

CSS



CSS, Part 2: Style Properties

In this slide show...

Typography: how to style type, including custom web fonts

Color: how to apply color to text, borders, backgrounds, etc.

Backgrounds: how to apply background images and color to the whole page and parts of the page

Review: CSS syntax

Selector

{ } open/close declaration set.
: separates property and value.
; closes each individual declaration.

p {

font-size: 12px;

Property

Value

font-family: sans-serif;

}

Property + Value = Declaration
Declaration + Declaration = Declaration Set

Selector + Declaration = Rule
Selector + Declaration Set = Rule Set

CSS



Typography

Typography on the web

Always been a bit of a mess, but
becoming less so lately

Browsers come with their own built in font
files, as do computers

Two main ways to specify typeface in CSS:

font-family property ← Browser defaults.

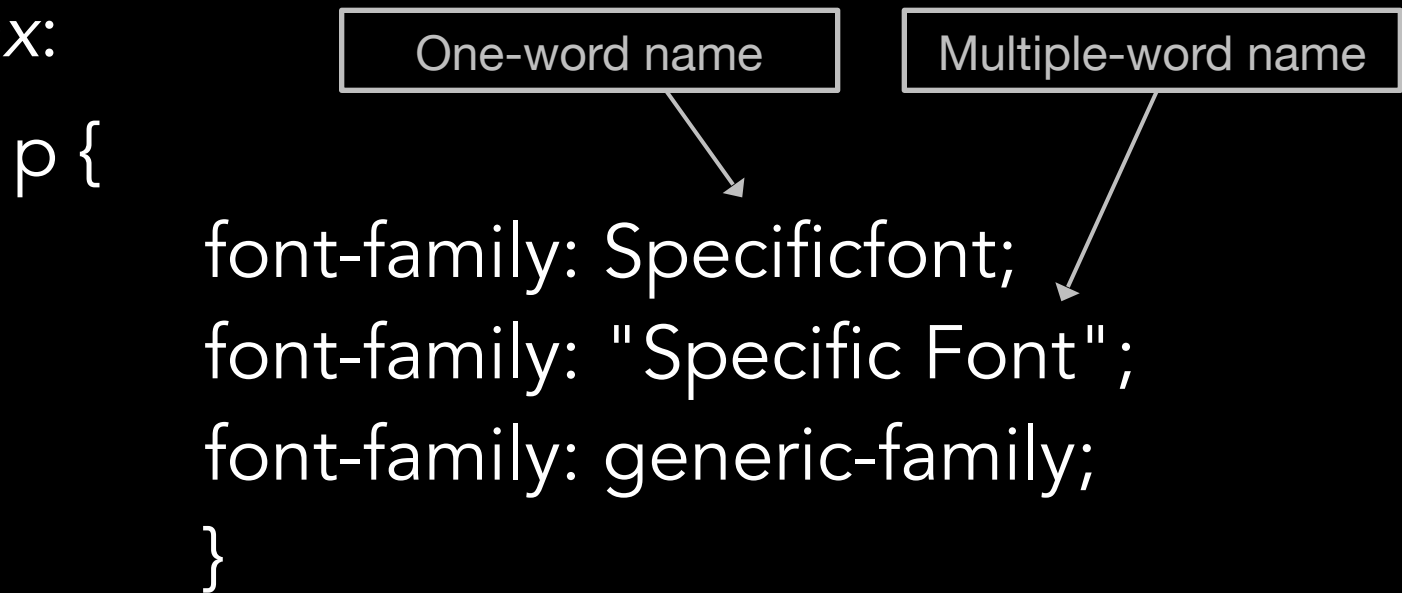
@font-face ← Custom fonts.

Specifying fonts: font-family

CSS property for specifying fonts

Can be used to specify specific fonts and generic font families

Syntax:



Cross-browser default fonts

Arial, **Arial Black**

Comic Sans MS

Courier New

Georgia

Impact

Lucida Sans/Lucida Grande

Palatino

Tahoma

Times New Roman

Trebuchet MS

Verdana

Generic font families

serif

sans-serif

monospace

cursive

fantasy

Generic font families will result in a different font depending on the OS default.

Go to fontfamily.io to see OS defaults.

Specifying fonts: font stacks

List of fonts to use, including fallback fonts

Browser will try to use the fonts, left to right, until it finds one it can

Syntax:

```
font-family: 1stchoice, 2ndchoice,  
3rdchoice, generic-family;
```

An example:

```
font-family: Futura, "Trebuchet MS",  
Arial, sans-serif;
```



cssfontstack.com

Specifying fonts: @font-face

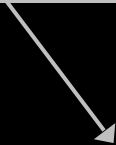
Inserts font file in website

Allows you to use basically any font in existence


Syntax:

```
@font-face {  
    font-family: FontName;  
    src: url('urlhere.otf');  
}
```

Give it a descriptive name.



Use multiple sources for cross-browser compatibility.



Note: You still have to use font-family to call the font whenever you want to use it.

Specifying fonts: fontsquirrel.com

WEBFONT GENERATOR

Usage: Click the "Add Fonts" button, check the agreement and download your fonts. If you need more fine-grain control, choose the **Expert** option.

 Add Fonts

You currently have no fonts uploaded.

BASIC

Straight conversion with minimal processing.

OPTIMAL

Recommended settings for performance and speed.

EXPERT...

You decide how best to optimize your fonts.

Agreement:

Yes, the fonts I'm uploading are legally eligible for web embedding.

Font Squirrel offers this service in good faith. Please honor the EULAs of your fonts.

Specifying fonts: Google fonts

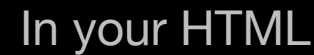
Google has a library of web fonts that are freely available for use

google.com/fonts

Syntax:

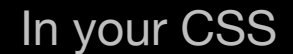
```
<link href="http://  
fonts.googleapis.com/css?  
family=Gabriela" rel="stylesheet"  
type="text/css" >
```

In your HTML



```
p { font-family: 'Gabriela', serif; }
```

In your CSS



Specifying fonts: icon fonts

Tons of free icon fonts available online

Examples include Font Awesome, Fontello, Pictonic, Modern Pictograms, etc.

Unlike image icons, can be styled just like any other font (e.g., size, color, effects, animations, etc.)



The Icons

Specifying font size

font-size property

Valid values:

1.5em

150%

14px

em: relative unit of measurement equal to current font size

px: absolute unit of measurement that is the smallest visual unit

Note: All sizes in CSS (not just font size) can be specified with em, %, or px. See p. 234 for more measurement units.

Specifying font weight

font-weight property

Valid values:

normal

bold

bolder

lighter

100, 200, 300, 400...**900**

Note: Most web fonts have only two weights, normal and bold. You will rarely, if ever, use the other values listed above.

Other text properties

font-style	italic, oblique
font-variant	small-caps
text-decoration	underline, line-through
text-transform	lowercase, uppercase
text-align	left, right, center, justify
vertical-align	top, middle, bottom, etc.
line-height	**measurement
text-indent	**measurement
letter-spacing	**measurement
word-spacing	**measurement

Changing list bullets and numbers

list-style-type property

Valid values:

none

circle

lower-alpha

lower-roman

decimal

decimal-leading-zero

disc

square

upper-alpha

upper-roman

Default



Default

Insert image as bullet

list-style-image property

Accompanied with list-style-type as a backup in case it doesn't work

Syntax:

```
ul li {  
    list-style-image:  
        url('nameofimage.gif');  
}
```

Best practices in web type

Make as much as you can text; images are not as versatile and accessible

If you use font-family, have a comprehensive and valid font stack

If you use @font-face, use a font with a free license

If you use @font-face, use several of OTF, TTF, EOT, and WOFF files

Set a base size for <body> and the rest as em

Best practices in web type (cont.)

Make your body text size larger than you would for print (14 to 16 pixels)

Use a modular scale for headings

Have a leading of ~ 1.5 , a measure of $\sim 50-75$ characters, and paragraph spacing of $\sim 0.75-1$

Underline your links and style them accordingly

Write web-friendly text with lots of paragraph breaks and punchy first sentences

CSS



Color

Color on the web

Screen/additive vs. print/subtractive color

RGB vs. CMYK

Each individual pixel is encoded with a color value and displays as that color

Transillumination and increased contrast of screen vs. print

Two ways to specify color in CSS: named and hexadecimal

Things you can use color on

Text:

color property


Borders:

border-color property

Backgrounds:

background-color property

Or the final value in the shortcut property, border.



Specifying color: named colors

Specific name as value

tinyurl.com/namedcolors

CSS2.1 supports 17, CSS3 supports 140



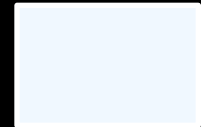
firebrick

papayawhip



olivedrab

aliceblue



orchid

burlywood



gold

chartreuse



Specifying color: color values

Named colors only get you so far; to include the whole range of colors, you need color values

RGB values come in three types:

percentage (50%,100%,0%)

integer (127,255,0)

hexadecimal #7FFF00

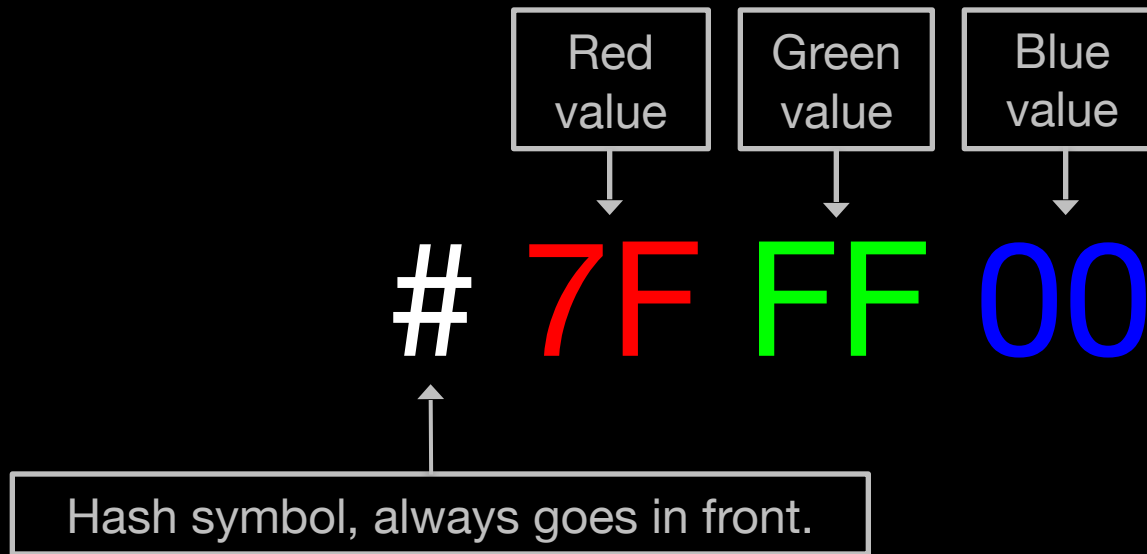
Hexadecimal is the way to go on the web

Take a stab at what the color above is.



Hexadecimal color values

Roses are **#FF0000**, violets are **#0000FF**



Integer values (0-255) convert to two-digit values.

Each digit in two-digit value has 16 possibilities: 0-9, then A-F (to represent 10-15).

7F FF 00

First digit in value is value when you divide by 16. It is the more important when determining general color.

Second digit in value is remainder after dividing by 16. It only makes a slight difference in coloration.

The practical side of hex colors

Hex codes with large variation create more saturated colors; small variations create more muted colors

Hex codes with all high values create light, pastel colors

Use the same values for each 2-digit pair for greyscale colors

#000000 is black; #FFFFFF is white

Opacity

RGBA allows you to specify opacity along with color (only use when fallback non-alpha color will work)

```
color: rgba(255,0,0,0.50);
```

opacity property allows you to specify opacity for images, text, borders etc.

```
img:hover { opacity: 0.75; }
```

CSS



Backgrounds

Applying a background

For whole page, apply background in body {
} selector

For individual component, apply
background using appropriate selector

To apply a solid color, use background-color
property

To apply an image, use background-image
property

Background images

`background-image: url('picture.png');` specifies location of image

`background-repeat` property allows you to specify how the image tiles

Valid values:

`repeat`

`no-repeat`

`repeat-x`

`repeat-y`

`background-attachment: fixed;` specifies a background that does not move when the user scrolls

Positioning your background

background-position property

Allows you to set an image that will always appear in a certain relationship to a certain element

Valid values:

_____px

left

top

center

_____%

right

bottom

Best practices in backgrounds

Use tasteful colors, patterns, and images

Make sure text is readable and contrasts well
with background

If using background-image, ensure your image
file size is small

Use background-color as a backup for all
instances of background-image

Use solid color as a backup for all instances of
background gradients

Next time on ENG 431...

The Box Model: padding, margins, borders, drop shadows, rounded corners, and sizing

Positioning Properties: floating, clearing, relative positioning, absolute positioning, fixed positioning, overflow, and display roles

Page Layouts: fixed, fluid, and elastic layouts

CSS



Thanks for watching!