



# MIS3690 WEB TECHNOLOGIES

**BABSON COLLEGE**  
**TOIM DIVISION**



# MULTIMEDIA OBJECTS



# EMBEDDING VS. LINKING

## ■ Linking

- Any type of file
- But that file becomes the full window

## ■ Embedding

- Application is embedded in your page
- Complicated because app must run inside the browser window in the space you've allocated

# LINKING TO A YOUTUBE VIDEO

- Copy the url and paste it in an `<a>` tag

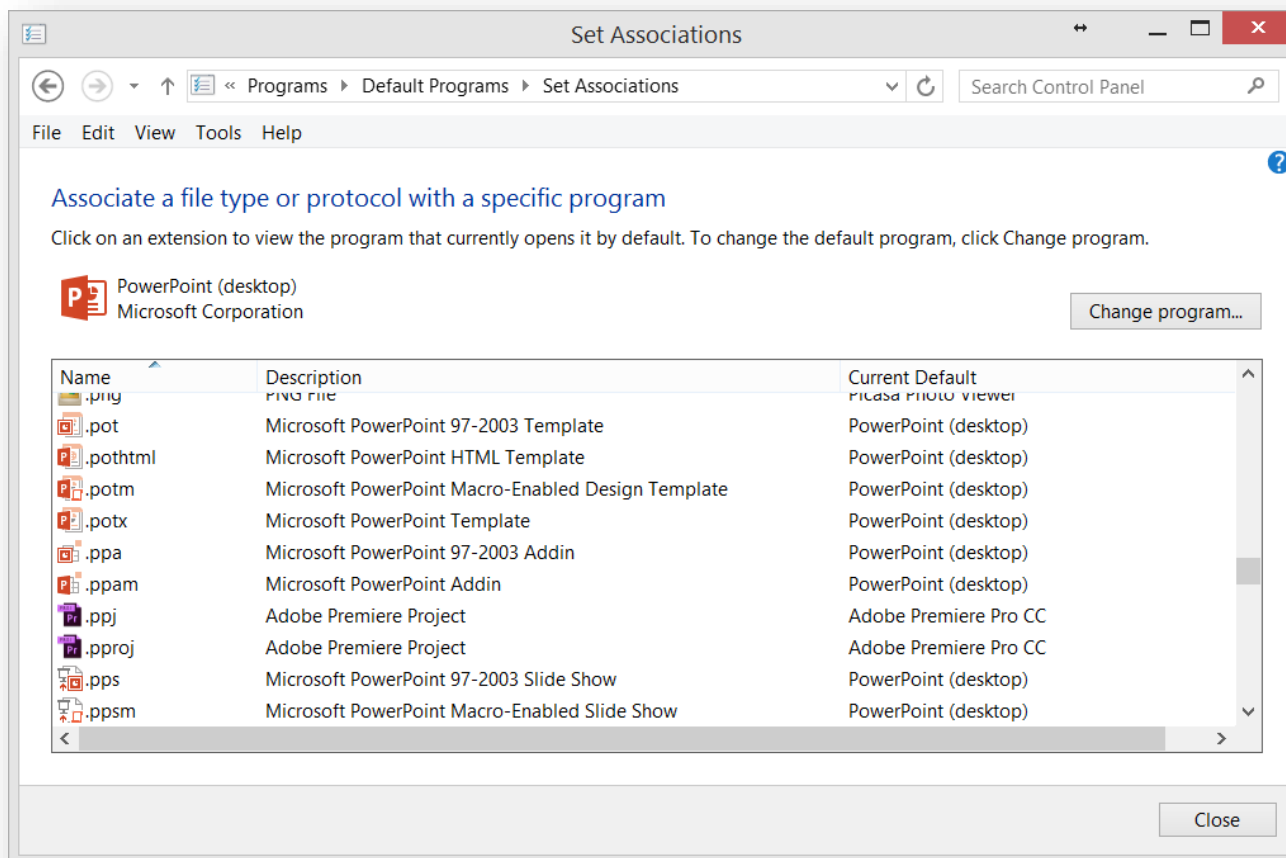
```
<a href="https://www.youtube.com/watch?v=JGwWNGJdvx8">Ed  
Sheeran - Shape of You [Official Video]</a>
```

# LINKING TO A FILE

## ■ Example:

```
<a  
href="file:\\C:\\Dropbox\\MIS3690_WebTech\\ClassSessions\\CS10.  
pptx">ppt</a>
```

# CONTROLLING HOW LINKED FILE RUNS



# EMBEDDING OBJECTS

- An embedded object runs inside a little window on your page
- It can be positioned or floated with styles
- Example: a typical YouTube video
- There are a variety of tags you can use for this:
  - `<audio>`
  - `<video>`
  - `<iframe>`
  - `<object>`
  - `<embed>`

# <AUDIO> & <VIDEO>

- New to HTML in HTML5
- Intended to replace the need for browser plugins that some users have and others do not
- Internet Explorer 9+, Firefox, Opera, Chrome, and Safari support the `<audio>` and `<video>` element.



# <AUDIO> AND <VIDEO>

- Optional attributes
  - `autoplay="autoplay"` (starts on page load)
  - `loop="loop"` (plays continuously)
  - `controls="controls"` (displays controls)
  - `preload = "auto"` (preloads file on page load) or `"meta"` (just preloads metadata)
  - `src`: the url of the source. If not included, you must specify the source with a `<source>` tag (see next page)
  - For `<video>`, `height` and `width`
- `</audio>` and `</video>` are required

# THE <SOURCE> TAG

- Provides alternative sources of audio and video between the opening and closing tags.

■ Example:

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

- When multiple `source` tags exist, first one supported by your browser will be the one used
- `src` attribute provides the url or file name
- For `type` attribute, see next page

# TYPES FOR THE <SOURCE> TAG

■ For video:

File Format	Media Type
MP4	video/mp4
WebM	video/webm
Ogg	video/ogg

■ For audio:

File Format	Media Type
MP3	audio/mpeg
Ogg	audio/ogg
Wav	audio/wav

# <AUDIO> <VIDEO> ASSESSMENT

- Standards are still evolving.
- Disagreements exist about whether standard should include only patent-free formats
- The wave of the future.
  - Pundits expect that in two years, all browsers will be compliant and eliminate use of Flash, Quicktime, Real, etc.

# THE <IFRAME> TAG

- `<iframe>` creates an inline frame in which another document (perhaps multimedia) can be placed
- Works for YouTube videos
  - In YouTube, click on "Share" and then "Embed"
  - Copy code
  - Remove type, `allowfullscreen`, and `frameborder` attributes, which are not standard HTML5

## OTHER <IFRAME> FILE TYPES

- The following file types will work in an `iframe` on Firefox, IE 9, Chrome, and Safari
  - swf
  - wav
  - mp3

# EMBEDDING A SOUNDCLLOUD AUDIO

```
<iframe width="50%" scrolling="no" frameborder="no"  
src="https://w.soundcloud.com/player/?url=https%3A//api.soundc  
loud.com/tracks/66424164&auto_play=false&hide_related=  
false&show_comments=true&show_user=true&show_repos  
ts=false&visual=true">  
</iframe>
```

- An embedded object runs inside a little window on your page

# EMBEDDING OBJECTS

- An embedded object runs inside a little window on your page
- It can be positioned or floated with styles
- To do this you need the tag:

`<object> </object>`

- This tag has attributes
- You can also specify "`parameters`" within the object tag.



# TYPICAL EMBEDDED OBJECTS

- Movie or recording
  - Windows media player
  - QuickTime
  - Flash
  - YouTube videos
  - Mp3

# ATTRIBUTES OF <OBJECT>

- **width**: specifies the width of the window in which the object is viewed
- **height**: specifies the height of the window in which the object is viewed
- **type**: used to specify the type of multimedia
- **data**: used to specify the file to play/open
- **classid**: a unique attribute used to specify the software for multi-media (Not supported in HTML5.)
- and there are more...

# OBJECT PARAMETERS

- Each object type has different parameters that control its function
- Parameters are placed between the `<object>` and `</object>` tags
- Parameter tag:

```
<param name="name" value="..." />
```

# EXAMPLE OF PARAMETERS

```
<param name="autostart" value="true" />
```

- Starts the object when the page loads

```
<param name="URL" value="http://..." />
```

- The URL or the file name where the movie or recording can be found

# EMBEDDING FLASH

## ■ Example:

[http://www.w3schools.com/html/tryit.asp?filename=tryhtml\\_object\\_plugin](http://www.w3schools.com/html/tryit.asp?filename=tryhtml_object_plugin)

# EMBEDDING PDF

```
<object data="test.pdf" height="800px" type="application/pdf"
width="100%">
```

```
<p>
```

```
    It appears you don't have a PDF plugin for this
    browser. You can <a href="test.pdf">click here to download the
    PDF file.</a>
```

```
</p>
```

```
</object>
```

# AUTOMATIC SLIDESHOW

- Example: Auto play 4 webpages, tiger1.htm, tiger2.htm, tiger3.htm and tiger4.htm

- In page1.html, in the **head** section, add the following **meta** tag

```
<meta http-equiv="refresh" content="3; url=tiger2.htm" />
```

- **content** = "n" where n is the number of seconds the page should stay on the screen

- **url**="nextpage.html" where nextpage.html is the next web page to be displayed

- After 5 seconds, tiger2.html will automatically be loaded.

- In tiger2.htm, in the head section, add the following **meta** tag

```
<meta http-equiv="refresh" content="3; url=tiger3.htm" />
```

- After 5 seconds, tiger3.htm will automatically be loaded.

- And so on...