Comp 125 - Visual Information Processing

Spring Semester 2018 - week 9 - wednesday

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CSS Basics - HTML5 content categories - part 1

- **block-level** is not technically defined for new elements in HTML5
- now have a slightly more complex model called **content categories**
- includes three primary types of content categories

These include,

- **main content categories** - describe common content rules shared by many elements
- **form-related content categories** - describe content rules common to form-related elements
- **specific content categories** - describe rare categories shared by only a small number of elements, often in a specific context

CSS Basics - HTML5 content categories - part 2

- **Metadata content** - modify presentation or behaviour of document, setup links, convey additional info...
  - *<base>, <command>, <link>, <meta>, <noscript>, <script>, <style>, <title>*

- **Flow content** - typically contain text or embedded content
  - *<a>, <article>, <canvas>, <figure>, <footer>, <header>, <main>*...

- **Sectioning content** - create a section in current outline to define scope of `<header>` elements, `<footer>` elements, and *heading* content
  - *<article>, <aside>, <nav>, <section>*

- **Heading content** - defines title of a section, both explicit and implicit sectioning
  - *<h1>, <h2>, <h3>, <h4>, <h5>, <h6>, <hgroup>*
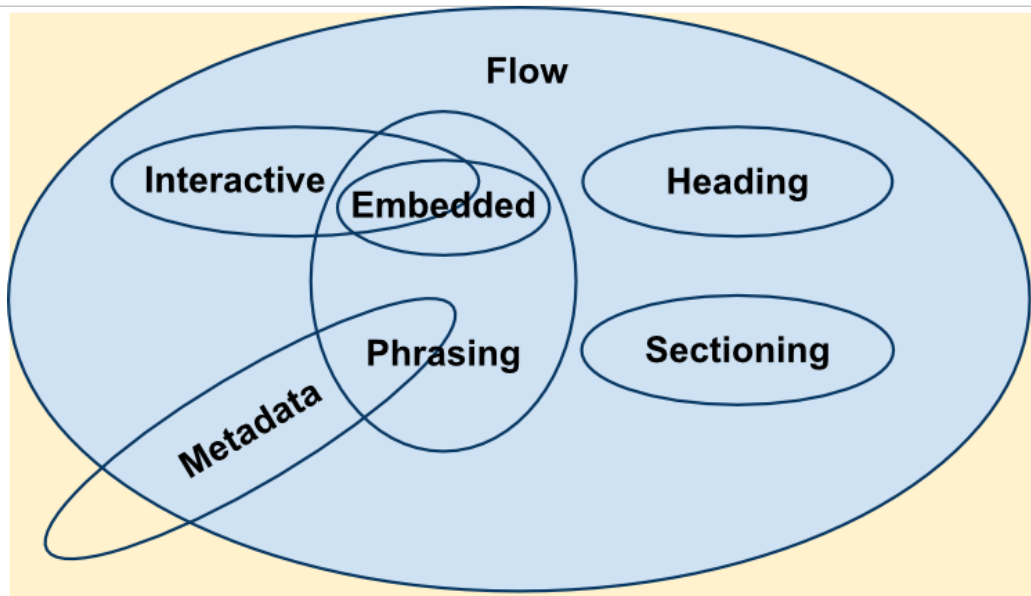
Source - MDN Content Categories

CSS Basics - HTML5 content categories - part 3

- **Phrasing content** - defines the text and the mark-up it contains
  - *<audio>, <canvas>, <code>, <img>, <label>, <script>, <video>...*
  - *other elements can belong to this category if certain conditions are met. e.g. <a>*

- **Embedded content** - imports or inserts resource or content from another mark-up language or namespace
  - *<audio>, <canvas>, <embed>, <iframe>, <img>, <math>, <object>, <svg>, <video>*

- **Interactive content** - includes elements that are specifically designed for user interaction
  - *<a>, <button>, <details>, <embed>, <iframe>, <keygen>, <label>, <select>, <textarea>*
  - *additional elements, available under specific conditions, include*
  - *<audio>, <img>, <input>, <menu>, <object>, <video>*

- **Form-associated content** - elements contained by a form parent element
  - *<button>, <input>, <label>, <select>, <textarea>...*
  - *there are also several sub-categories, including listed, labelable, submittable, resettable*

Source - MDN Content Categories

Image - HTML5 Content Categories

HTML5 Content Categories

Source - MDN - Content Categories

CSS Basics - box model - part 1

- consideration of the CSS box model
- a document's attempt to represent each element as a rectangular box
- boxes and properties determined by browser rendering engine
- browser calculates size, properties, and position of these required boxes
- properties can include, for example,
  - *colour, background features, borders, width, height...*
- box model designed to describe an element's required space and content
- each box has a series of edges,
  - ***margin*** *edge*
  - ***border*** *edge*
  - ***padding*** *edge*
  - ***content*** *edge*

CSS Basics - box model - part 2

Content

- box's **content area** describes element's actual content
- properties can include `color, background, img`...
  - *apply inside the* ***content*** *edge*
- dimensions include **content width** and **content-height**
- content size properties (assuming that the `box-sizing` property remains default) include,
  - *width, min-width, max-width, height, min-height, max-height*

Demo - CSS Box Model

- Demo - CSS Box Model

CSS Basics - box model - part 3

Padding

- box's **padding area** includes the extent of the padding to the surrounding border

- background, colour etc properties for a content area extend into the padding
  - *we often consider the padding as extending the content*

- padding itself is located in the box's **padding edge**

- dimensions are the width and height of the **padding-box**.

- control space between padding and content edge using the following properties,
  - `padding-top, padding-right, padding-bottom, padding-left`
  - `padding` *(sizes calculated clock-wise)*

Demo - CSS Box Model - Padding

- JSFiddle - CSS Box Model

References

- MDN
- CSS documentation
- W3Schools
- CSS
- CSS Box Model