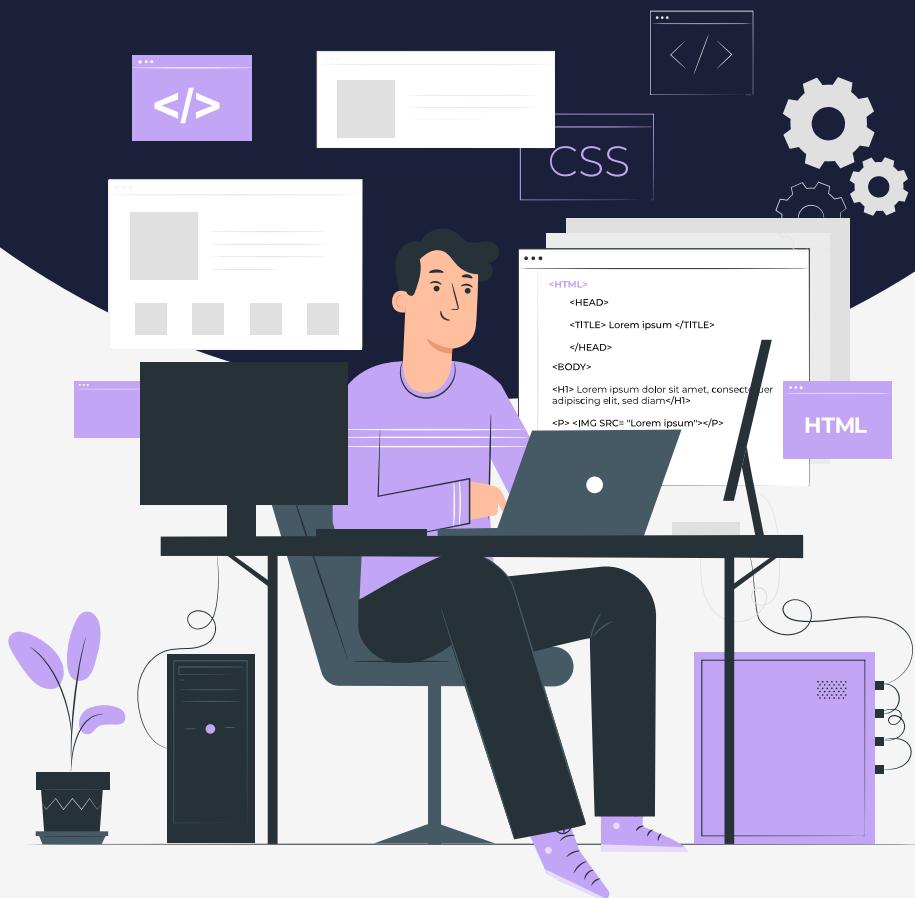


Lesson:

Bring in Media



Topics Covered

- What is media and benefits of using media in HTML
- Adding images using tag
- Adding audio using <audio> tag
- Adding video using <video> tag
- Embed another document using <iframe> tag

What is Media and Benefits of Using Media in HTML

In HTML, "**Media**" refers to **any content** that can be **displayed or played back on a web page**, such as images, audio files, and video files.

Here are a few benefits of using media in HTML

- Media is essential to **making web pages** more **engaging, interesting, and visually appealing**.
- It helps to convey information more effectively and can be used to create interactive applications.
- Media can enhance accessibility by providing alternative means of consuming information, such as audio, and videos, for specially-abled users.

Using media in HTML is necessary to create engaging and accessible web pages that can simplify information, improve SEO, and increase user engagement.

Adding image using Tag

The tag is used to embed an image in an HTML page.

Example:

```
Unset
<!DOCTYPE html>
<html>
  <head>
    <title>< img ></title>
  </head>
  <body>
    <h1>Heading </h1>
    <p>This is a random photo</p>
    
  </body>
</html>
```

Browser Output:

Heading

This is random photo



Image Attributes

1. **src:** The src attribute is an HTML attribute used to specify the URL of an image file to be displayed on a web page.
2. **alt:** The alt attribute is an HTML attribute used to provide alternative text for an image in case the image cannot be displayed, or for accessibility purposes.
3. **width and height:** These attributes specify the width and height of the image in pixels.

For example:

Unset

```

```

4. **loading:** The loading attribute is an HTML attribute used to control the loading behavior of an image on a web page. The attribute has three possible values:

- **lazy** which delays the load until the image or iframe reaches a distance threshold from the viewport.
- **eager** which loads the resource immediately.
- **auto** which is the default behavior, loads the resource

Note: It is important to include alt text for images because it provides information to users who may be unable to see the image due to a slow internet connection, a broken image link, or a visual impairment.

Supported image formats

1. The `` tag in HTML can display various types of image files. The most commonly supported image formats are:

- ".jpeg"
- ".png"
- ".svg"
- ".gif"
- ".webp"

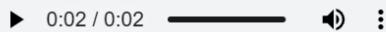
Adding Audio using `<audio>` Tag

The `<audio>` HTML element is utilized for embedding audio content within HTML documents.

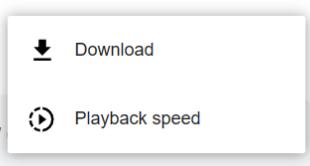
Example

```
Unset
<!DOCTYPE html>
<html>
<head>
  <title>Audio</title>
  <script src="script.js"></script>
</head>
<body>
  <audio
    controls
    src="https://interactive-examples.mdn.mozilla.net/media/cc0-audio/t-rex-roar.mp3">
  </audio>
</body>
</html>
```

Browser Output:



If you click on 3 dots,



Audio Tag Attributes

1. **src:** This attribute specifies the source URL (Uniform Resource Locator) of the audio file that should be played.

For example:

Unset

```
<audio src="audio.mp3"></audio>
```

2. **controls:** When this attribute is present, it displays the default audio controls, such as play, pause, and volume, allowing users to interact with the audio player.

For example:

Unset

```
<audio src="audio.mp3" controls></audio>|
```

3. **autoplay:** When this attribute is present, the audio will start playing automatically when the page loads.

For example:

Unset

```
<audio src="audio.mp3" autoplay></audio>
```

4. **loop:** When this attribute is present, the audio will loop and play repeatedly.

For example:

Unset

```
<audio src="audio.mp3" loop></audio>
```

5. **preload:** This attribute specifies how the audio file should be preloaded. It can have values like,

- **auto** – loads the audio file automatically
- **metadata** – loads only the metadata of the audio file
- **none** – does not preload the audio file

For example:

Unset

```
<audio src="audio.mp3" preload="auto"></audio>
```

6. **controlstlist:** This attribute specifies the controls that should be displayed in the audio player's controls. It can have values like

- **nodownload** – disables download button
- **nofullscreen** – disables fullscreen button
- **nodownload nofullscreen** – disables both download and fullscreen buttons).

For example:

Unset

```
<audio src="audio.mp3" controls  
controlsList="nodownload"></audio>
```

7. muted: When this attribute is present, the audio will be muted by default.

For example:

Unset

```
<audio src="audio.mp3" muted></audio>
```

Audio with multiple sources

Not all browsers or devices support the same file format, and using **multiple <source> tags** allows the browser to choose the best-suited file format that it can play. The browser will try to play the first file format specified in the **<source> tag**, and if it cannot play it, it will try the next one until it finds a compatible file format.

To specify multiple sources, we use **<source>** tags within **<audio>** tag.

Example:

Unset

```
<audio controls>  
  <source src="sample.opus" type="audio/ogg; codecs=opus" />  
  <source src="sample.ogg" type="audio/ogg; codecs=vorbis" />  
  <source src="sample.mp3" type="audio/mpeg" />  
</audio>
```

Note: <audio> tag is introduced in HTML5.

Adding video using <video> tag

The **<video>** HTML element embeds a media player that supports video playback into the document.

Unset

```
<!DOCTYPE html>  
<html lang="en-us">  
  <head>  
    <meta charset="utf-8">  
    <meta name="viewport" content="width=device-width">  
    <title>Video</title>  
    <link href="minimal-table.css" rel="stylesheet"  
          type="text/css">  
  </head>  
  <body>  
    <video  
      src="https://interactive-examples.mdn.mozilla.net/media/c  
co-videos/flower.webm" controls width="250">  
    </video>  
  </body>  
</html>
```

Browser Output:-

Video Tag attributes

1. **src:** This attribute specifies the source URL (Uniform Resource Locator) of the video file that should be played.

For example:

Unset

```
<video src="video.mp4"></video>
```

2. **controls:** When this attribute is present, it displays the default video controls, such as play, pause, and seek, allowing users to interact with the video player.

For example:

Unset

```
<video src="video.mp4" controls></video>
```

3. **autoplay:** When this attribute is present, the video will start playing automatically when the page loads.

For example:

Unset

```
<video src="video.mp4" autoplay></video>
```

4. **loop:** When this attribute is present, the video will loop and play repeatedly.

For example:

Unset

```
<video src="video.mp4" loop></video>.
```

5. preload: This attribute specifies how the video file should be preloaded. It can have values like,

- **auto** – loads the video file automatically.
- **metadata** – loads only the metadata of the video file.
- **none** – does not preload the video file.

For example:

Unset

```
<video src="video.mp4" preload="auto"></video>
```

6. poster: This attribute specifies an image URL that should be displayed as a poster frame before the video starts playing.

For example:

Unset

```
<video src="video.mp4" poster="poster.jpg"></video>
```

7. Width and height: These attributes specify the width and height of the video player in pixels.

For example:

Unset

```
<video src="video.mp4" width="640" height="360"></video>
```

8. controlsList: This attribute specifies the controls that should be displayed in the video player's controls. It can have values like,

- **nodownload** – disables download button.
- **nofullscreen** – disables the fullscreen button.
- **nodownload nofullscreen** – disables both download and fullscreen buttons.

For example:

Unset

```
<video src="video.mp4" controls  
controlsList="nodownload"></video>
```

9. muted: When this attribute is present, the video will be muted by default.

For example:

Unset

```
<video src="video.mp4" muted></video>
```

Video with multiple sources

Just like the `<audio>` tag, the `<video>` tag can use the `<source>` tag to provide alternative file formats to ensure that the video can be played on a wide range of devices and web browsers.

To specify multiple sources, we use `<source>` tags within `<video>` tag.

```
Unset
<video
  width="620"
  controls
>
  <source
  src="https://archive.org/download/ElephantsDream/ed_hd.ogv"
  type="video/ogg" />

  <source
  src="https://archive.org/download/ElephantsDream/ed_hd.avi"
  type="video/avi" />

  <source
  src="https://archive.org/download/ElephantsDream/ed_1024_512kb
.mp4" type="video/mp4" />

  Sorry, your browser doesn't support embedded videos.

</video>
```

Note: `<video>` tag is introduced in HTML5.

Embed another document using `<iframe>` Tag

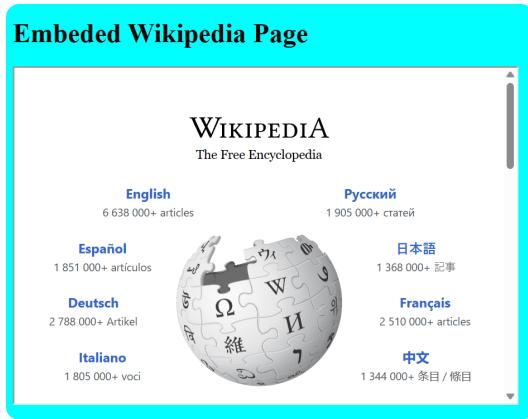
The `<iframe>` tag is an HTML element used to embed another HTML document within the current document.

Yes, document inside another document!

Let's try to embed the Wikipedia page - <https://www.wikipedia.org/>, into our HTML doc.

```
Unset
<!DOCTYPE html>
<html>
<head>
  <title>iframe</title>
</head>
<body style="background-color: aqua;">
  <h1>Embedded Wikipedia Page</h1>
  <iframe src="https://www.wikipedia.org/" frameborder="1"
width="600" height="400"></iframe>
</body>
</html>
```

Browser Output:-



<iframe> Attributes

1. **src:** This attribute specifies the URL of the web page that you want to display within the <iframe>. It can be a relative or an absolute URL.
2. **frameborder:** This attribute specifies whether or not to display a border around the <iframe>. A value of "0" means no border, and "1" means to display a border.
3. **width and height:** These attributes specify the width and height of the <iframe>, respectively. They can be specified in pixels or as a percentage of the available width or height.
4. **sandbox:** This attribute allows you to define a sandbox environment for the content within the <iframe>. It can be used to restrict the capabilities of the embedded content, such as preventing it from running JavaScript or accessing certain features of the parent document.
5. **allow:** This attribute specifies what features are allowed to be used by the content within the <iframe>. It can be used to enable specific permissions, such as allowing full-screen mode or access to the microphone.
6. **scrolling:** This attribute specifies whether or not to display scrollbars within the <iframe>. It can have values of "yes", "no", or "auto".