**Cascading Style Sheets**

**syntax, selectors, attributes**

# CSS basics

## stylesheet files

link style.css (stylesheet) to index.html file

index.html

<head>

<link rel="stylesheet" type="text/css" href="style.css">

</head>

## comment syntax

single line

/\* ======= section ======= \*/

multi line

/\*

#paragraph1 {

float: left;

width: 30%;

text-align: left;

background-color: white;

}

\*/

## selectors

tag

p {

font-family: "Ariel", sans-serif;

}

class (period)

.section {

margin: 20px;

padding: 10px;

}

id (hash tag)

#header {

margin: 20px 20px 0 20px;

padding: 10px;

background-color: #eee;

}

direct descendent (descendent operator)

#menu-item > a {

width: 80px;

height: 40px;

color: purple;

}

## attributes

key/value pairs

#header {

margin: 20px 20px 0 20px;

padding: 10px;

}

## attribute sequencing

attributes should be sequenced from structural to style

position > dimensions > spacing > fonts > colors > decoration

example

#msg-box {

width: 180px;

height: 30px;

margin: 10px 0;

padding: 5px;

background-color: #eee;

border: 1px solid black;

border-radius: 5px;

}

## combined selectors

element/class

ul.presidents {

list-style-type: square;

}

multiple elements

ul.presidents, span {

font-family: "Arial", sans-serif;

}

direct descendents

ul.presidents > li {

list-style-type: square;

}

## attributes to know

​NOTE: values are typical only

position: relative;

display: inline-block;

float: left;

width: 100%;

height: 20px;

top: 100px;

left: 30px;

margin: 10px auto;

padding: 20px 10px;

font-size: 20px;

font-style: italic;

font-family: "Times New Roman", serif;

text-align: center;

text-decoration: none;

line-height: 20px

list-style: none;

color: red;

background-color: #fff;

background-image: url('tiger.png');

background-repeat: no-repeat;

border: solid 2px orange;

## other attributes to know

list-style-type: square;

list-style-image: url('my-bullet.png');

display: flex;

flex-direction: row;

justify-content: center;

## CSS measurement units

Units for width, height, and font size

% -- percentage of the parent element width/height (note: parent must have specified width/height)

width: 43%;

height: 20%;

px -- an exact pixel value for the element

width: 100px;

height: 420px;

em -- proportionate to the parent value

font-size: 3em

default value for 1 em: 16px

usage:

1em: exact parent value (16px)

2em: twice parent value (32px)

1.2em: 120% of parent value ~19px (note that decimals allow precise control)

## Specifying colors

colors are specified for element backgrounds and text

background-color -- specifies color of element background

color -- specifies color of element text

values can be rgba, hex or named

rgba

red, green, blue, alpha (opacity)

alpha value is optional

background-color: rgba(100, 43, 210, .4);

color: rgb(10, 160, 30);

hex

see https://www.w3schools.com/colors/colors\_picker.asp for hex code processor (excellent resource!)

hexadecimal (base 16) values

values: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, a, b, c, d, e, f

hex number is preceded by hash tag (#)

background-color: #ef3c7d;

color: #1e5d42;

named

html5 specifies several colors by name

see https://www.w3schools.com/colors/colors\_names.asp for list