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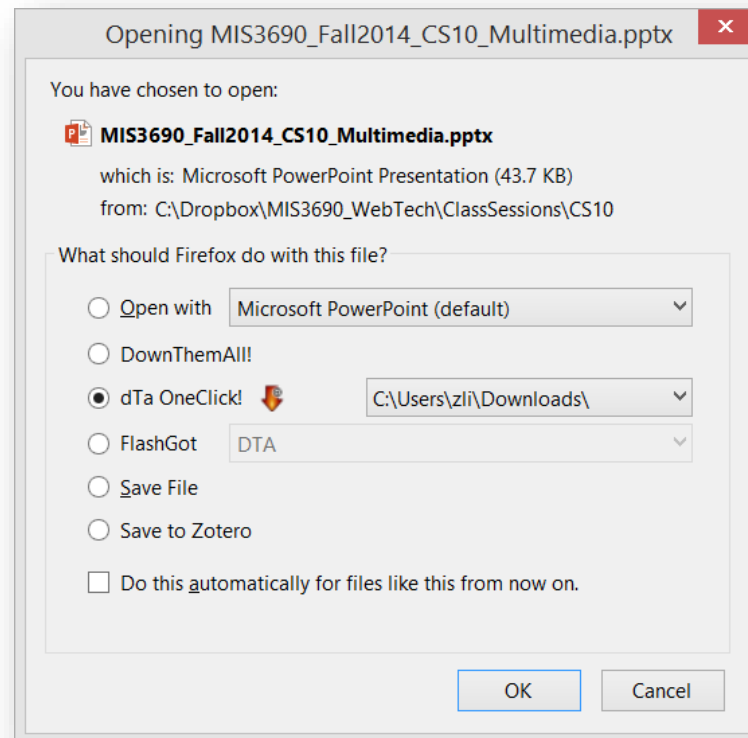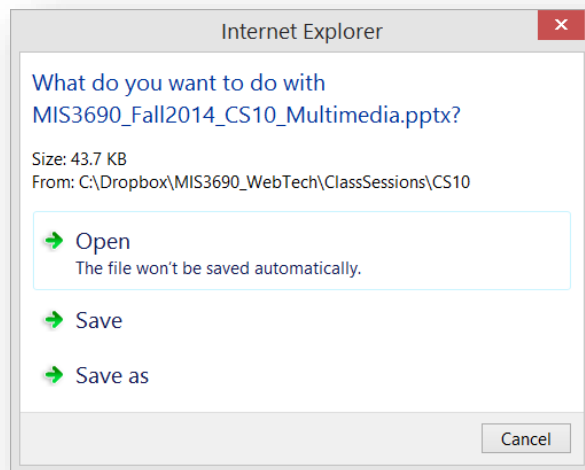
■ Copy the url and paste it in an `<a>` tag

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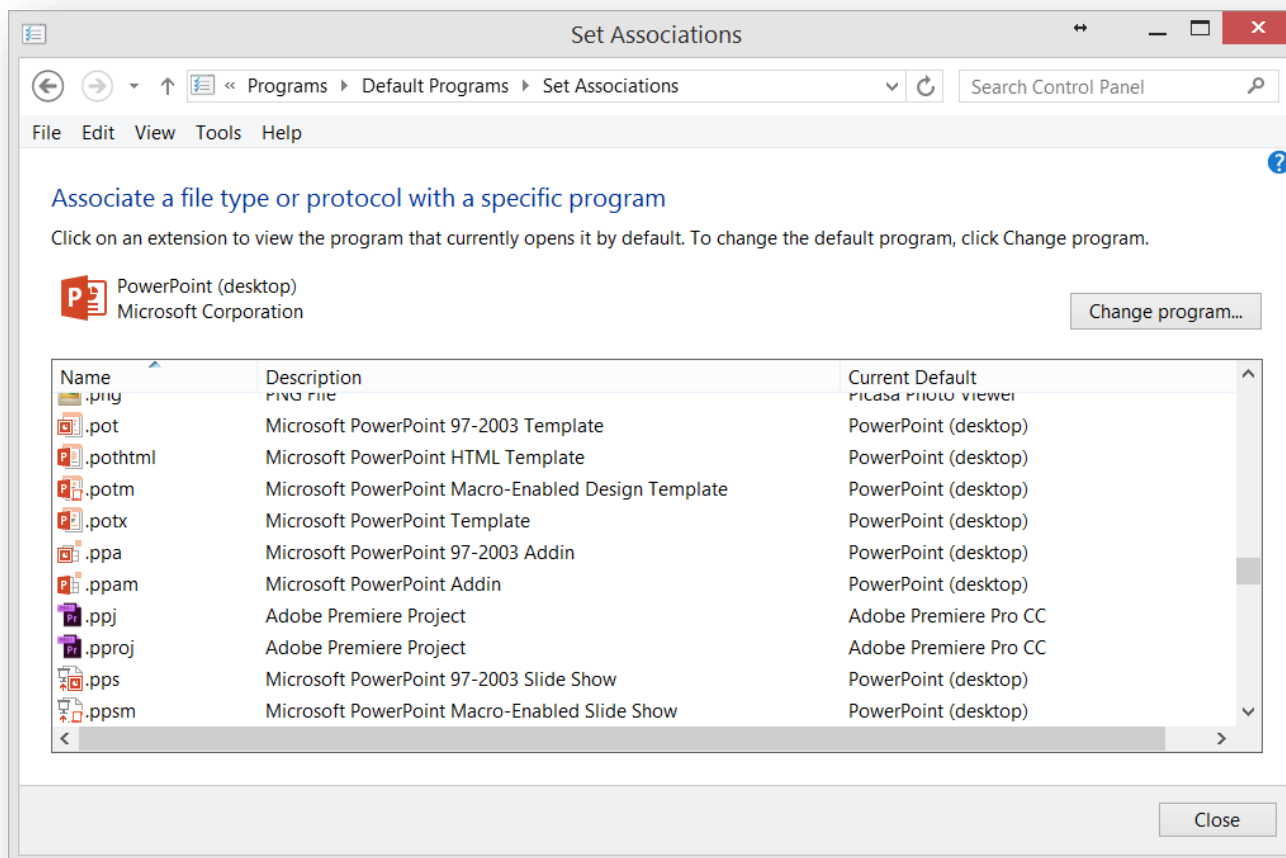
LINKING TO A FILE

■ Example:

```
<a
href="file:\\C:\Dropbox\MIS3690_WebTech\Fall2018\ClassSessi
ons\CS10.pptx">ppt</a>
```

LINKING EXAMPLE – ON RUN

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 SOUNDCLOUD AUDIO

```
<iframe width="50%" scrolling="no" frameborder="no"

src="https://w.soundcloud.com/player/?url=https%3A//api.soundc
loud.com/tracks/66424164&amp;auto_play=false&amp;hide_related=
false&amp;show_comments=true&amp;show_user=true&amp;show_repos
ts=false&amp;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

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="5"; 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="5; url=tiger3.htm" />
```

  - After 5 seconds, tiger3.htm will automatically be loaded.
  - And so on…