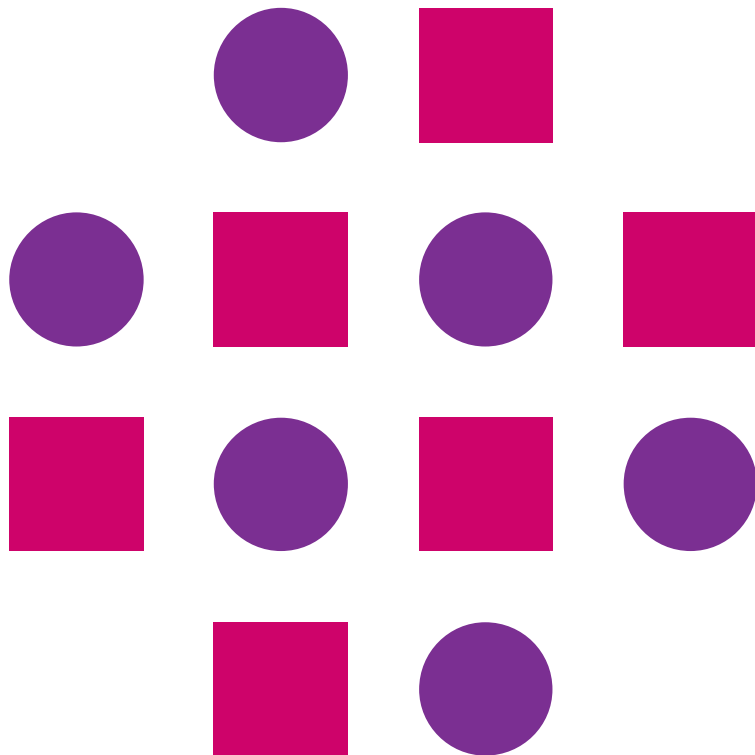


# Images, Video, Audio

## Hypertext Markup Language 5 (HTML5)



# Table of Content

- Image
- Videos
- Audio
- Track
- Object Fit





# Images

(Hypertext Markup Language 5)

# Images

- HTML img tag is used to display image on the web page
- HTML images are defined with the <img> tag
- Syntax :

``

- Example :

``

# Attributes of img tag

- **src** : describes the source or path of image
- **alt** : The alt attribute defines an alternate text for the image (in case image can't be displayed)
- **width** : Specifies width of the image
- **height** : Specifies height of the image

# The alt Attribute

- The alt attribute provides an alternate text for image
- Example :

```

```

# Image as link

- To use image as a link `<img>` tag is used within anchor tag `<a>`

- Example

```
<a href="default.asp">
```

```
 </a>
```

- Images can be jpg, gif, png etc.

# Image Maps

- The `<map>` tag to define an image-map
- An image-map is an image with clickable areas
- The name attribute of the `<map>` tag creates a relationship between the image and the map
- The `<map>` tag contains a number of `<area>` tags, that defines the clickable areas in the image-map



# Image Maps

## Syntax :

```
<map name="mapname">
```

```
<area shape="shapetype" coords="coordinates list" alt="alternate  
text" href="link to webpage">
```

```
<area . . . >
```

```
<area . . . >
```

```
</map>
```

# Image Maps

- The <area> tag to define an clickable area
- “**shape**” attribute defines the shape type
- “**coords**” define the coordinates
- Default – Entire region

Syntax :

```
<area shape="default | rect | circle | poly" coords="x1, y1, x2, y2">
```



# Video

(Hypertext Markup Language 5)

# HTML5 Video

- Flash was used to play video before introduction of HTML5
- The video could be played by launching the video player or using a browser plug-in
- HTML5 specification introduced video element for the purpose of playing videos
- HTML5 `<video>` Tag defines video to be embedded in a web page

# HTML5 Video

## (Example)

```
<!DOCTYPE html>
<html>
<body>
<video src="./video/race_3.mp4" width="640px" height="360px"
controls autoplay></video>
</body>
</html>
```

# HTML5 Video Attributes

- **src** - The path and name of the source video
- **autoplay** - allows the video to play when the page loads
- **preload** – Tells the browser if complete video to be loaded or only metadata to be loaded when page loads
- **controls** – To add controls (play, pause buttons) for the video
- **poster** - A URL indicating a poster frame to show until the user plays or seeks

# HTML5 Source element

- Defines multiple media resources for audio and video
- Supported media types for video are [mp4](#), [webm](#) and [ogg](#)

```
<video width="1200px" height="600px" controls autoplay>  
  <source src="./video/birds_sd.3gp" type="video/3gpp">  
  <!-- alternate video if above format is not supported -->  
  <source src="./video/birds_hd.mp4" type="video/mp4">  
</video>
```

# HTML5 Video

## (poster)

```
<!DOCTYPE html>
<html>
<body>
<video src="./video/birds_hd.mp4" width="1200px" height="600px"
poster="./images/birds-1280x688.jpg" controls></video>
</body>
</html>
```



# Audio

(Hypertext Markup Language 5)

# HTML5 Audio

- The HTML5 <audio> element specifies a standard way to embed audio in a web page
- To play an audio file in HTML, use the <audio> element
- Supported audio formats are – [mp3](#), [wav](#), and [ogg](#)
- Fallback content for browsers not supporting the <audio> element can be added inside the opening <audio> and closing </audio> tags
  - Example : <audio> [Your Browser does not support audio!](#) </audio> will be displayed in browsers that do not support <audio> tag

# HTML5 Audio attributes

Attribute	Value	Description
autoplay	autoplay	Audio will start playing as soon as page is loaded
controls	controls	Audio controls should be displayed
loop	loop	Audio will start over again, every time it is finished
muted	muted	Audio output should be muted
preload	auto metadata none	<ul style="list-style-type: none"><li>• Specifies the way audio should be loaded when page loads</li><li>• Preload attribute is ignored if autoplay is present</li></ul>
src	URL	Specifies the URL of the audio file

# HTML5 Audio attributes

## (preload)

Value	Description
auto	Download whole audio file even if user is not expected to use it
metadata	Only audio metadata (e.g. length) is fetched
none	Audio should not be preloaded
Empty string	Synonym of the auto value

# HTML5 Audio

```
<!DOCTYPE html>
<html>
<body>
  <audio controls>
    <source src="./audio/dangal.mp3" type="audio/mp3">
  </audio>
</body>
</html>
```



DOWNLOAD PROGRESS



68%

# Track

(Hypertext Markup Language 5)

CUSTOMER  
PAYMENT  
PRODUCT  
MARKET  
MONEY  
CORPORATE  
SUCCESS  
ENTERPRISE  
COLLABORATION  
PARTNER  
OFFICE  
SERVICE  
EXCELLENCE  
INDUSTRIAL



CUSTOMER  
PAYMENT  
PRODUCT  
MARKET  
MONEY  
CORPORATE  
SUCCESS  
ENTERPRISE  
COLLABORATION  
PARTNER  
OFFICE  
SERVICE  
EXCELLENCE  
INDUSTRIAL

# The track element

- The <track> tag is new to HTML5 and used to define text tracks in media players
- The track element is used to specify subtitles, caption files or other files containing text, that should be visible when the media is playing

# The track element

Attribute	Value	Description
default	default	Specifies that the track is to be enabled if the user's preferences do not indicate that another track would be more appropriate
kind	captions chapters descriptions metadata subtitles	Specifies the kind of text track
label	text	Specifies the title of the text track
src	url	Specifies the URL of the track file
srclang	Language code	Specifies the language of the track text data (required if kind="subtitles")



# The track element (subtitles)

- Provide translation of content that cannot be understood by the viewer
- For example dialogue or text that is not English in an English language film
- Subtitles may contain additional content, usually extra background information
  - Example : the text at the beginning of a film, or the date, time, and location of a scene

# The track element

## (caption)

- Closed captions provide a transcription and possibly a translation of audio
- It may include important non-verbal information such as music cues or sound effects
- It may indicate the cue's source (e.g. music, text, character)
- Suitable for users who are deaf or when the sound is muted

# The track element

## (descriptions)

- Textual description of the video content
- Suitable for users who are blind or where the video cannot be seen

# The track element

## (chapters, metadata)

- Chapters
  - Chapter titles are intended to be used when the user is navigating the media resource
- Metadata
  - Tracks used by scripts
  - Not visible to the user

# The track element

## Example :

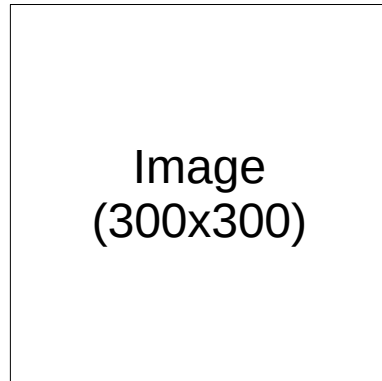
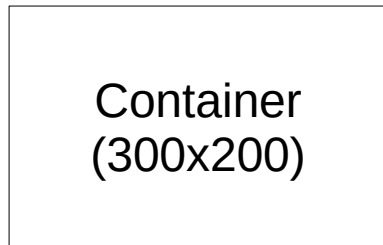
```
<video width="300px" height="200px" controls>
  <source src="test.mp4" type="video/mp4">
  <track kind="subtitles" label="English" src="subtitles_en.vtt" srclang="en" default> </
track>
  <track kind="captions" src="captions_en.vtt" srclang="en">
  <track kind="subtitles" label="Deutsche" src="subtitles_de.vtt" srclang="de"></track>
</video>
```

# Object Fit

(Hypertext Markup Language 5)

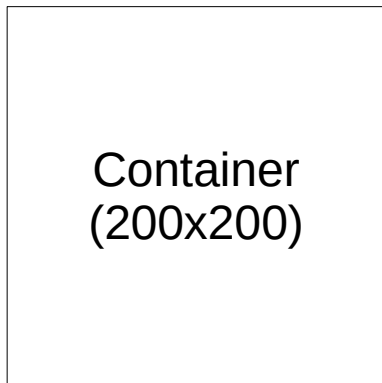
# Object Fit

- Many times we encounter a situation where image or video dimensions may not be in same proportion of container



# Object Fit

- What options do we have to display the image or video in container?



183 x 275



# Object Fit

- Display part of the image
- Scale down the image
- CSS provides options through object-fit property to display media on more appropriate way



183 x 275



183 x 275

# Object Fit

## Syntax :

```
selector {
```

```
    object-fit : none | cover | contain | scale-down | fill;
```

```
}
```

or

```
style="object-fit : none | cover | contain | scale-down | fill;"
```

# Object Fit

**Example :**

```
<img style="object-fit : cover;" />
```

```
<video style="object-fit : contain;" />
```

# Object Fit

Value	Description
fill	<ul style="list-style-type: none"><li>• Content is sized to fill the element's content box</li><li>• The object may be stretched or squished to fit</li></ul>
contain	Content is scaled to maintain its aspect ratio while fitting within the element's content box
cover	<ul style="list-style-type: none"><li>• Content is sized to maintain its aspect ratio while filling the element's entire content box</li><li>• The object will be clipped to fit</li></ul>
scale-down	Content is sized as if none or contain were specified
none	Content is not resized

# Object Fit



Object fit : none



Object fit : contain



Object fit : scale-down



Object fit : cover



Object fit : fill

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*Thank  
you*