HTML5

10 Things to Know

Webster University

R. Scott Granneman

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1
Flux

Warning!

Some of this may change!

The spec is still in development!

2
Simpler Template

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

</body>
</html>
```

3
CSS Replaces Some HTML

Bye Bye Bye

In general,
if you can use CSS,
you have to

~~<font>~~

~~<big>~~

~~ ~~

~~<s>~~ & ~~<strike>~~

~~<tt>~~

~~<acronym>~~

align

bgcolor

height on <td> & <th>

hspace & vspace

nowrap

valign

width on <hr>, <table>, <td>, & <th>

4
Frames
Are Dead

~~<frame>~~

~~<frameset>~~

~~<noframes>~~

Removed due to
poor usability & accessibility

<iframe> is still OK

5
Redefined Elements

`<i>`

HTML 4: italic

HTML5: text in an “alternate voice”

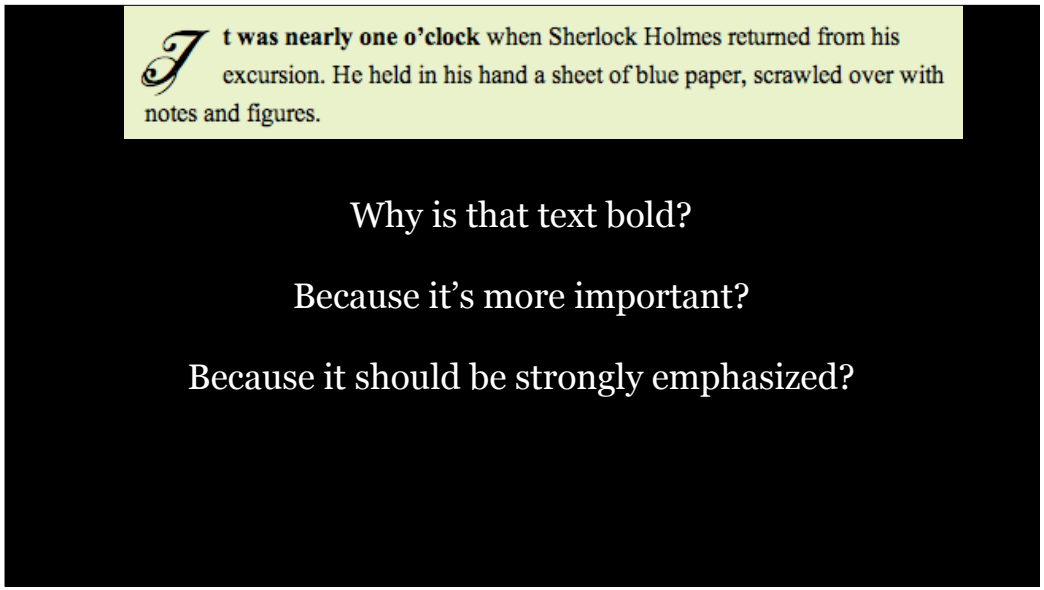
Examples
» Foreign words `<i lang="fr">`
» Technical terms
» Ship names
» Stage directions
» Typographically italicized text

<b>

HTML 4: bold

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

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


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.
Why is that text bold?
Because it's more important?
Because it should be strongly emphasized?

`<em>`

HTML 4: emphasis (italic)

HTML5: “stress emphasis” text

Something pronounced differently: “Come here *now*!”

`<strong>`

HTML 4: strong emphasis (bold)

HTML5: “strong importance” text

Warning: Do not feed the bears.

`<small>`

In HTML 4, made text smaller

In HTML5, indicates side comments & small print

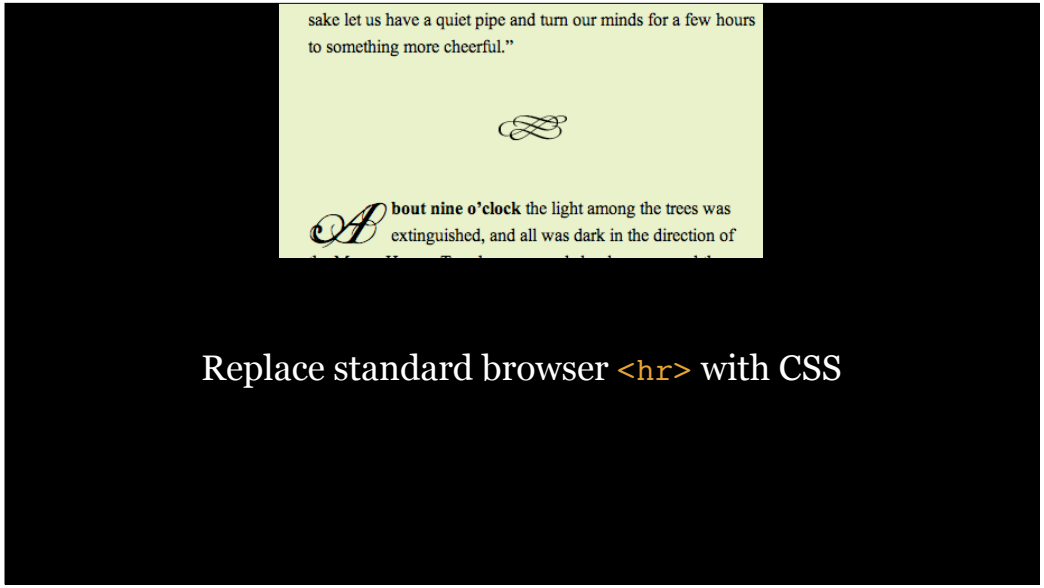
Examples:
» Legal disclaimers
» Copyright & licensing info
» Attributions

<hr>

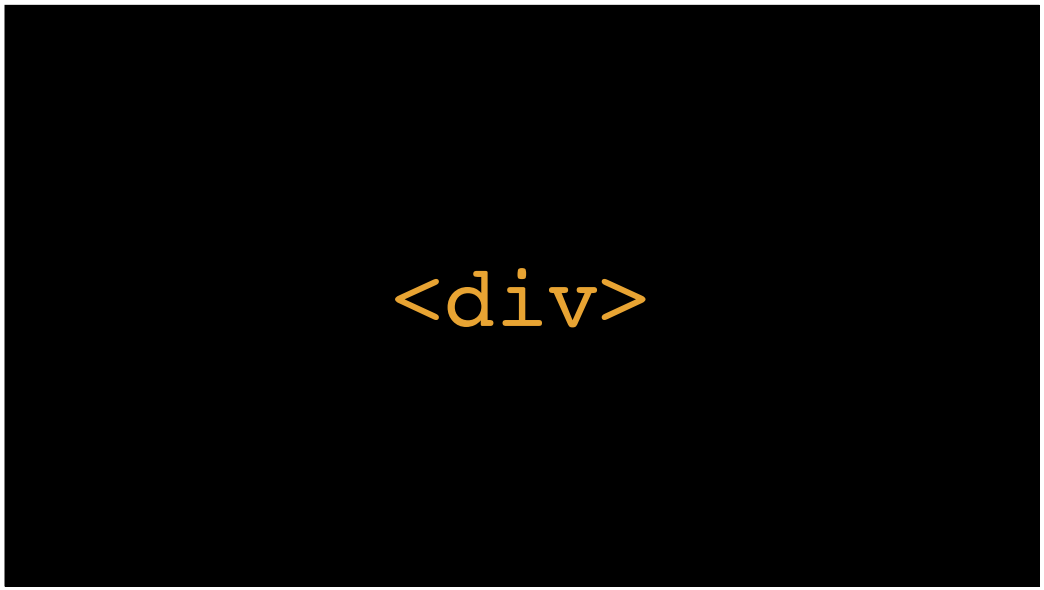
In HTML 4, inserted horizontal rule

In HTML5, indicates“paragraph-level thematic break”

Use to separate topics or scenes


sake let us have a quiet pipe and turn our minds for a few hours
to something more cheerful."
About nine o'clock the light among the trees was
extinguished, and all was dark in the direction of
Replace standard browser <hr> with CSS

6
Content Blocks



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

`<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

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

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

<section>

"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."

You should almost always start a section with a header

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

<article>

`<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

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

```
<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>
```

Which One To Use?

`<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?”

7
Semantic Page Parts

<aside>

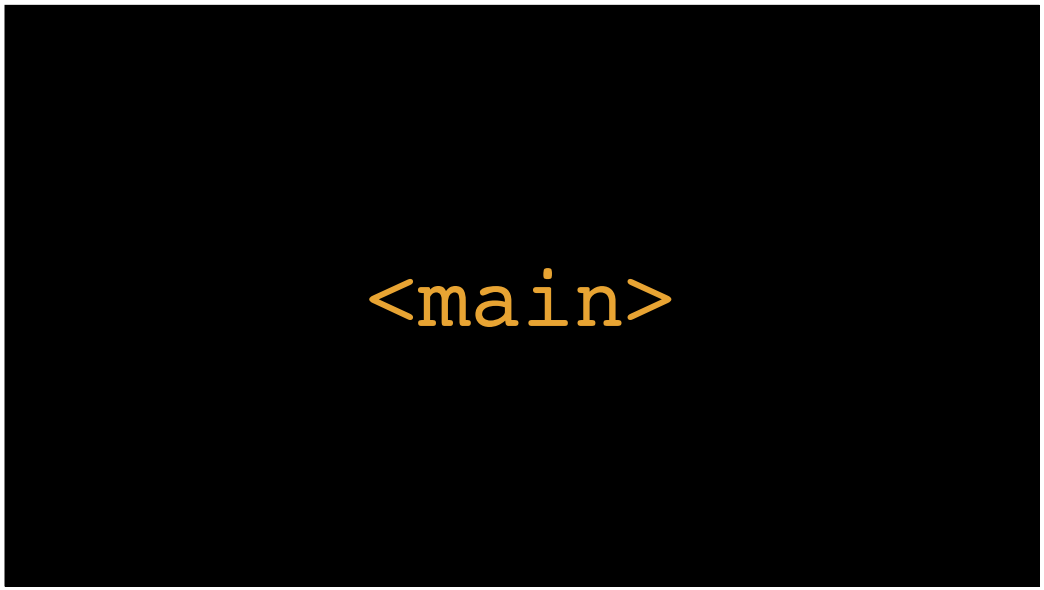
Tangentially related content

» Sidebars
» Pull quotes
» Glossary
» Related links

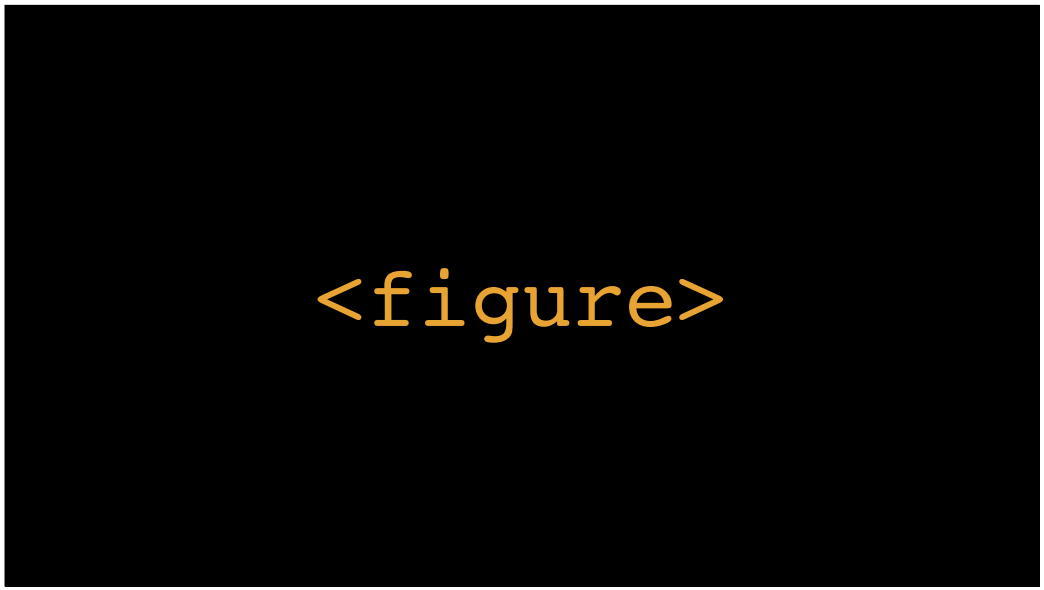
<nav>

“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”


<main>

“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”

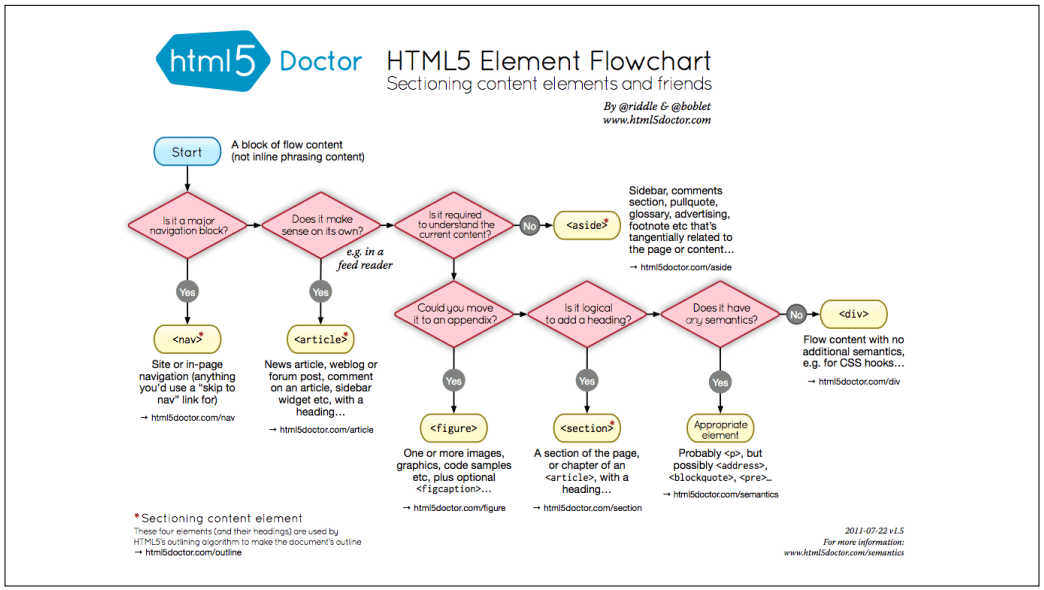

<figure>

"...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."

<figcaption>

Optional caption or legend associated with a <figure>

```
<figure>
  <img src="images/libby.jpg" alt="My dog
Libby">
  <figcaption>Libby when she was a few months
old</figcaption>
</figure>
```



html5doctor.com/downloads/h5d-sectioning-flowchart.png

8
Headers & Footers

<header>

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

<footer>

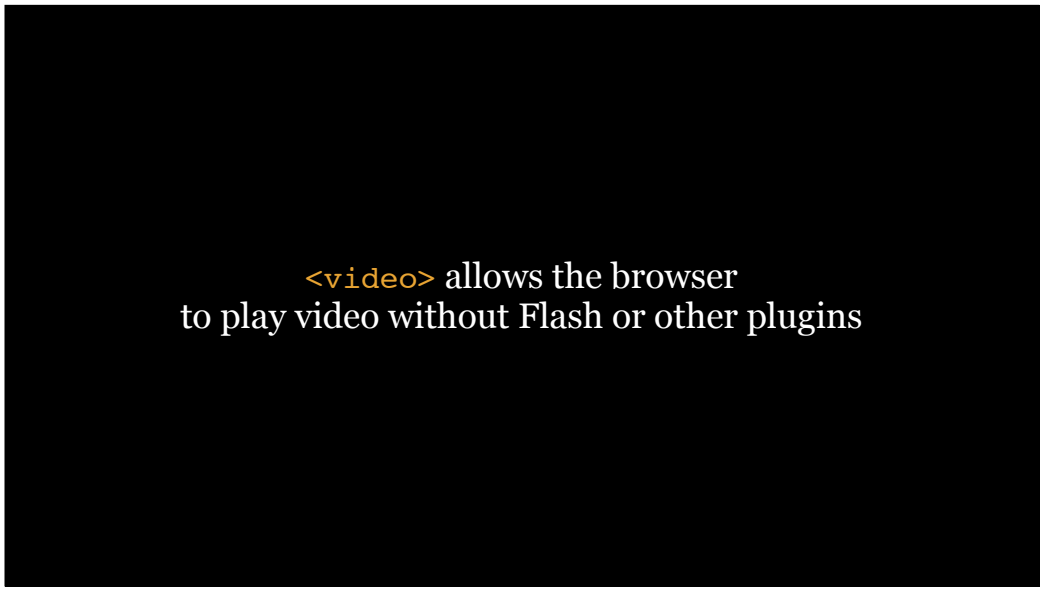
Replaces `<div id="footer">`

Footer not just for pages, but also for sections too

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

9
<video>
&
<audio>

<video>


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

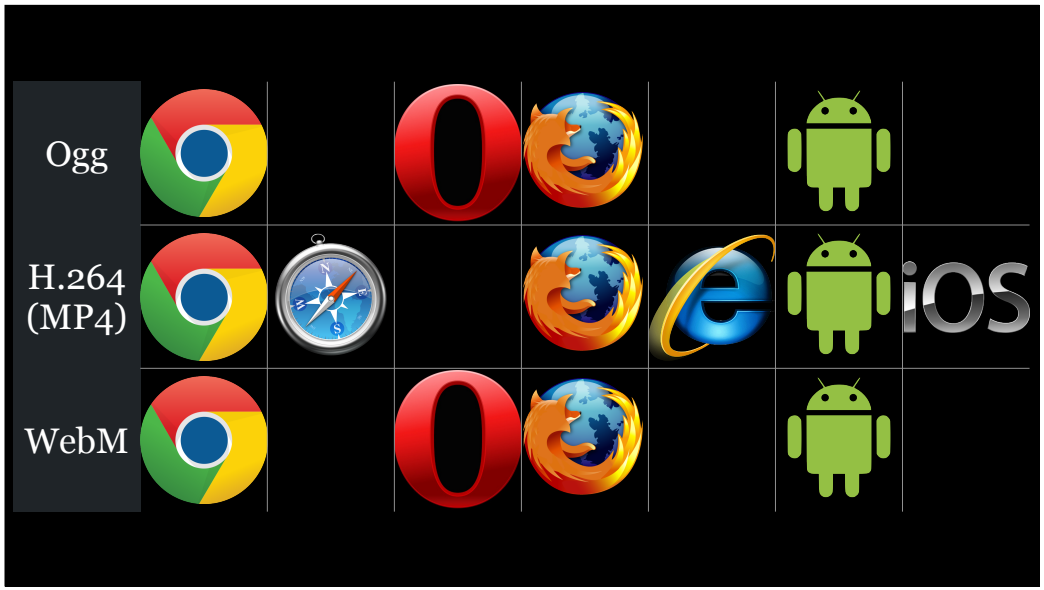
```
<video width="640" height="360" src="http://
www.youtube.com/demo/google_main.mp4" controls
autobuffer></video>
```

`controls`
Show play, stop, & other controls

`autoplay`
No!

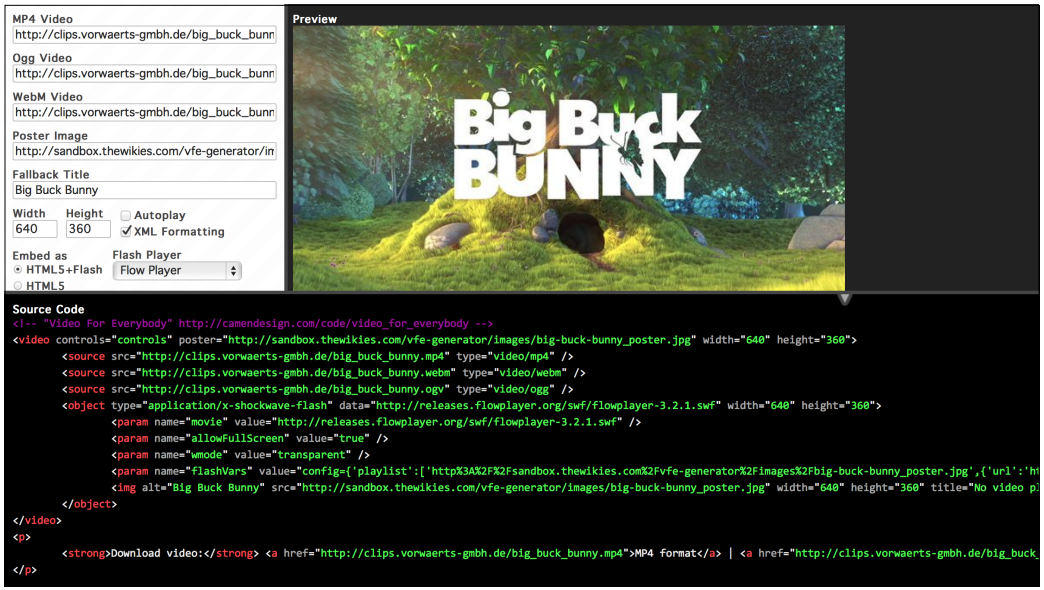
`autobuffer`
No autoplay,
so video downloaded in background

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


Ogg
H.264
(MP4)
WebM
iOS

Best way to generate `<video>` code

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


MP4 Video
http://clips.vorwaerts-gmbh.de/big_buck_bunn
Ogg Video
http://clips.vorwaerts-gmbh.de/big_buck_bunn
WebM Video
http://clips.vorwaerts-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
HTML5+Flash
HTML5
Flash Player
Flow Player
Preview
Big Buck BUNNY
Source Code
<!-- "Video For Everybody" http://camendesign.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.vorwaerts-gmbh.de/big_buck_bunny.mp4" type="video/mp4" />
<source src="http://clips.vorwaerts-gmbh.de/big_buck_bunny.webm" type="video/webm" />
<source src="http://clips.vorwaerts-gmbh.de/big_buck_bunny.ogv" type="video/ogg" />
<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="wmode" value="transparent" />
<param name="flashVars" value="config={'playlist':['http%3A%2F%2Fsandbox.thewikies.com%2Fvfe-generator%2Fimages%2Fbig-buck-bunny_poster.jpg',{'url':'ht
<img alt="Big Buck Bunny" src="http://sandbox.thewikies.com/vfe-generator/images/big-buck-bunny_poster.jpg" width="640" height="360" title="No video p
</object>
</video>

Download video: MP4 format | <a href="http://clips.vorwaerts-gmbh.de/big_buck_

Video Conversion Software

Media Converter
media-converter.sourceforge.net
Free!

Freemake Video Converter
www.freemake.com
Free!

<audio>

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

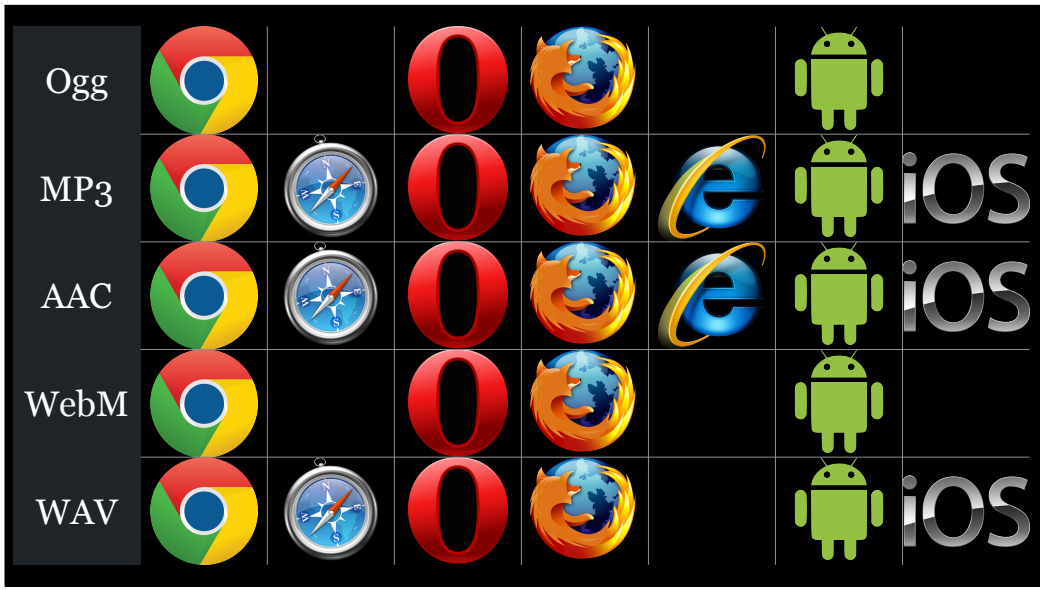
```
<audio src="elvis.ogg" controls autobuffer>
</audio>
```

`controls`
Show play, stop, & other controls

`autoplay`
No!

`autobuffer`
No autoplay,
so audio downloaded in background

`loop`
Repeat—only use if necessary!

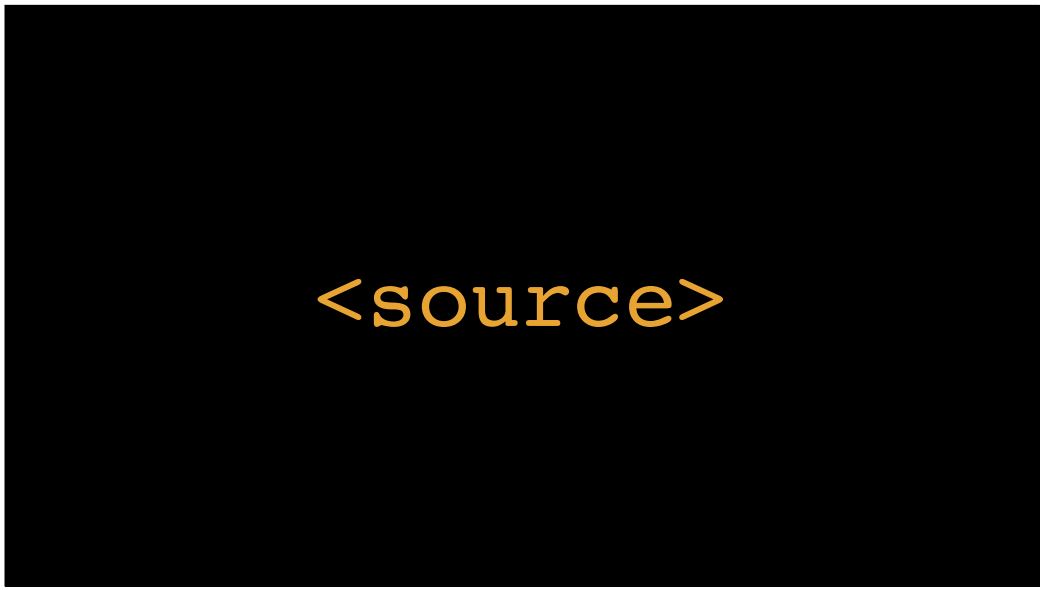

Ogg
MP3
AAC
WebM
WAV
iOS
iOS
iOS

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!


<source>

`<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>`

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

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

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

10
IE?

IE 9 & below do not fully support HTML5

(surprise!)

There are ways to add HTML5 support to IE, however

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

code.google.com/p/html5shiv/

github.com/aFarkas/html5shiv

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

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

modernizr.com

github.com/Modernizr/Modernizr

Thank you!

scott@granneman.com
www.granneman.com
ChainsawOnATireSwing.com
@scottgranneman

HTML5

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R. Scott Granneman

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Questions? Email scott@granneman.com

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