Demo: html5 structure

Simple Text/Web Editor
• TextEdit –make plain text (osx)
• Notepad++ (windows)
• TextWrangler (osx)
• Coda 2 (osx)
• Sublime Text 2 (osx & windows)
• Brackets (osx & windows)

General Workflow (nomadic version)
• Set up/verify web folder on local hard drive
• Set up FTP (file transfer protocol) client
• Download web files (html, css, jpg, gif, png) from server to local folder
• Open/create web files from the local web folder (ONLY)
• Edit web files
• Test locally in browser (chrome)
• Chrome inspect element
• Validate code (w3c validator)
• Upload web files from local drive to server
• Test live in browser (multiple browsers)

What is html?
• acronym for hypertext markup language
• hypertext means ability jump to another document (links)
• markup is a language for describing web pages.
• markup tags define the structure of content in web pages
• “view source” in any browser to see the html markup of a webpage

html tags
• html markup is called “tags”
• tags are special keywords surrounded by angle brackets
  o <html> <body> <head> <title>
• html tags normally come in pairs
  o <p> .... </p>
  o exception is “empty tags”
    ▪ <meta> <br> <img>
    ▪ no closing tag because they don’t enclose anything they are “empty”
• First tag = start or open tag
• Second tag= end or close tag

html document = web page
• html documents contain html tags and plain text to describe web pages
• Web browsers (Chrome, Safari, Firefox, IE, Opera) read html documents and display them as web pages.
• Browsers use tags to interpret the structure (outline) of web page to create the DOM (document object model)
Example of bare minimum HTML document:
<!doctype html>
<html>
  <head>
    <meta charset="utf-8">
    <title>Hello World</title>
  </head>
  <body>
    Hello World!
  </body>
</html>

HTML example explained
• <!doctype html> = specifies HTML5 rule set
• <html> = HTML document
• <head> = instructions for the browser
  o meta, title, css, javascript
• <meta charset="utf-8"> = specifies character encoding
• <title> = title of document
• <body> = visible page content

File extensions
• .html or .htm
• .html more popular = better

CASE SENSITIVITY
• HTML5 is no longer case sensitive (however)
• most developers keep their tags in lowercase for consistency (and as a nod to predecessor XHTML)
• good writing style

Doctype declaration
• you MUST specify the doctype in all of your HTML documents
  o tells browser what type of document to expect and what rules to follow.
  o consistent rendering across browsers
  o otherwise you get quirks mode
    ▪ browser emulates 1990's era browser
    ▪ not good
• the doctype declaration MUST be on the first line in your HTML document and before the <html> tag.
• doctype declaration for HTML5
  <!doctype html>
• simplified version of previous doctypes
  <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML+RDFa 1.0//EN" "http://www.w3.org/MarkUp/DTD/xhtml-rdfa-1.dtd"

Structure
• information
  o most important feature of webpage
• webpages are structured in outline form
  o headings
  o paragraphs
• lists
• figures (informational images)
• parent–child relationships
  • most html elements can be nested (can contain other html elements).
• good structure
  • ACCESSIBILITY
  • SEO
  • DOM

html5 structural markup
• <header>
• <nav>
• <section>
• <article>
• <aside>
• <footer>

Generic structure tags
• <div> (block level)
• <span> (inline)
• used with CSS for design

html headings
• think outline – use html headings for the purpose of headings only
  • DO NOT use headings to make text big or bold (presentational)
• search engines use headings to index your pages (SEO)
• use headings in order of hierarchy:
  <h1>This is a heading</h1>
  <h2>This is a sub heading</h2>
  <h3>This is a sub sub heading</h3>

html paragraphs
  <p>This is a paragraph.</p>
  <p>This is another paragraph.</p>

html links
• absolute link
  • full http address
  • link to external website
<a href="http://www.w3schools.com">link</a>
• relative link
  • local .html address
  • link to internal web page
  • internal site navigation
<a href="index.html">home</a>

html attributes
• html elements can have attributes
• provide additional information about an element
• always specified in the start tag
  <tag attribute="value"></tag>
• attributes must have values
• values should be in quotes (writing style)
html images (informational)
• informational imagery uses the img should be in <figure> tags

<figure>
<img src="images/w3schools.jpg" width="104" height="142"
alt="accurate description of image">
</figure>

• img tag creates a placeholder for images
• src attribute fills placeholder with image
  o common for images to reside in an images folder
• width and height attribute defines image size to be displayed
• alt attribute specifies an alternate text for an image
  o required for validation
  o displayed when image cannot be displayed (broken)
  o useful for people with disabilities (accessibility)
  o also useful as keywords for search engines (seo)
• design (non-informational) imagery is handled by css
  o placed in background of elements
  o displayed visibly but hidden semantically

html comments
• inserted into the HTML code as programmer’s notes
• makes code more readable or understandable
• ignored when rendered by the browser and are not displayed
  <!-- This is an html comment -->

Lists
Ordered          Unordered
<ol>
  <li></li>
  <li></li>
  <li></li>
</ol>

<ul>
  <li></li>
  <li></li>
  <li></li>
</ul>

special characters
<&lt; is the same as <
&amp;gt; is the same as >
&amp;#169; is the same as ©
&amp;nbsp; non-breaking space