



WEBD 162

Class 13
Chapter 10 - HTML5

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History of HTML

- ▶ 1989
 - ▶ Tim Berners Lee / text based browser
- ▶ April 1993 / November 1994
 - ▶ Mosaic browser / Netscape browser
- ▶ Late 1994
 - ▶ W3C forms – HTML I (?)
- ▶ November 1995
 - ▶ HTML 2
- ▶ Early 1996
 - ▶ HTML 3.2
- ▶ 1998 / 1999
 - ▶ HTML 4 / HTML 4.01
- ▶ January 2000
 - ▶ XHTML (no XHTML 2)

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History of HTML

- ▶ 2004
 - ▶ WHATWG – Web Hypertext Application Technology Working Group
- ▶ 2008
 - ▶ WHATWG – First Draft HTML5
- ▶ 2009
 - ▶ WHATWG – joined by W3C

- ▶ October 2014
 - ▶ HTML5

DTDs

```
HTML5
<!DOCTYPE html>

HTML 4.01 Transitional
The Transitional DTD includes deprecated elements and attributes:
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/HTML4.01/loose.dtd">

HTML 4.01 Strict
The Strict DTD omits all deprecated elements and attributes:
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN"
"http://www.w3.org/TR/HTML4.01/strict.dtd">

HTML 4.01 Frameset
If your document contains frames—that is, it uses frameset instead of body for its
content—then identify the Frameset DTD:
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN"
"http://www.w3.org/TR/HTML4.01/frameset.dtd">

XHTML 1.0 Strict
The same as HTML 4.01 Strict, but reformulated according to the syntax rules of XML:
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">

XHTML 1.0 Transitional
The same as HTML 4.01 Transitional, but reformulated according to the syntax rules of
XML:
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

XHTML 1.0 Frameset
The same as HTML 4.01 Frameset, but reformulated according to the syntax rules of
XML:
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Frameset//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-frameset.dtd">
```

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XHTML Markup Requirements

- ▶ Lower case
- ▶ Empty elements must be terminated - `
`
- ▶ Attribute values must be quoted
- ▶ Attributes must have values: `checked="checked"`
- ▶ Special character must be represented by the entity: `&` should be `&`;
- ▶ Use of 'id' instead of 'name'

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HTML5 contributions

- ▶ Reversion to HTML syntax
- ▶ New semantic elements
- ▶ New form elements
- ▶ Native audio and video (api)



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HTML5 contributions – page 191

- ▶ **APIs** (most need JavaScript)
 - ▶ Geolocation – find where you are
 - ▶ Drag and Drop
 - ▶ Local Storage – more storage
 - ▶ Application Cache – downloads certain files in case connection is lost
 - ▶ Web Workers – run scripts in the background
 - ▶ Web Sockets – open a connection to server without interrupting the page
 - ▶ Editing - `contenteditable="true"`
 - ▶ **Canvas** – drawing tool

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Media Formats - 192

- ▶ Codec – how media is encoded
 - compression/decompression
- ▶ Container – the container format for the codec and the media (like a zip file)

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Video - 193

Codec

- ▶ H.264
- ▶ Vorbis
- ▶ Theora
- ▶ VP8
- ▶ AAC

Container

- ▶ ogg
- ▶ Mp4
- ▶ webm

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Audio - 194

- ▶ ogg
- ▶ mp3
- ▶ wav
- ▶ webm

Encoding tools – page 194

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Adding Video to the web page - 195

<video width="" height="" controls preload
autoplay poster="" >

<source src="file.mp4" type="video/mp4"> (IE / C / S)

<source src="file.ogg" type="video/ogg"> (FF / O)

<source src="file.webm" type="video/webm"> (IE / C / FF)

[Download the file](file.mp4) - used for older browsers

</video>

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Adding Audio to the web page - 198

<audio controls preload autoplay loop >

<source src="file.mp4" type="video/mp3"> (IE / C / S)

<source src="file.ogg" type="video/ogg"> (FF / O)

<source src="file.webm" type="video/webm"> (IE / C / FF)

[Download the file](file.mp3) - used for older browsers

</audio>

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Adding Video to the web page

