HTML MEDIA

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HTML Multimedia

▸ Multimedia on the web is sound, music, videos, movies, and animations

▸ Multimedia comes in many different formats. It can be almost anything you can hear or see.

▸ Examples: Images, music, sound, videos, records, films, animations, and more.

▸ Web pages often contain multimedia elements of different types and formats.

Browser Support

▸ The first web browsers had support for text only, limited to a single font in a single color.

▸ Later came browsers with support for colors and fonts, and images!

▸ Audio, video, and animation have been handled differently by the major browsers. Different formats have been supported, and some formats require extra helper programs (plug-ins) to work.

▸ Hopefully this will become history. HTML5 multimedia promises an easier future for multimedia.

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Multimedia Formats

▸ Multimedia elements (like audio or video) are stored in media files.

▸ The most common way to discover the type of a file, is to look at the file extension.

▸ Multimedia files have formats and different extensions like: .swf, .wav, .mp3, .mp4, .mpg, .wmv, and .avi.

Common Video Formats

▸ MP4 is the new and upcoming format for internet video.

▸ MP4 is recommended by YouTube.

▸ MP4 is supported by Flash Players.

▸ MP4 is supported by HTML5

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`<video>` Tag

▶ The `<video>` tag specifies video, such as a movie clip or other video streams.

▶ The `<video>` tag is new in HTML5.

▶ the `<video>` tag is supported in Internet Explorer 9, Firefox, Opera, Chrome, and Safari.

Video Formats and Browser Support

Currently, there are 3 supported video formats for the <video> element: MP4, WebM, and Ogg:

Browser	MP4	WebM	Ogg
Internet Explorer	YES	NO	NO
Firefox	YES	YES	YES
Google Chrome	YES	YES	YES
Safari	YES	NO	NO
Opera	YES	YES	YES

MIME Types for Video Formats

Format	MIME-type
MP4	video/mp4
WebM	video/webm
Ogg	video/ogg

```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>
```

Optional Attributes

Attribute	Value	Description
autoplay	autoplay	Specifies that the video will start playing as soon as it is ready
controls	controls	Specifies that video controls should be displayed (such as a play/pause button etc).
height	pixels	Sets the height of the video player
loop	loop	Specifies that the video will start over again, every time it is finished
muted	muted	Specifies that the audio output of the video should be muted
poster	URL	Specifies an image to be shown while the video is downloading, or until the user hits the play button
preload	auto metadata none	Specifies if and how the author thinks the video should be loaded when the page loads <video preload="auto|metadata|none">
src	URL	Specifies the URL of the video file
width	pixels	Sets the width of the video player

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Playing a YouTube Video in HTML

```
<iframe width="420" height="345"
src="http://www.youtube.com/embed/XGSy3_Czz8k">
</iframe>
```

```
<embed
width="420" height="345"
src="http://www.youtube.com/v/XGSy3_Czz8k"
type="application/x-shockwave-flash">
</embed>
```

<audio> tag

▶ The <audio> tag defines sound, such as music or other audio streams.

▶ The <audio> tag is new in HTML5.

▶ The <audio> tag is supported in Internet Explorer 9, Firefox, Opera, Chrome, and Safari.

▶ **Note:** Internet Explorer 8 and earlier versions, do not support the <audio> tag.

```
<audio controls>
    <source src="horse.ogg" type="audio/ogg">
    <source src="horse.mp3" type="audio/mpeg">
Your browser does not support the audio element.
</audio>
```

Audio Formats and Browser Support

Currently, there are 3 supported file formats for the <audio> element: MP3, Wav, and Ogg:

Browser	MP3	Wav	Ogg
Internet Explorer	YES	NO	NO
Firefox	YES	YES	YES
Google Chrome	YES	YES	YES
Apple Safari	YES	YES	NO
Opera	YES	YES	YES

MIME Types for Audio Formats

Format	MIME-type
MP3	audio/mpeg
Ogg	audio/ogg
Wav	audio/wav

Attributes

Attribute	Value	Description
autoplay	autoplay	Specifies that the audio will start playing as soon as it is ready
controls	controls	Specifies that audio controls should be displayed (such as a play/pause button etc).
loop	loop	Specifies that the audio will start over again, every time it is finished
preload	auto metadata none	Specifies if and how the author thinks the audio should be loaded when the page loads
src	URL	Specifies the URL of the audio file

preload

Syntax

<audio preload="auto|metadata|none">

Value	Description
auto	The author thinks that the browser should load the entire audio file when the page loads
metadata	The author thinks that the browser should load only metadata when the page loads
none	The author thinks that the browser should NOT load the audio file when the page loads

Note: The preload attribute is ignored if autoplay is **present**.

HTML YouTube Videos

▶ Converting videos to different formats can be difficult and time-consuming.

▶ An easier solution is to let YouTube play the videos in your web page.

▶ YouTube will display an id (like qDjEFN5ow8Y), when you save (or play) a video.

▶ You can use this id, and refer to your video in the HTML code

```
<iframe width="420" height="345"
src="https://www.youtube.com/embed/qDjEFN5ow8Y">

</iframe>
```

```
<iframe width="420" height="315"
src="https://www.youtube.com/embed/XGSy3_Czz8k?controls=0">
</iframe>


<object width="420" height="315"
data="http://www.youtube.com/embed/XGSy3_Czz8k">
</object>


<embed width="420" height="315"
src="http://www.youtube.com/embed/XGSy3_Czz8k">
```