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CSCI-UA-4-005

Intro to Web Design + Computer Principles
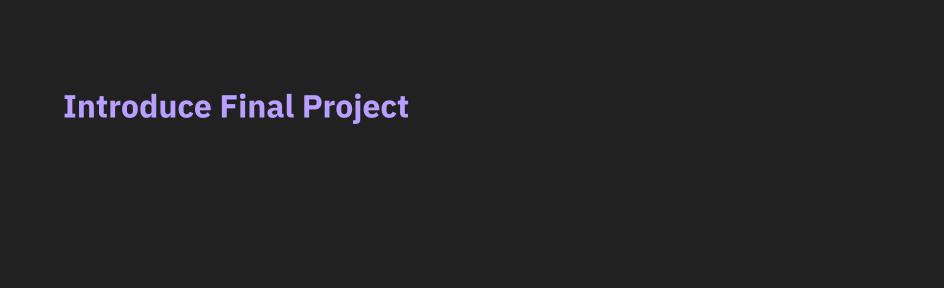
HTML Audio + Video

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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

```html
<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

```html
<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>
```
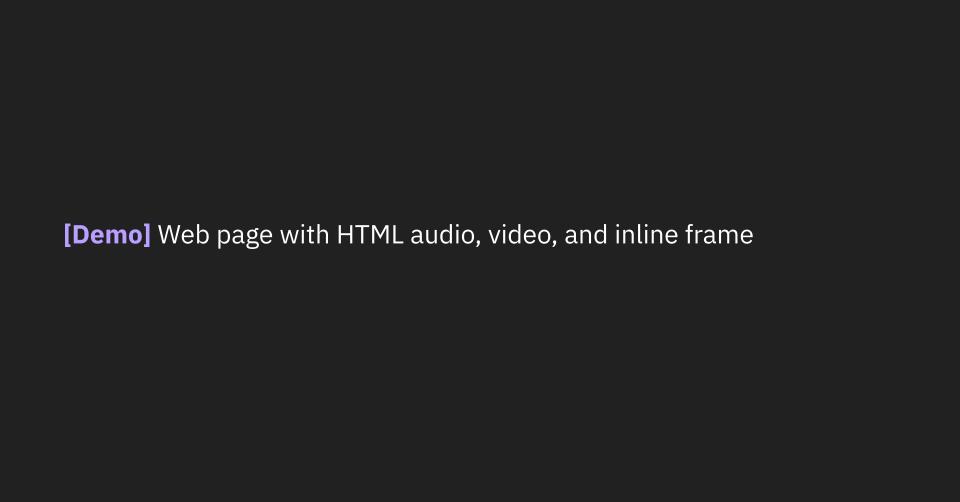
Resources for free Audio + Video

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