Week4- Topics

HTML5 & CSS

Intro to CSS

CSS text

External/ Internal /Inline CSS

CSS rules

External   Internal   Inline

```
<link href="css/styles.css"   <style type="text/css">      <span class="yellow">
type="text/css" rel="stylesheet" />  …                              …

Styles.css                    </style>                     </span>
```

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Common default browser typefaces

Georgia

Times

Times New Roman

Arial

Verdana

Helvetica

Typefaces are subject to copyright

typefaces installed on the user's computer

Link to download the typeface

License fonts from font foundries

Convert font to images (logo, titles)

sIFR - Embed font into a Flash movie

Cufon- uses JavaScript to create SVG or VML version of the text

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font-family:

```
<style type="text/css">
body {
        font-family: Georgia, Times, serif;}
h1, h2 {
        font-family: Arial, Verdana, sans-serif;}
.credits {
        font-family: "Courier New", Courier, monospace;}
</style>
```

font-size:

```
body {
        font-family: Arial, Verdana, sans-serif;
        font-size: 12px;}
h1 {
        font-size: 200%;}
h2 {
        font-size: 1.3em;}
```

font-size:

pixels – px

> precise control over how much space the text takes
>
> The default size of text in browsers is 16px

percentages - %

> 75% - the equivalent of 12px
>
> 200% - 32px

ems

> An em is equivalent to the width of a letter m

points – pt

> for printer friendly versions of web pages

font-size:

16 century – European typographers developed
scale of text sizes

Changed little in the past 400 years

Photoshop, InDesign and Word offer
the same sizes of text

8pt
9pt
10pt
11pt
12pt
14pt
18pt
24pt
36pt
48pt
60pt
72pt

font-size:

PIXELS

TWELVE PIXEL SCALE

h1	24px
h2	18px
h3	14px
body	12px

SIXTEEN PIXEL SCALE

h1	32px
h2	24px
h3	18px
body	16px

=

PERCENTAGES

h1	200%
h2	150%
h3	117%
body	75%

h1	200%
h2	150%
h3	133%
body	100%

=

EMS

h1	1.5em
h2	1.3em
h3	1.17em
body	100%
p	0.75em

h1	2em
h2	1.5em
h3	1.125em
body	100%
p	1em

font-size:

- Font size in pixels – true to size
- Pixels are relative to the resolution of the screen

    800x600 vs 1280x800 screen resolution will appear different

- The default size of text in a web browser is 16 pixels.

    Using percentages of this amount, create a scale where the default text size is different, and headings are sized in relation to this.

- Users can change the default size of text in their web browsers
- Preserve the scale but not the size

Typography options

- Are limited

- Replacements techniques

    @font-face
    sIFR
    Canvas

@font-face

- allows to use a font not installed on the computer of the user
- by specifying a path to a copy of the font, which will be downloaded if it is not on the user's machine
- the license for the font must permit it to be used in this way

```
@font-face {
      font-family: 'ChunkFiveRegular';
      src: url('fonts/chunkfive.eot');}
h1, h2 {
      font-family: ChunkFiveRegular, Georgia, serif;}
```

@font-face

- typeface designers do not allow to use their fonts as @font-face
- open source fonts:

  www.fontsquirrel.com
  www.fontex.org
  www.openfontlibrary.org

- some fonts are only free for personal use (not in .com websites!)

@font-face

- commercial fonts for a fee:

   www.typekit.com

   www.kernest.com

   www.fontspring.com

- Google open source font files on their servers:
www.google.com/webfonts
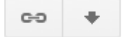
Replacement techniques

sIFR

- uses Flash to replace the text with a small vector representation of the desired glyphs

- requires a browser with the Adobe Flash Lite plugin

Canvas

- uses JavaScript and the HTML5 canvas element to render text to the device

- browsers must have good JavaScript and HTML5 support

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Google Fonts - Free

TypeKit

https://typekit.com/

install Creative Cloud Software
to sync the fonts to our desktop
At no extra fee for this sync, even if you do not subscribe to CC
The username and password are:

graphicdesignuic@gmail.com
Roeger3410

Font Formats

- different browsers support different font formats
- supply the font in several variations to reach all browsers

FontSquirrel can convert fonts into different formats:
www.fontsquirrel.com/fontface/generator

- Provides the CSS code for the @font-face rule

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Font Formats

Font formats order:

       1. eot
       2. woff
       3. ttf/otf
       4. svg

Font Formats

```
@font-face {
        font-family: 'ChunkFiveRegular';
        src: url('fonts/chunkfive.eot');
        src: url('fonts/chunkfive.eot?#iefix')
        format('embedded-opentype'), url('fonts/chunkfive.woff')
        format('woff'), url('fonts/chunkfive.ttf')
        format('truetype'), url('fonts/
        chunkfive.svg#ChunkFiveRegular')
        format('svg');
                }
```

Font Formats

BROWSER	FORMAT			
	eot	woff	ttf / otf	svg
Chrome (all)				●
Chrome 6+		●	●	●
Firefox 3.5			●	
Firefox 3.6+		●	●	
IE 5 - 8	●			
IE 9+	●	●	◖	
Opera 10+			●	●
Safari 3.1+			●	●
iOS <4.2				●
iOS 4.2+			●	●

font-weight:

```
.credits {
        font-weight: bold;}




.maintext {
        font-weight: normal;}
```

font-style:

- normal
- Italic
- oblique

```
.credits {
        font-style: italic; }
```

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text-transform:

- uppercase
- lowercase
- capitalize
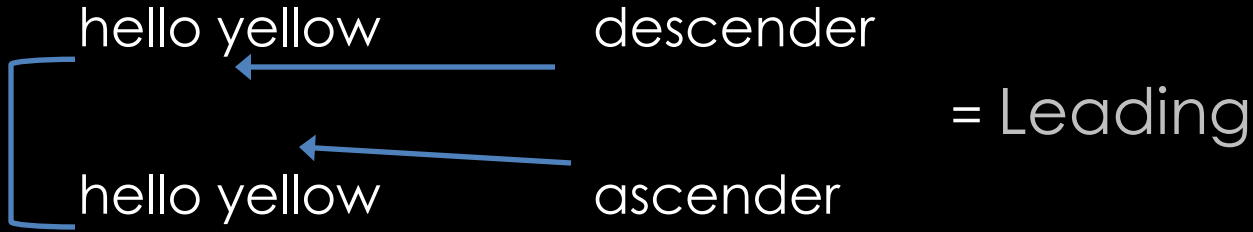
```
h1{
        text-transform: uppercase; }
h2{
        text-transform: lowercase; }
.credits{
        text-transform: capitalize; }
```

text-decoration:

- none
- underline
- line-through
- blink

```
.credits{
        text-decoration: underline; }
A       {
        text-decoration: none; }
```

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line-height:

hello yellow   descender

                              = Leading

hello yellow   ascender

Font-size   minus   line-height   =   leading

p {

    line-height: 1.4 em; }

letter-spacing: word-spacing:

letter-spacing: = kerning


```css
h1, h2 {
        text-transform: uppercase;
        letter-spacing: 0.2em;}
.credits {
        font-weight: bold;
        word-spacing: 1em;}
```

text-align:

- left
- right
- center
- Justify

```
h1 {
        text-align: left;}
p {
        text-align: justify;}
```

vertical-align:

- Baseline
- Sub
- Super
- Top
- Text-top
- Middle
- Bottom
- Test-bottom

```css
#six-months {
  vertical-align: text-top;}
#one-year {
  vertical-align: baseline;}
#two-years {
  vertical-align: text-bottom;}
```

RESULT

Briard Life Stages

Six months

One year

Two years

text-indent:

Allows to indent the first line of text

```
h1 {
  background-image: url("images/logo.gif");
  background-repeat: no-repeat;
  text-indent: -9999px;}
.credits {
  text-indent: 20px;}
```

RESULT

Briards

by Ivy Duckett

The briard, or berger de brie, is a large breed of dog traditionally used as a herder and
guardian of sheep.

Breed History

The briard, which is believed to have originated in France, has been bred for centuries to herd
and to protect sheep. The breed was used by the French Army as sentries, messengers and to
search for wounded soldiers because of its fine sense of hearing. Briards were used in the
First World War almost to the point of extinction. Currently the population of briards is
slowly recovering. Charlemagne, Napoleon, Thomas Jefferson and Lafayette all owned

CSS3 – text-shadow:

1 - how far to the left or right the shadow should fall

2 - the distance to the top or bottom that the shadow should fall

3 - specifies the amount of blur that should be applied to the drop shadow

4 - the color of the drop shadow

```
p.three {
        background-color: #cccccc;
        color: #ffffff;
        text-shadow: 2px 2px 7px #111111;}
```

```
p.intro:first-letter {
          font-size: 200%;}
p.intro:first-line {
          font-weight: bold;}
```

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Pseudo classes - :link, :visitied, :hover, :active, :focus

Pseudo classes allow to change appearance of elements upon interaction

:link

      styles for links that have not yet been visited

:visited

      styles for links that have been visited

:hover

      a user hovers over an element with a mouse cursor

:active

      when an element is activated by a user (button is pressed)

:focus

      when an element has focus

```
a:link {
        color: deeppink;
        text-decoration: none;}
a:visited {
        color: black;}
a:hover {
        color: deeppink;
input {
        padding: 6px 12px 6px 12px; border: 1px solid #665544; color: #ffffff;}
input.submit:hover {
        background-color: #665544;}
```

Attribute Selectors

allow to create rules that apply to elements that have an attribute with a specific value

SELECTOR	MEANING	EXAMPLE
EXISTENCE	`[]` Matches a specific attribute (whatever its value)	`p[class]` Targets any `<p>` element with an attribute called `class`
EQUALITY	`[=]` Matches a specific attribute with a specific value	`p[class="dog"]` Targets any `<p>` element with an attribute called `class` whose value is `dog`
SPACE	`[~=]` Matches a specific attribute whose value appears in a space-separated list of words	`p[class~="dog"]` Targets any `<p>` element with an attribute called `class` whose value is a list of space-separated words, one of which is `dog`

Attribute Selectors

PREFIX	**[^=]** Matches a specific attribute whose value begins with a specific string	**p[attr^"d"]** Targets any \<p\> element with an attribute whose value begins with the letter "d"
SUBSTRING	**[*=]** Matches a specific attribute whose value contains a specific substring	**p[attr*"do"]** Targets any \<p\> element with an attribute whose value contains the letters "do"
SUFFIX	**[$=]** Matches a specific attribute whose value ends with a specific string	**p[attr$"g"]** Targets any \<p\> element with an attribute whose value ends with the letter "g"

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Simple attribute selector

    selects all elements with the matching value

    p[class] {color: blue}

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CSS Selectors

Advanced attribute selector

   selects elements with matching substrings in the value of the attribute. (existing attributes or created custom attributes)

caret (^) - begins with the value "iphone":

p[device^="iphone"] {background: green;}

dollar sign or string ($) - ends with the value "iphone":

p[device$="iphone"] {background: blue;}

star (*) - contains at least one instance of "lcd":

p[device*="lcd"] {background: red;}

CSS Selectors

Selector selects markup elements it should apply rules to

- Universal
- Type or element selectors
- Contextual selectors (descendant, child, and adjacent sibling)
- Class
- ID
- Pseudoclasses
- Pseudoelements

CSS Selectors

Universal selector

selects all elements useful for defining the default typeface or font size (body, html)

{font-family:sans-serif;}

Type or element selector

selects specific element

h1 {color: red;}

CSS Selectors

Descendent selector

selects elements that are descendants of another element as indicated by a single space separation

li a {color: black;}

Child selector

similar to the descendent selector

selects only the child of the defined element, not all instances like the descendent selector

p > em {background-color: yellow;}

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Pseudoselectors

  select elements that might not exist in the markup

:link

:visited

:hover

:active

:before

:after

:first-child

:last-child

Adjacent sibling selector

>   Selects an element that comes immediately after another element with the same parent.

>   h1 + p { margin-bottom: 1em;}

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CSS Selectors Commonly used in Mobile Dev.

Class selector

The class selector targets any element with the matching class

.red {background-color: red;}

ID selector

selects any element with the matching ID

#alert {background-color: yellow;}

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CSS Text

- properties to control the choice of font, size, weight, style, and spacing

- limited choice of fonts that most people will have installed

- wider range of typefaces involves copyright and the right license issues

- can control the space between lines of text, individual letters, and words

- text can be aligned to the left, right, center, or justified, or indented

- pseudo-classes can change the style of an interactive element