embedded content

- "Embedding" refers to the practice of including a document inside another document
- Embedding is distinct from quotation – when embedding the original document is included whole, and is distinct from the document in which it is embedded

- Most embedded content is displayed inline by default

- Embedded content is stored externally to the HTML document – thus, it must be "linked" to the HTML document using a URL, this is called embedding

- CSS files are embedded files, but they are not content – they are styling instructions

- Images, video, and audio are examples of embedded content frequently found on webpages

- Many social and media services such as Facebook, Twitter, Flickr, and YouTube allow users to embed content from the service into other sites

images

- images are embedded using the img element
- img elements are empty, they do not have a closing tag

`<img>`

- the src attribute is used to indicate the location of the image – either in the file system or the internet
- the value of the src attribute must be a valid URL
- the file name indicated must include the file extension

`<img src="images/image.png">`

image metadata

- the alt attribute specifies an alternate text for an image – this will be displayed in cases where the embedded image is unavailable or otherwise can not be displayed

<img alt="this is a sample image">

- the alt attribute should be included to facilitate accessibility – screen readers can not describe an image, but will instead read out the alternate text

image sizes

- by default images will be displayed at their original size – this size can often be too small or too large to fit properly with the rest of the content

- the width and height attributes can be used to specify the height of an image in HTML, this is useful for cases when a CSS style sheet is unavailable

- the value of width and height is always measured in pixels

<img height="400" width="400">

- like all HTML elements, the height and width of an image can also be defined through CSS, indicating only one or the other will keep the image aspect ratio

audio and video

video

- the video element is used to embed video content, and can be authored like an img element
- however, at this point in time video file formats have not been standardized for the web – thus some file formats may not display properly in certain browsers
- to circumvent this <source> elements may be nested within a video element to indicate multiple versions of the video

- video elements are not empty elements – they should have both opening and closing tags

video meta data

- alternate text for video content is not indicated using an attribute – instead it is defined as plain text content inside the video element

<video>This text will be displayed if the video content is unavailable.</video>

- width and height attributes can be used to specify a size for a video
- the controls empty attribute can be used to display controls with the video (pause and play buttons, etc.)

<video controls></video>

video sources

- the source element is an empty element in which a source file for a parent video element is defined
- the src attribute is used to indicate the location of the video, and must be a valid URL
- the type attribute is used to specify the type of media and file format of the sourced content ([link](#))

<source src="movie.mp4" type="video/mp4">

sample video html

<video width="320" height="240" controls>
  <source src="movie.mp4" type="video/mp4">
  <source src="movie.ogg" type="video/ogg">
  Your browser does not support the video tag.
</video>

- in case the browser can not display any of the sourced video files, the plain text content will be displayed

[audio](#)

- the audio element works exactly like the video element, but it does not have a height specification (though width can be specified to stretch the controls)

- audio source elements will have different values in the type attribute ([link](#))

caution!

- attributes such as autoplay are available in html – and will make video or audio content play as soon as it loads on the page – using this attribute is (almost) never a good idea

- there are very few uses for embedding audio directly in a page – it is usually better to hyperlink to the file (we will cover this soon) – think carefully before embedding audio

embedding html pages

iframe

- the iframe (inline frame) element is used to embed external HTML documents in your HTML document

- height and width attributes can be used to size the element

- the src attribute is used to indicate the location of the external document, and must be a valid URL

- iframe elements have very few uses in non-interactive websites – so you should probably not use them in your page

YouTube videos

- YouTube uses iframes to let users embed videos in their sites
- YouTube provides a premade piece of embed code – there is usually no need to modify this code (modification will often result in minor display anomalies)

\<iframe width="560" height="315" src="http://www.youtube.com/embed/pwnefU aKCbc?rel=0" frameborder="0" allowfullscreen>\</iframe>

- many other sharing video sharing sites use similar techniques – so understanding of iframe syntax can prove useful in some cases