

L1: Intro

Monday, 4 March, 2019 3:47 PM

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Main reference: New Perspective on HTML5

Focus:

1. History of web
2. Insert metadata into document
3. Sectioning elements
4. Grouping elements
5. Text-level elements
6. Inline images
7. Symbols
8. Lists

Learning outcome:

1. CLO1: Create a website
2. CLO2: CSS and JavaScript

History of web

1. **Network** = Structure to share information and services among devices
2. **Host/Node** = Devices which can send/receive data
3. **Server** = Provide information/service to devices
 - a. Service receiver = **client**
4. **Client-server network** = clients access others information
5. **Local area network** = Network in small geographic area, **switch** are intermediary devices
6. **Wide area network (WAN)** = Network in wide area
 - a. Largest: Internet
7. **Timothy Bernes-Lee**, CERN facility in Switzerland laid foundation for WWW in 1989
8. **Hypertext** = Method to organize data sources through **links/hyperlinks** to jump to other information.
9. **Web Page**: Document on web, stored on **web servers**, accessible using **web browser**

Introducing HTML

1. **HTML** (Hypertext Markup Language): Language to write web page, describes content
2. **Markup language**: Describe content/structure of document through tags and elements
3. **W3C (WWW Consortium)**: Created standards for browser to follow
 - a. No enforcement
4. **XHTML** (eXtensible): different HTML with stricter standards
5. **HTML5**: Next generation HTML, **depreciate** older features
6. HTML Converter - translate text to HTML code
 - a. "Bloated": Usually longer & more complicated
7. **IDE** (Integrated Development Environment)
 - a. Software covering all development process (from writing HTML code > create scripts on servers)
8. **Validators**: Test code, ensure no syntax error

Document Type Declaration

1. Doctype: describe markup language

Introducing Element Tags

1. Marks element in document
2. **Two sided element**: Starting tag (tag without "/")ending tag
3. Empty elements (one-sided tag): refer to nontextual elements

- a. **
**: Indicate line break
- b. **<hr>**: Horizontal line
4. **Head** : mark document information
5. **Body**: Content appearing in web page

Displaying HTML file

1. Use different browser to check compatibility

Introducing Element Attributes

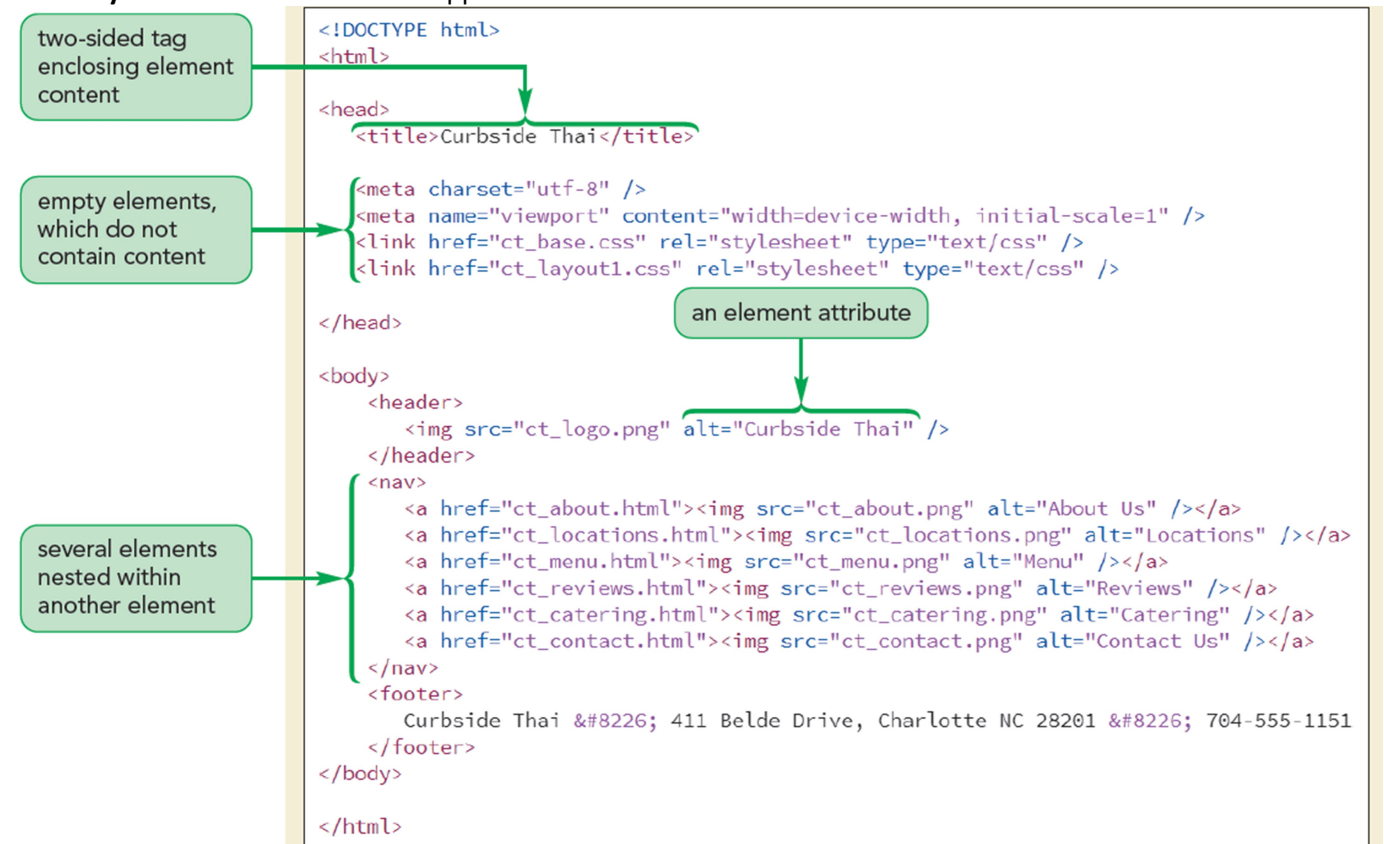
1. **Element attributes**: additional information to inform browser on element purpose, **not case sensitive**
2. **Style attributes (remember semicolon)**:
 - a. Center text: "style=text-align: alignment;"
 - b. Alignment = left/right/center/justify
 - c. Font color: "style=color: color;"

Handling White Space

1. **White-space character**: Empty/blank character
2. **White space**: Make file easier to read

Viewing HTML Files

1. **Style sheets**: Describe actual appearance



Document head

1. Contains **metadata**, describe on how the browser should process the document
2. **Meta** element: general list of metadata values
 - a. `<meta attributes>`
3. **Character encoding**: Process to convert text into bytes & vice versa

Comments

1. `<!-- comment -->`

Page Body

1. **Sectioning/semantic elements:** Marks major topical areas
 - a. `<h1>`
 - b. `<p>`
 - c. `<blockquote>`
 - d. Generic block-level element: `<div>`
2. **Style sheet:** specify how elements displayed in **CSS** language
 - a. External, internal, inline.

Character sets/special characters

1. **Character set:** Collection of characters/symbols rendered by browser
 - a. **Character encoding:** associate character from char set to read by computer using numbers
 - i. `&#code`
 - b. **Character entity reference:** Insert special symbol using short names
 - i. `&char`
2. In exam don't have to remember the exact code, will be given, however it won't tell either `&` or `&#` so have to remember when to use

Working with Inline Images

1. **Embedded content:** content from other place using **embedded elements**
2. **Inline images:** Images placed like text-level elements
 - a. `img`, `src`, and `alt`

List

1. Grouping element (common element: `li`)
2. **Ordered list, *ol*:** sequential order, alphabetically/numerically
3. **Unordered list, *ul*:** no sequential order
4. **Description list, *dl*, *dt*, *dd*:** term with matching description
5. **Navigation list, *nav* + *ul*:** List of `ul` list with hypertext links placed within **`nav`** element