



Web Design with HTML5 & CSS3

Chapter 9- Integrating Audio and Video

HTML5 and Multimedia

- Built-in media support in HTML5:
 - **audio** element `<audio> </audio>`
 - **video** element `<video> </video>`

Flash & Java Applets

- **Flash**, or Adobe Flash, has been used for approximately 20 years but is **no longer supported as of 2021**
 - Was used to create animations or movie files
 - Requires browsers to have a Flash plug-in, which had many security issues.
- iOS has never properly supported flash, and since its obsolescence, web developers have embraced **JavaScript** to incorporate additional interactivity within their websites
- **Therefore, support for Flash and Java applets** has completely subsided.



<audio> Element – Defining Audio Streams

Audio File Formats

- Audio file formats supported : .mp3 -- .ogg -- .wav

Audio File Format	Internet Explorer	Google Chrome	Mozilla Firefox	Apple Safari	Opera
MP3	•	•	•	•	•
Ogg		•	•		•
Wav		•	•	•	•

HTML5 audio Element

- The audio element allows multiple source elements, which can link to different audio files
- Text content should be inserted between <audio> and </audio> tags because browsers that do not support the audio element ignore the <audio> tag and alert users

```
<audio autoplay controls>
  <source src="media/ffc_aud.mp3" type="audio/mp3">
  <source src="media/ffc_aud.ogg" type="audio/ogg">
  <source src="media/ffc_aud.wav" type="audio/wav">
  <p>Your browser does not support the audio tag.</p>
</audio>
```

Audio Element Attributes

```
<audio autoplay controls>
  <source src="media/ffc_aud.mp3" type="audio/mp3">
  <source src="media/ffc_aud.ogg" type="audio/ogg">
  <source src="media/ffc_aud.wav" type="audio/wav">
  <p>Your browser does not support the audio tag.</p>
</audio>
```

Table 9–2 Audio Element Attributes

Attribute	Value	Description
autoplay	autoplay	Specifies that the audio will automatically start playing
controls	controls	Specifies that audio controls should be displayed (such as a play/pause button)
loop	loop	Specifies that the audio will start playing every time it is finished
muted	muted	Specifies that the audio should be muted
preload	auto metadata none	Specifies whether and how the audio should be loaded when the page loads
src	URL	Specifies the URL of the audio file

The background features a dark, high-contrast image of a film reel on the left and a clapperboard on the right. The clapperboard has several lines of text: 'PRODUCTION', 'DIRECTOR', 'CAMERA', 'SCENE', and 'TAKE'. The text is white and stands out against the dark background.

`<video>` Element – Defining embedded video

Video File Formats

- Video file formats supported: .mp4 -- .ogg -- .webm

Table 9–6 Video File Browser Support

Video File Format	Internet Explorer	Google Chrome	Mozilla Firefox	Apple Safari	Opera
MP4
Ogg		.	.		.
WebM		.	.		.

HTML5 video Element

```
<div class="video">
<video autoplay controls>
  <source src="media/ffc_vid.mp4" type="video/mp4">
  <source src="media/ffc_vid.ogv" type="video/ogg">
  <source src="media/ffc_vid.webm" type="video/webm">
  <p>Your browser does not support the video tag.</p>
</video>
</div>
```

- The video element allows multiple source elements, which can link to different video files
- Text content should be inserted between <video> and </video> tags because browsers that do not support the video element ignore the <video> tag and alert users

<video> Element Attributes

```
<div class="video">
<video autoplay controls>
  <source src="media/ffc_vid.mp4" type="video/mp4">
  <source src="media/ffc_vid.ogg" type="video/ogg">
  <source src="media/ffc_vid.webm" type="video/webm">
  <p>Your browser does not support the video tag.</p>
</video>
</div>
```

Table 9–5 Video Element 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)
height	<i>pixels</i>	Sets the height of the video player
loop	loop	Specifies that the video will start playing every time it is finished
muted	muted	Specifies that the audio output of the video should be muted
poster	<i>URL</i>	Specifies an image to be shown while the video is downloading, or until the user clicks the play button
preload	auto metadata none	Specifies whether and how the video should be loaded when the page loads
src	<i>URL</i>	Specifies the URL of the video file
width	<i>pixels</i>	Sets the width of the video player

This week

- C9 fitness, lab 1, lab 2
- Term project