Lesson 1: Building Your First Web Page

- HTML = HyperText Markup Language ; gives content structure & meaning by defining content as : headings
  paragraphs
  images

  - represents content

- CSS = Cascading Style Sheets ; presentation language, styles appearance of content using : fonts
  colors

  - represents appearance of that content

Understanding Common HTML Terms

- 3 common HTML terms : elements
  tags
  attributes

- elements = designators that define the structure & content of objects w/in a page
  identified via <> surrounding the element name

  ⟶ (eg. headings) : <h1> through <h6>

  ⟶ (eg. paragraphs) : <p>

- tags = the <> surrounding an element
  occur in pairs of opening & closing tags

  ⟶ (eg. <div>) : opening tag

  ⟶ (eg. </div>) : closing tag

- attributes = properties used to provide additional info about an element
  defined w/in the opening tag after an element's name

  - general format : attribute name = "attribute value" ⟶ href = "..."

  ⟶ (eg. id) : identifies an element

  ⟶ (eg. class) : classifies an element

  ⟶ (eg. src) : specifies a source for embeddable content

  ⟶ (eg. href) : provides a hyperlink reference to a linked resource

<u>Setting Up the HTML Document Structure</u>

· HTML documents = plain text documents saved w/ an .html (>.txt) file extension
· required structure (declarations & elements) : <!DOCTYPE html>
$\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\quad$ <html>
$\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\quad$ <head>
$\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\quad$ <body>

· <!DOCTYPE html> = latest version of HTML
$\qquad\qquad\qquad\qquad$ placed at the very beginning of HTML document
$\qquad\qquad\qquad\qquad$ document type declaration = informs web browsers which version of HTML is being used

<html> = signifies the beginning of the document
$\qquad\qquad$ following the document type declaration

· <head> = identifies the top of the document, including any metadata
$\qquad\quad$ metadata = accompanying info about the page
$\qquad\quad$ inside the <html> element
$\qquad\quad$ content inside isn't displayed on webpage

$\quad$ ⁻ can include · document title
$\qquad\qquad\qquad\qquad\quad$ ⁻ displayed on title bar in the browser window
$\qquad\qquad\qquad\quad$ links to any external files
$\qquad\qquad\qquad\quad$ other beneficiary metadata

· <body> = holds all the visible content of the web page
· nested = when an element is placed inside of another element

$\quad$ ⁻ indent nested elements

· common self-closing elements (aka only the opening tag) :
 $\qquad$ <input>
$\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad$ <img> $\qquad$ <param>
$\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad$ <meta> $\quad$ <hr>
$\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad$ <wbr> $\quad$ <link>
$\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad$ <embed> $\,$ <source>

<u>Understanding Common CSS Terms</u>

· 3 common CSS terms : selectors
$\qquad\qquad\qquad\qquad\qquad$ properties
$\qquad\qquad\qquad\qquad\qquad$ values

· selectors = designate exactly which element(s) w/in our HTML to target & apply styles to
$\qquad\qquad$ may include a combo of diff qualifiers to select unique elements
$\qquad\qquad$ generally target an attribute value or type of element

$\quad$ ⁻ styles : color
$\qquad\qquad\quad$ size
$\qquad\qquad\quad$ position

- format : selected element { styles to be applied} → p {...}

· **properties** = determine the styles that will be applied to that element
after a selector, w/in the { }

- properties: background
color
font·size
height
width

- format: selector {   →   p {
        property name : ... ;   color: ... ;
    }   }

· **values** = determines behavior of a property
the text between the : & ;

- format: selector {   →   p {
        property · value;   color : orange;
    }   }

· most common selectors: type
                          class | more selective
                          ID   ↓

· **type selectors** = target elements by their element type

    ⟶ (eg. div {...}): selects all division elements in the corresponding HTML code (<div>...</div>)

· **class selectors** = selects an element based on the element's class attribute value
                        particular group of elements > all elements of one type

- format: .class attribute value {...} →   .awesome {...}

    ⟶ (eg. .awesome {...}) : selects any element containing "awesome" class attribute (<div class="awesome">...</div>
                                                                                    <p class="awesome">...</p>)

· **ID selectors** = target only one unique element at a time based on an element's id attribute value
                     id attribute values limit 1x/page → reserved for significant elements

- format : #id attribute value {...} →   #shayhowe {...}

    ⟶ (eg. #shayhowe {...}) : only selects the element containing "shayhowe" id attribute value (<div id="shayhowe">...
                                                                                                </div>)

- must reference CSS file w/in HTML : include all styles in a single external style sheet
  reference css file using rel & href attribute inside <link> element w/in <head> element
  of HTML document

  - format : <head>   ⟶   <head>
                <link rel="stylesheet" href="css file name">   <link rel="stylesheet" href="main.css">
                <head>   <head>

  - css file should be saved in same folder location (aka root directory) as HTML file — if in a subfolder of root directory,
    href attribute value format : "subdirectory name/css file name"

Using CSS Resets

- every web browser has its own default styles for different elements: headings
                                                                         paragraphs
                                                                         lists

- CSS resets = take every common HTML element w/ a predefined style & provide one unified style for all browsers
                ensure cross-browser compatability
                must be included at the very top of style sheet

  - generally removes or tones down: sizing
                                      margins
                                      padding
                                      additional styles

    ⟶ (eg. Eric Meyer's reset): popular reset
                                   includes styles for new HTML5 elements

    ⟶ (eg. Normalize.css):   sets common style for elements > hard reset for elements