



CSCI-UA-4-005

Intro to Web Design + Computer Principles

HTML Audio + Video

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M/W 12:30PM – 1:45PM



Agenda

- Introduce Final Project
- Lecture: HTML Audio + Video
- Demo: Web page with HTML audio, video, and inline frame
- Programming Exercise: Custom video player
- Demo: Mario Soundboard

Introduce Final Project

HTML Audio + Video

HTML Audio + Video

- HTML5 supports audio and video natively in the web browser.
- For years, it was necessary to rely on a third party to deliver this kind of content.
- Now we can use the `<audio>` and `<video>` tags.
- The `<audio>` and `<video>` tags use `src` attribute or the `<source>` tag to specify one or more media resources.

HTML Audio

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

1. The `controls` attribute adds audio controls, like play, pause, and volume.
2. The `<source>` element allows you to specify alternative audio files which the browser may choose from. The browser will use the first recognized format.
3. The text between the `<audio>` and `</audio>` tags will only be displayed in browsers that do not support the `<audio>` element.

HTML Video

```
<video width="320" height="240" autoplay>
  <source src="movie.mp4" type="video/mp4">
  <source src="movie.ogg" type="video/ogg">
  Your browser does not support the video tag.
</video>
```

1. The `controls` attribute adds video controls, like play, pause, and volume.
2. The `<source>` element allows you to specify alternative video files which the browser may choose from. The browser will use the first recognized format.
3. It is a good idea to always include `width` and `height` attributes. If height and width are not set, the page might flicker while the video loads.
4. The text between the `<video>` and `</video>` tags will only be displayed in browsers that do not support the `<video>` element.

HTML Inline Frame (iframe)

- Another way to embed media on a web page is with the HTML inline frame element: `<iframe>`
- An inline frame represents a nested browsing context, embedding another HTML page into the current one.
- Embedding all or part of one web page into another is way to present content on a website.

```
<iframe src="https://www.w3schools.com"  
        title="W3Schools Free Online Web Tutorials">  
</iframe>
```


Resources for free Audio + Video

Audio

- [Youtube Audio Library](#)
- [Freesound.org](#)

Video

- [Pexels](#)

[Demo] Web page with HTML audio, video, and inline frame

Programming Challenge: Custom Video Player

We are going to create a custom video player:

1. Add HTML `<video>` element with `library-mist.mp4` as the source (640px by 360px)
2. Create SVG play and pause buttons
3. Create 3 DOM queries (1) video (2) play button (3) pause button
4. Bind the click of the play button to the `playVideo()` function
5. Bind the click of the pause button to the `pauseVideo()` function
6. Add CSS
 - a. Give the buttons a fill color of gray
 - b. On hover, the play button should turn green and the pause button should turn red
 - c. On active click, both buttons should have an opacity of 0.6

[Demo] Mario Soundboard

Homework

- Begin brainstorming your final project