

HTML Media Elements

CISC-2350-R01 | Fall 2017 | Week 3

Ruta Kruliauskaite

Today's Agenda

- Attendance
- Review last week's class assignment & Codecademy questions
- Review HTML images and links
- Student web review presentations
- HTML Media Elements:
 - iframes
 - video
 - audio
- Homework Assignment

In-class exercise & questions

Image that is a link

```
<body>
  <!-- Let's make in image clickable -->
  <p>
    This is a clickable image:
    <a href="https://www.shutterstock.com/search?search_source=base_landing_page&language=en&
      searchterm=alpacas&image_type=all" target="_blank">
      
    </a>
  </p>
</body>
```

<meta> data

- Provides metadata about html document
- Not displayed on the page
- Can be used by browsers, search engines, other web services
- Read **more**

```
<head>
  <meta charset="UTF-8">
  <meta name="description" content="Free Web tutorials">
  <meta name="keywords" content="HTML,CSS,XML,JavaScript">
  <meta name="author" content="John Doe">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>
```

Block vs. inline elements

Every HTML element has a default display value depending on what type of element is it.

A block-level element always starts on a new line and takes up the full width available (stretches out to the left and right as far as it can).

- `<div>`, `<h1>`-`<h6>`, `<p>`

An inline-level element does not start on a new line and only takes up as much width as necessary.

- ``, `<a>`, ``



Questions

Review: HTML Links & Images

Structure of a link

OPENING
LINK TAG

URL WE ARE
DIRECTED TO

TEXT WE
CLICK ON

CLOSING
TAG

```
<!-- link -->  
<a href="https://www.fordham.edu/" target="_blank">Fordham University</a>
```



[FORDHAM UNIVERSITY](https://www.fordham.edu/)

Linking to other sites

```
<!-- link -->  
<a href="https://www.fordham.edu/" target="_blank">Fordham University</a>
```

Linking pages on the same site

```
<!-- linking to relative page on the same site -->  
<a href="/index.html">Homepage</a>
```

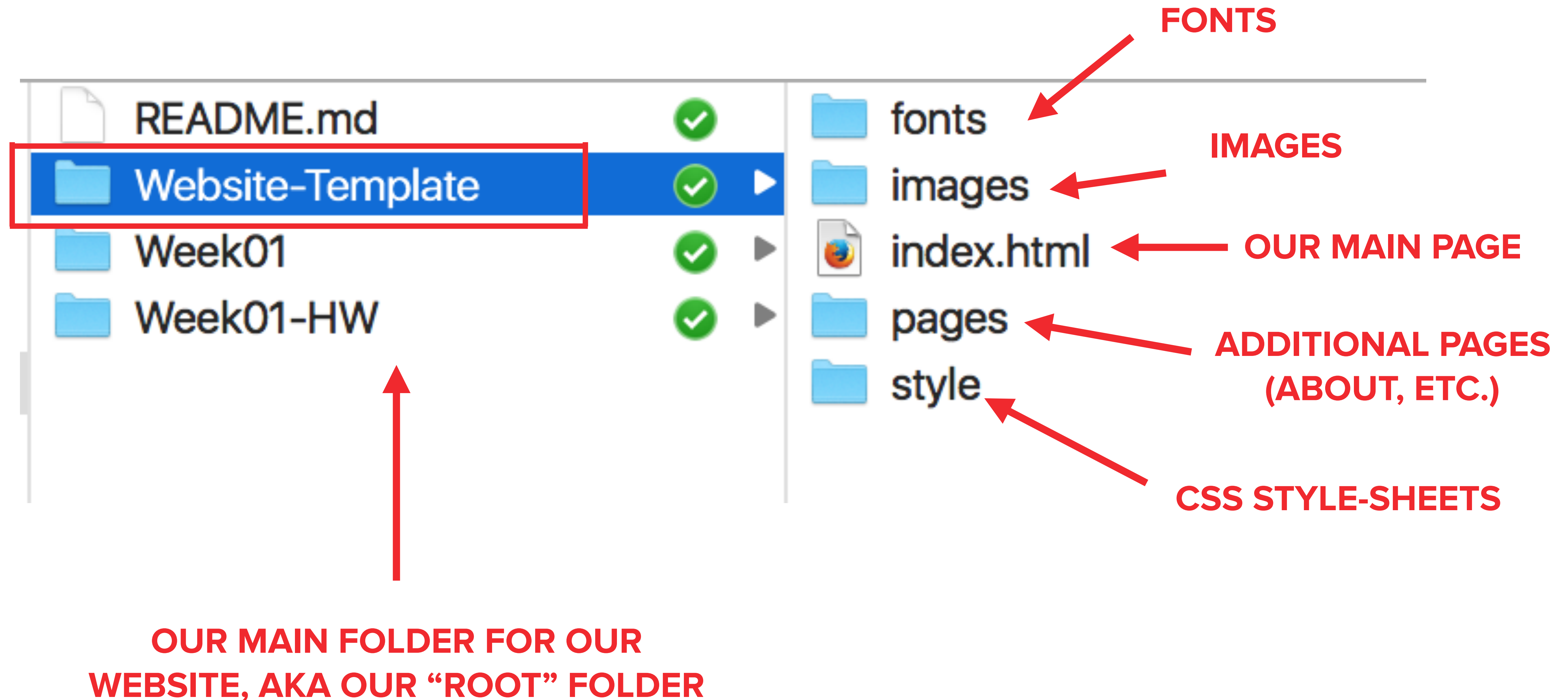
Linking to specific part on the same site

```
<!-- linking to specific part on same site -->  
<a href="#myBio">My Bio</a>
```

Linking to specific part on different site

```
<!-- linking to specific part on another site -->  
<a href="../index.html #moreInformation">Read more information</a>
```

Let's break it down



Structure of an image tag

source
attribute



alternative
description
attribute



title
attribute

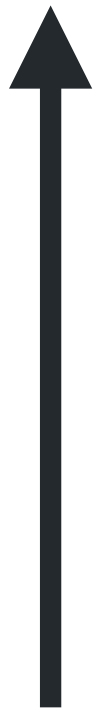


```
<!-- image tag -->  

```



left-angle
bracket



right-angle
bracket

Images: Local vs. URL

- The tag is for images, which can be on your local directory or on another webpage. Read all about tag [here](#)

```
<!-- An image on the local directory -->


<!-- Or with size specs -->


<!-- Image from another site -->

```

Web review presentations

HTML Media Elements

**What multimedia elements can
we use on a website to enrich
the experience?**

Media elements

- Images
- GIFS
- Frames of other websites, i.e. Google Maps
- Video
- Sound
- Animation
- 3D models

1. HTML iframes

What is an iframe?

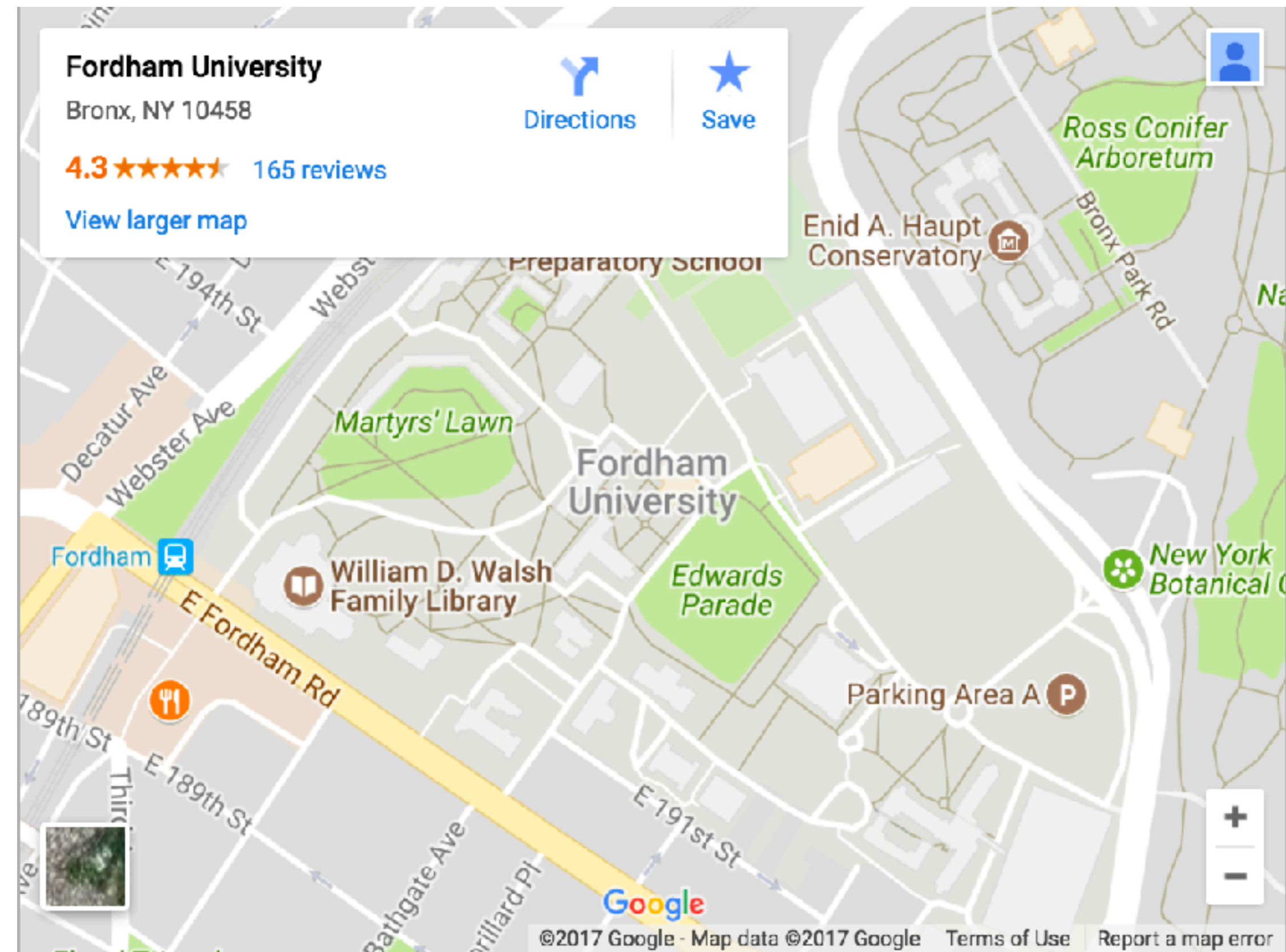
- iframe is an abbreviation of “inline frame”
- Uses `<iframe>` tag
- Youtube, Google Maps
- Copy code from another website and adjust these attributes:
src, height, width
- Code can usually be found under “Share” section
- More info on [iframe tag](#)

Attributes

- **src**
 - specifies URL of the page to show in the frame
- **height**
 - specifies the height of iframe in pixels
- **width**
 - specifies the width of iframe in pixels

Example iframe

```
<iframe src="https://www.google.com/
maps/embed?pb=!1m18!1m12!1m3!
1d3017.4480566921543!
2d-73.8878873843578!
3d40.86204037931593!2m3!1f0!2f0!
3f0!3m2!1i1024!2i768!4f13.1!3m3!1m2!
1s0x89c2f37e5180c091%3A0x39c5c
f445ed73ef8!2sFordham+University!
5e0!3m2!1sen!2sus!
4v1505080850545" width="600"
height="450" frameborder="0"
style="border:0" allowfullscreen>
</iframe>
```



Embed each of the following...

- [youtube.com](#)
- [flickr.com](#)
- [TED.com](#)
- [giphy.com](#)

2. HTML video

Attributes

- With HTML 5 video capabilities got way more advanced
- **<video />** tag

```
<body>

  <!-- Adding video tag -->
  <video poster="media/listen.jpg" width="400px" preload loop autoplay controls>
    <source src="media/listen.mp4"/>
    <source src="media/listen.webm"/>
  </video>
</body>
```


<video /> structure

main tag

poster

width/height

control attributes



```
<body>

<!-- Adding video tag -->
<video poster="media/listen.jpg" width="400px" preload loop autoplay controls>
  <source src="media/listen.mp4"/>
  <source src="media/listen.webm"/>
</video>
</body>
```



different
sources

Attributes

- **Check out** all the things you can control when using video
- For now, we'll look into these attributes:
 - Preload - what preloads when the page loads
 - Controls - if the play/stop buttons are visible
 - Autoplay - if the video should start playing automatically
 - Loop - if the video should loop on completion

Video formats

- There are a ton of video formats, and it could be a whole course in discussing the attributes of each and what they should be used for
- **Codecs:** how a video is compressed:
 - H.264, ProRes, Animation JPEG
- **Wrappers:** how a video is contained in:
 - e.g. .mp4, .mov, .avi
- Each browser prefers different audio file:
 - **H264:** IE & Safari
 - **WebM:** Android, Chrome, Firefox, Opera
 - We'll use **.mp4** & **.webm** for websites to be compatible with all browsers
- Videos can be converted using **Miro Video Converter**

3. HTML audio

Attributes

- Also HTML5
- `<audio />` tag

```
<audio controls autoplay loop>
  <source src="audio/virginia.mp3" />
  <source src="audio/virginia.ogg" />
  <p>This browser does not support this audio format</p>
</audio>
```

<audio /> structure

main tag



control attributes



```
<audio controls autoplay loop>
  <source src="audio/virginia.mp3" />
  <source src="audio/virginia.ogg" />
  <p>This browser does not support this audio format</p>
</audio>
```

different
sources



text is the file
cannot be found



Attributes

- Preload - what preloads when the page loads
- Controls - if the play/stop buttons are visible
- Autoplay - if the video should start playing automatically
- Loop - if the video should loop on completion

Audio formats

- There are tons of audio formats:
 - .mp3: IE, Safari & Chrome
 - .ogg: Chrome, Firefox, Opera, IE
- We'll use both .mp3 & .ogg (it's good idea to add multiple sources)
- Audio can be converted using **Miro Video Converter**

HTML Video & Audio Summary

FROM JOHN DUCKET “HTML AND CSS”

- HTML introduces new `<video>` and `<audio>` elements for adding video and audio to web pages, but these are only supported in the latest browsers
- Browsers that support the HTML5 elements do not all support the same video and audio formats, so you need to supply your files in different formats to ensure that everyone can see / hear them.

Homework assignment

Homework

For Thursday (due Wednesday by 6pm):

1. Make a single page website as a response to one of the following subject prompts:

- Tell us about an artist or person who is most influential to you creatively
- Pick a topic you know nothing about on Wikipedia and tell us about it in a new way

2. Regardless of what prompt you choose, you must include all of the following tags:

- Two kinds of headers from <h1> to <h6>
- Paragraphs <p>
- Links <a>
- One list, either or
-
 and <hr> tags
- Three tags: at least one local (on your computer) one image from URL - make sure the file structure is right
- **One <iframe> tag**
- One figure tag (an image + caption) - e.g. give credit whose photo you're using
- One tag we have not yet learned in class (use [W3 Schools](#))
- Be sure to clearly comment everything out
- **Optional: <video> and <audio> tags**

3. Assignment delivery:

1. **Save your page as index.html and email it to me along with any image files as a .zip and proper file structure file by Wednesday at 6pm**
2. **On Slack #general channel post a screenshot of the site you build together with 5-6 description of how you did it (tags you used, why you chose the following structure, etc.)**

4. Be ready to talk about it in class

5. Office hours: today 6:45-7:45pm. Sign up [here](#).