

# OIM3690 - Web Technologies



# **Multimedia and Embedding**

# Linking

- After clicking, the file is opened in full window or asked to be downloaded.
- Linking to a YouTube video
  - Copy the URL and paste it in an `<a>` tag.
  - Example:

```
<a href="https://www.youtube.com/watch?v=dQw4w9WgXcQ">Ed Sheeran - Shape of You</a>
```

- Linking to a file
  - Examples:

```
<a href="https://www.w3.org/WAI/ER/tests/xhtml/testfiles/resources/pdf/dummy.pdf">dummy.pdf</a>  
<a href="README.md">README</a>
```

# Embedding

- An embedded object inside part of your page.
  - It can be positioned or floated with styles.
  - e.g. embedding a YouTube video
- A variety of tags:
  - `<audio>` , `<video>` (new in HTML5)
  - `<iframe>` (commonly used)
  - `<object>` / `<embed>` (going out of fashion)
  - `<canvas>` (to draw graphics and animations)
  - `<svg>` (to draw 2D-based vector graphics)

# `<audio>` and `<video>`

- Attributes:
  - `autoplay="autoplay" | autoplay` (starts on page load)
  - `loop="loop"` (plays continuously)
  - `controls="controls"` (displays controls)
  - `src="path/to/file"` ( similar to `src` for `<img>` )
  - `height` and `width` (for `<video>` only)
- End tag `</audio>` / `</video>` is required
- supported media formats

## <audio> and <video> Example

- ```
<audio autoplay controls src="media/mymusic.mp3">  
  Your browser does not support the <code>audio</code> element.  
</audio>
```
- ```
<video controls muted src="media/kittens.mp4" height="300"></video>
```

# <iframe>

- HTML inline frame element
  - It represents a nested browsing context.
  - It can be used to embed another HTML page into the current one.
  - It has many [security concerns](#)
- Examples:
  - Embedding a web page

```
<iframe src="index.html" frameborder="0" width="800"></iframe>
```
  - Embedding YouTube/Vimeo video, Google map, Spotify/SoundCloud playlist
- Note: embedding *twitter/instagram* is different.

## <svg>

- Scalable Vector Graphics (SVG)
  - It is an XML-based markup language for describing two-dimensional based vector graphics.
  - SVG is, essentially, to graphics what HTML is to text.
- Let's find out the SVG logo of [CNN.com](https://www.cnn.com)



# Two Types of Images - Raster vs. Vector

- **Raster images** are defined using a grid of pixels
  - .bmp , .png , .jpg , .gif
- **Vector images** are defined using algorithms
  - A vector image file contains shape and path definitions.
  - Check out the difference: [vector-versus-raster.html](https://www.dreamworksgroup.com/vector-versus-raster.html)
- More Resources on SVG
  - [SVG tutorial](#) on MDN
  - [SVG examples](#) on W3Schools

# Questions?

