# Web Programming

## Lecture 9

*HTML Multimedia*

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# Introduction

- <u>Multimedia can be almost anything we can hear or see, like images, music, sound, videos, records, films, animations, and more</u>.

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

- HTML allows us to create standards-based video and audio players that don't require the use of any plugins.

# Common Video Formats

- The MP4, WebM, and Ogg formats are supported by HTML.

| FORMAT | FILE | DESCRIPTION |
|---|---|---|
| MPEG | .mpg .mpeg | MPEG Developed by the Moving Pictures Expert Group. Not supported anymore in HTML. |
| AVI | .avi | AVI (Audio Video Interleave). Plays well on Windows computers, but not in web browsers. |
| WMV | .wmv | WMV (Windows Media Video). Plays well on Windows computers, but not in web browsers. |
| Flash | .flv | Flash. Developed by Macromedia. Often requires an extra component (plug-in) to play in web browsers. |
| Ogg | .ogg | Theora Ogg. Supported by HTML. |
| WebM | .webm | WebM. Developed by Mozilla, Opera, Adobe, and Google. Supported by HTML. |
| MPEG-4 MP4 | .mp4 | **MP4. Developed by the Moving Pictures Expert Group. Supported by all browsers** |

# Common Audio Formats

- Only MP3, WAV, and Ogg audio are supported by the HTML standard.

| FORMAT | FILE | DESCRIPTION |
|---|---|---|
| MIDI | .mid .midi | MIDI (Musical Instrument Digital Interface). Plays well on all computers and music hardware, but not in web browsers. |
| WMA | .wma | WMA (Windows Media Audio). Plays well on Windows computers, but not in web browsers. |
| AAC | .aac | Plays well on Apple computers, but not in web browsers. |
| WAV | .wav | WAV. Developed by IBM and Microsoft. Supported by HTML. |
| Ogg | .ogg | Supported by HTML. |
| MP3 | .mp3 | **MP3 files are actually the sound part of MPEG files. MP3 is the most popular format for music players. Supported by all browsers.** |

# HTML Video

- To embed video in HTML, we use the <video> tag. It contains one or more video sources at a time using <source> tag.

- <u>Syntax:</u>

<video>

    <source src="file_name" type="video_file_type">

</video>

- We can use <source> tag to specify media along with media type and many other attributes.

# Video attribute specification

| ATTRIBUTE | DESCRIPTION |
| --- | --- |
| autoplay | When the page is loaded, It specifies to play video as soon as possible. |
| controls | It displays video control such as play, pause, and stop. |
| loop | It will start the video again when it is finished. |
| muted | When the page is loaded, video will be automatically muted. |
| src | **It specifies the URL of the video file.** |
| width | It specifies the width of the video area. The default value of width is 'auto'. |
| height | It specifies the height of the video area. |

# HTML Audio

- To embed audio in HTML, we use the <audio> tag.

- Syntax:

<audio>

   <source src="file_name" type="audio_file_type">

</audio>

- The HTML <audio> element is used to play an audio file on a web page.

# Audio attribute specification

| ATTRIBUTE | DESCRIPTION |
|-----------|-------------|
| autoplay | When the page is loaded, It specifies to play audio as soon as possible. |
| controls | It displays audio control. |
| loop | It will start the audio again when it is finished. |
| muted | When the page is loaded, audio will be automatically muted. |
| src | **It specifies the URL of the audio file.** |

# Summary

- HTML embedded audio and video


- In the next class, we will start **Unit II – Cascading Style Sheet** in detail.

- Thanks