

HTML5

10 Things to Know

Webster University

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1 Flux

2

Warning!

Some of this may change!

The spec is still in development!

3

4

2 Simpler Template

5

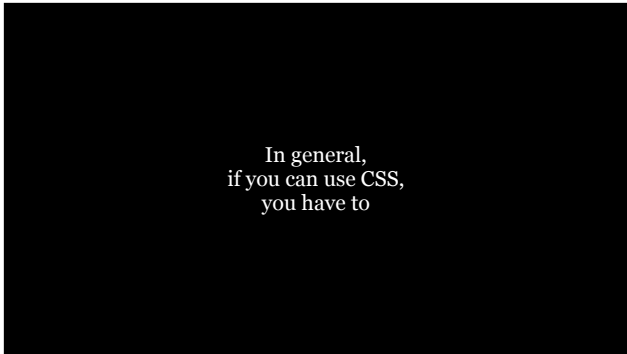
```
<!doctype html>  
<html>  
<head>  
  <meta charset="UTF-8">  
  <title></title>  
</head>  
<body>  
  
</body>  
</html>
```

6

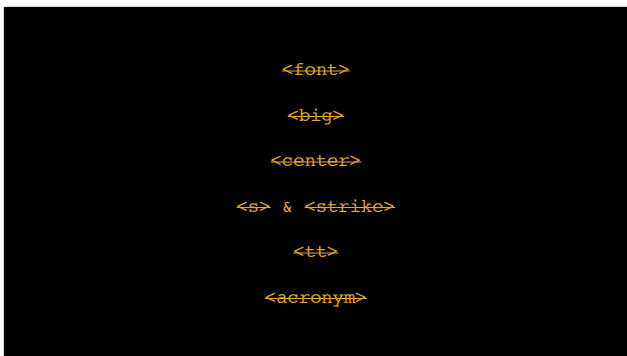
3 CSS Replaces Some HTML



7



8



9

10

align
bgcolor
height on `<td>` & `<th>`
hspace & vspace
nowrap
valign
width on `<hr>`, `<table>`, `<td>`, & `<th>`

11

4 Frames Are Dead

12

`<frame>`
`<frameset>`
`<noframes>`
Removed due to
poor usability & accessibility
`<iframe>` is still OK

5

Redefined Elements

13

`<i>`

HTML 4: italic

HTML5: text in an “alternate voice”

Examples

- » Foreign words `<i lang="fr">`
- » Technical terms
- » Ship names
- » Stage directions
- » Typographically italicized text

14

``

HTML 4: bold

HTML5: “stylistically offset” text
that’s not more important

Examples

- » Keywords
- » Product names in a review
- » Typographically emboldened text

15

It was nearly one o'clock when Sherlock Holmes returned from his excursion. He held in his hand a sheet of blue paper, scrawled over with notes and figures.

16

Why is that text bold?

Because it's more important?

Because it should be strongly emphasized?

``

HTML 4: emphasis (italic)

HTML5: "stress emphasis" text

Something pronounced differently: "Come here *now!*"

17

``

HTML 4: strong emphasis (bold)

HTML5: "strong importance" text

Warning: Do not feed the bears.

18

19

`<small>`

In HTML 4, made text smaller

In HTML5, indicates side comments & small print

Examples:

- » Legal disclaimers
- » Copyright & licensing info
- » Attributions

20

`<hr>`

In HTML 4, inserted horizontal rule

In HTML5, indicates "paragraph-level thematic break"

Use to separate topics or scenes

21

sake let us have a quiet pipe and turn our minds for a few hours to something more cheerful."



*A*bout nine o'clock the light among the trees was extinguished, and all was dark in the direction of

Replace standard browser `<hr>` with CSS

22

6 Content Blocks

23

```
<div>
```

24

```
<div>
```

`<div>` has been around since HTML 4.01,
but you need to understand it
to get what HTML5 is doing

25

`<div>` is a block-level element
that does nothing without CSS

Use `<div>`
to group block-level elements together
that you want to affect in the same way
with CSS

26

```
<div class="attention">
  <p>...</p>
  <blockquote>
    <p>...</p>
    <p>...</p>
  </blockquote>
  <p>...</p>
</div>
```

27

```
<div class="utility-nav">
  <p class="off">...</p>
  <p class="on">...</p>
  <p class="off">...</p>
</div>
```

28

`<section>`

29

“The `section` element represents a generic document or application section... The `section` element is not a generic container element. When an element is needed for styling purposes or as a convenience for scripting, authors are encouraged to use the `div` element instead.”

30

You should almost always start a section with a header

```
<section>
  <h2>Header</h2>
  <p>...</p>
</section>
```

31

`<article>`

32

`<article>` is “a section of content that forms an independent part of a document or site”

In other words,
content that can stand on its own

33

Use `<section>` to split `<article>`
into logical groups of content

34

```
<article>
  <h1>Cthulhu Mythos</h1>
  <p>Lorem ipsum</p>
  <section>
    <h2>Yog-Sothoth</h2>
    <p>Lorem ipsum</p>
  </section>
  <section>
    <h2>Nyarlathotep</h2>
    <p>Lorem ipsum</p>
  </section>
</article>
```

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Which One To Use?

36

`<article>`
An independent, self-contained block of related content
"Can it stand on its own?"

`<section>`
A block of related content
"Is it related content?"

`<div>`
A generic block of content
"Is it a block of content?"

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7 Semantic Page Parts

38

```
<aside>
```

39

Tangentially related content

- » Sidebars
- » Pull quotes
- » Glossary
- » Related links

40

`<nav>`

41

“a section of a page
that links to other pages or to parts within the page:
a section with navigation links.”

Only “major navigation blocks”

42

`<main>`

43

“The main content of the body
of a document or application...
content that is directly related to or expands upon
the central topic of a document”

44

`<figure>`

45

“...annotate illustrations, diagrams, photos, code listings, etc,
that are referred to from the main content of the document,
but that could, without affecting the flow of the document,
be moved away from that primary content,
e.g. to the side of the page, to dedicated pages,
or to an appendix.”

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`<header>`

50

Introductory or navigational aids

Usually contains

- » A section's heading (`<h1>`–`<h6>`)
- » Table of contents
 - » Logos
 - » Search form

Does not introduce a new section;
it is the head of a section

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`<footer>`

52

Replaces `<div id="footer">`

Footer not just for pages, but also for sections too

- Info such as
 - » Author
 - » Copyright
 - » Links to related content
 - » Contact info (in `<address>`)

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9
`<video>`
&
`<audio>`

54

`<video>`

55

`<video>` allows the browser
to play video without Flash or other plugins

56

```
<video width="640" height="360" src="http://  
www.youtube.com/demo/google_main.mp4" controls  
autobuffer></video>
```















`controls`
Show play, stop, & other controls

`autoplay`
No!

`autobuffer`
No autoplay,
so video downloaded in background

`poster="action.png"`
Display image before video loads

57

Ogg							
H.264 (MP4)							
WebM							

58

Best way to generate <video> code

Video for Everybody Generator
sandbox.thewikies.com/vfe-generator/

MP4 Video
http://clips.vowwerts-gmbh.de/big_buck_bunn

Ogg Video
http://clips.vowwerts-gmbh.de/big_buck_bunn

WebM Video
http://clips.vowwerts-gmbh.de/big_buck_bunn

Poster Image
<http://sandbox.thewikies.com/vfe-generator/in>

Fallback Title
Big Buck Bunny

Width: 640 Height: 360 Autoplay XML Formatting

Embed as: Flash Player HTML5

Source Code

```

<!-- Video for Everybody? http://sandbox.thewikies.com/code/video_for_everybody -->
<video controls*="controls" poster="http://sandbox.thewikies.com/vfe-generator/images/big-buck-bunny_poster.jpg" width="640" height="360">
  <source src="http://clips.vowwerts-gmbh.de/big_buck_bunny.mp4" type="video/mp4" />
  <source src="http://clips.vowwerts-gmbh.de/big_buck_bunny.ogg" type="video/ogg" />
  <source src="http://clips.vowwerts-gmbh.de/big_buck_bunny.webm" type="video/webm" />
  <object type="application/x-shockwave-flash" data="http://releases.flowplayer.org/swf/flowplayer-3.2.1.swf" width="640" height="360">
    <param name="movie" value="http://releases.flowplayer.org/swf/flowplayer-3.2.1.swf" />
    <param name="allowFullScreen" value="true" />
    <param name="flashVars" value="config={playlist:[{http://sandbox.thewikies.com/vfe-generator/2f/images/2fbig-buck-bunny_poster.jpg},{url:'h
  </object>
  </video>
</pre>


http://clips.vowwerts-gmbh.de/big\_buck\_bunny.mp4 http://clips.vowwerts-gmbh.de/big\_buck\_bunny.ogg http://clips.vowwerts-gmbh.de/big\_buck\_bunny.webm


```

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Video Conversion Software



Media Converter
media-converter.sourceforge.net
Free!



Freemake Video Converter
www.freemake.com
Free!

60

61

`<audio>`

62

`<audio>` allows the browser
to play audio without Flash or other plugins

63

```
<audio src="elvis.ogg" controls autobuffer>  
</audio>
```

`controls`

Show play, stop, & other controls

`autoplay`

No!























`autobuffer`

No autoplay,
so audio downloaded in background

`loop`

Repeat—only use if necessary!

64

Ogg							
MP3							ios
AAC							ios
WebM							
WAV							ios

65

Audio Conversion Software

 Media Converter
media-converter.sourceforge.net
Free!

 XLD
tmkk.pv.land.to/xld/index_e.html
Free!

 Freemake Audio Converter
www.freemake.com
Free!

66

<source>

67

`<source>`

“...allows authors to specify multiple media resources for media elements.

It does not represent anything on its own.”

Always a child of media elements

`<video>` & `<audio>`

68

```
<video>
  <source src="video.mp4" type="video/mp4">
  <source src="video.ogv" type="video/ogg;
codecs='theora, speex' ">
</video>
```

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Older browsers
don't support `<video>` & `<audio>`

Use the JavaScript found at
github.com/etianen/html5media
to enable older browsers to work

70

10 IE?

71

IE 9 & below do not fully support HTML5

(surprise!)

There are ways to add HTML5 support to IE,
however

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html5shiv can
“...enable use of HTML5 sectioning elements
in legacy Internet Explorer”

code.google.com/p/html5shiv/

github.com/aFarkas/html5shiv

73

```
<!--[if lt IE 9]>  
<script src="dist/html5shiv.js"></script>  
<![endif]-->
```

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Modernizr is “a JavaScript library
that detects HTML5 & CSS3 features
in the user’s browser”

modernizr.com

github.com/Modernizr/Modernizr

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Thank you!

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HTML5

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Questions? Email scott@granneman.com

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```
<header></header>
<nav></nav>
<main>
  <article>
    <section></section>
    <figure></figure>
    <section></section>
  </article>
  <article></article>
</main>
<aside></aside>
<footer></footer>
```

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