

Comp 125 - Visual Information Processing

Spring Semester 2018 - week 9 - wednesday

Dr Nick Hayward

CSS Basics - HTML5 content categories - part I

- **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>`

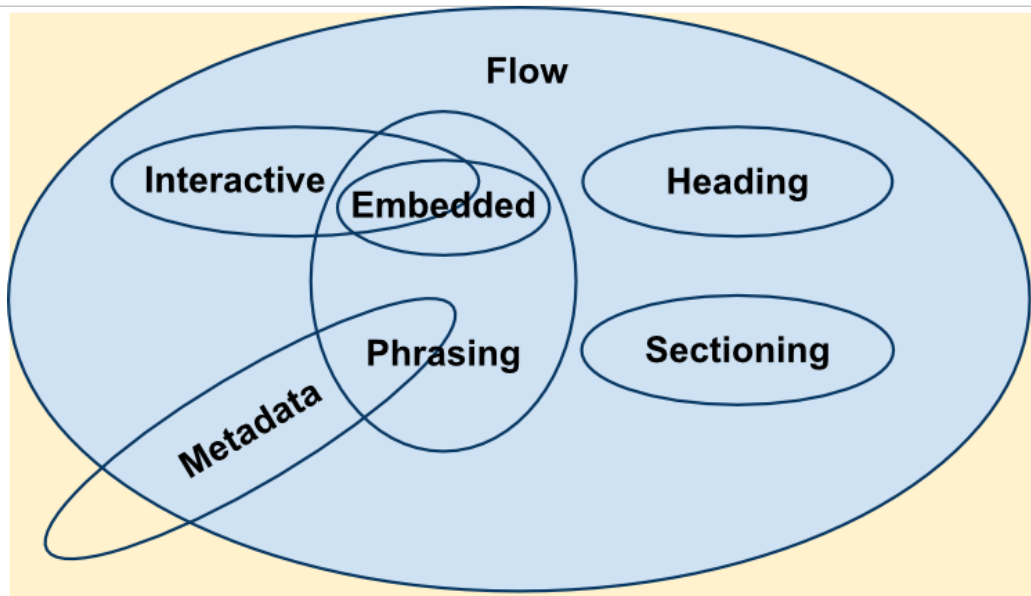
Source - MDN Content Categories

CSS Basics - HTML5 content categories - part 3

- **Phrasing content** - defines the text and the mark-up it contains
 - `<audio>`, `<canvas>`, `<code>`, ``, `<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>`, ``, `<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>`, ``, `<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 I

- 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](#)