontally, vertically, both, or just hide any overflowing data.

Overflow

.myItem { overflow: hidden; }

- There is overflow, overflow-x, and overflow-y.

- They can have the values:

  - visible (not clipped, renders outside the box)

  - hidden (clipped)

  - scroll

  - auto (only add scrollbar on overflow)

http://www.w3schools.com/cssref/

Overflow

.myItem { overflow: hidden; }

.myItem { overflow-x: visible; }

.myItem { overflow-y: auto; }

References

CSS Reference, W3Schools.com
http://www.w3schools.com/cssref/

Sans-serif, Wikipedia.org
http://en.wikipedia.org/wiki/Sans-serif