

Chapter 5: Typography

Objectives

- understand type design principles
- understand CSS measurement units
- use the css text and font properties
- build a font and text properties style sheet
- customize bulleted and numbered lists

Type Design Principles

- choose fewer fonts and sizes
 - decide on a font for each different level of topic importance (page heading, section headings, body text)
 - communicate hierarchy of information with changes in size, weight, or color of the typeface
- choose available fonts (use common web fonts & font families)
 - CSS3 `font-face` property lets you link to a font, download it, and use it in style rules
- avoid creating text as graphic
 - use HTML styled text on pages, including creating HTML and CSS-based navigation
- design for legibility. Font families can be rendered differently based on end user setup
- text choices become more important for smartphones

CSS Measurement Units

- measurement units used depends on destination medium
 - print media: absolute units, web: relative units

Relative unit: **em**

- in CSS, **em** unit is equal to the font size of an element
- can be used for both horizontal and vertical measurement

Relative unit: **%**

- works the same as **em**
- for a 12pt font size, 100% size equals 12pt

Relative unit: **ex**

- **ex** unit is equal to the height of the lowercase letter **x** in any given font

Relative unit: **rem**

- works exactly like the **em** unit, but relative to the root element of the document

Viewport Percentage Units

- units relative to the size of the device viewport window
- similar to percentage units, except based on the root container rather than immediate parent container

UNIT	UNIT ABBREVIATION	DESCRIPTION
ABSOLUTE UNITS		
Centimeter	cm	Standard metric centimeter
Inch	in	Standard U.S. inch
Millimeter	mm	Standard metric millimeter
Pica	pc	Standard publishing unit equal to 12 points
Point	pt	Standard publishing unit, with 72 points in an inch
Pixel	px	The size of a pixel on the current device
RELATIVE UNITS		
Em	em	The width of the capital <i>M</i> in the current font, usually the same as the font size; 1 em is the default font size, 1.5 em is one-and-one-half times the default font size, and so on. Em is relative to the current font size.
Ex	ex	The height of the letter <i>x</i> in the current font
Percentage	Example: 150%	Works exactly like em: 100% is the default font size, 150% is one-and-one-half times the default font size, and so on
Rem	rem	Works like em, but is relative to the root element of the document. This newer CSS3 measurement unit may not have consistent browser support.
Viewport Width	vw	Equal to 1% of the width of the initial containing block
Viewport Height	vh	Equal to 1% of the height of the initial containing block
Viewport Minimum	vmin	Equal to the smaller value of vw or vh
Viewpoint Maximum	vmax	Equal to the larger value of vw or vh

Table 5-2: CSS Measurement Units

© 2015 Cengage Learning®

Using the CSS Font Properties

font-family

- allows specification of generic font family names or a specific name
- user must have font installed, otherwise browser uses default font
- by using a list of fonts, we can specify alternate fonts. Browser will attempt to load the font successively

font-face

- “@fontface {font-family: font_x; src: url(http...)} lets you specify a font to be downloaded

font-size

- gives control over specific sizing of font
- can choose from various length units such as ems or percentages

font-style

- lets you specify italic text “{font-style: italic;}”

font-variant

- lets you define small capitals

font-weight

- lets you set the weight of the typeface. Numerical keyword values can be used. `{font-weight: bold;}`

Using the CSS Text Properties

text-indent

- set amount of indentation for the first line of text and element such as paragraph
- can specify a length or percentage value

text-align

- set horizontal alignment for the lines of text and element
- can specify alignment values: **Left**, **Center**, **Right**, **Justify**

line-height

- specify either a length or percentage value for the line height
- also known as leading white space between lines of text

vertical-align

- lets you adjust the vertical line of text w/in the line box
- only works on in-line elements
- use this property to superscript or subscript characters
- baseline sub and super values are the most evenly supported
- can also be used to align text with graphics

letter-spacing

- lets you adjust the white space between letters, often called kerning
- length specified is added to the default letter spacing

word-spacing

- adjust white space between words in text
- length specified is added to the default spacing

text-decoration

- lets you apply line effects to your text (underline, overline, line-through)
- underlining should not be used except for hypertext links

white-space

- lets you control how paragraph text wraps and preserve white space

text-transform

- lets you change the capitalization of text
- useful for headings

text-shadow

- lets you define a shadow that is displayed behind text
- specify horizontal and vertical offset as well as the blur value
- `text-shadow: <horizontal offset> <vert offset> <blur value> #color`

Customizing Bulleted and Numbered Lists

- `list-style` properties let you control visual characteristics of bulleted and numbered lists

list-style-type

- lets you specify one of three types of markers for a list
- you can choose a symbol, a numbering system, or an alphabetical system

list-style-image

- lets you easily attach an image to a list and have it repeated as the list symbol
- attach an image to a bulleted list: `ul {list-style-image: url(pawprint.gif);}`

list-style-position

- lets you determine the placement of the list marker (inside, outside(default))

Summary

- use type to communicate information structure
- HTML text downloads faster than graphics-based text
- use fonts that appear consistently across operating systems
- standardize you styles
- use external style sheets
- test your work
- design for legibility
- choose correct measurement unit based on the destination medium
- use font properties to control the look of your letter forms
- use text spacing properties to create more visually interesting and legible text