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| **Set 17. Media** |

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| **Skill 17.01: Reference media**  **Skill 17.02: Implement the *img* tag**  **Skill 17.03: Implement the *video* tag** |

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| **Skill 17.01: Reference media** |

**Skill 17.01 Concepts**

So far, you have structured your content using paragraphs, headings, and lists. In this lesson you will learn how to add images and videos to make your content more interesting.

The images and videos you include with your page are separate files and will need to be referenced correctly to be displayed.

Images and videos are referenced using src attribute - short for source. This tells the tag the location of the image or video to load.

Consider the following file structure. Media is the name of the folder. And, inside the folder we have a file called *Index.html* and an image called *Frog.jpg*. The following code could be used to reference the *Frog.jpg* image from the *Index.html* page.

|  |  |
| --- | --- |
| **Media** | src = “Frog.jpg” |
| Index.html  Frog.jpg |

Now consider an example where the *Frog.jpg* we are trying to reference is stored in a directory that is different than *Index.html*. In the file structure below, we have created a directory called *Images* inside the *Media* folder and placed the *Frog.jpg* image inside of it. The following code could be used to reference the *Frog.jpg* image from the *Index.html* page.

|  |  |
| --- | --- |
| **Media** | src = “Images/Frog.jpg” |
| Index.html   |  | | --- | | **Images** | | Frog.jpg | |

Now consider the situation below. *Media* and *Images* are both separate directories in the *MyWebsite* directory. Inside the *Media* directory we have an *Index.html* page and inside the *Images* directory we have our image *Frog.jpg* we want to reference. To do this, we must first “backout” of the *Media* directory, then enter the Images directory. The “. .” syntax is used to backout of a directory.

|  |  |  |
| --- | --- | --- |
| **MyWebsite** | | src = “../Images/Frog.jpg” |
| **Media** | **Images** |
| Index.html | Frog.jpg |

[**Skill 17.01 Exercise 1**](https://hpluska.github.io/APCompSciPrinciples/ticketOutTheDoor/set17/Set17TicketOutTheDoorAPCompSciPrinciples.pdf)

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| **Skill 17.02: Implement the *img* tag** |

**Skill 17.02 Concepts**

The *img* tag allows you to add images to your page. And like the *br* tag, the *img* tag doesn’t require a closing tag. All the information needed to display your image is contained within the tag itself.

To tell the browser the location and name of the file to use, you need to use the *src* attribute. The *src* attribute is added to the image tag inside the brackets. An additional attribute, called *alt*, provides backup text in case your image doesn't download properly or for visually impaired users.

How the *img* tag can be used to display an image on your webpage is illustrated below,

|  |  |
| --- | --- |
| Media | https://cdo-curriculum.s3.amazonaws.com/media/uploads/img_tag.png |
| Index.html  dog.jpg |
| 1. Creates an image tag using the abbreviation *img*. This is considered a self closing tag, since it doesn't need to wrap text as many other tags do. The /right before the ending > is optional, but helps remind us that this tag doesn't need a closing tag. 2. The *src* attribute is short for source. This tells the tag which image to load. In this case, the page will look for an image with the filename dog.jpg in the same directory as the page. Image file names include extensions that tell the computer which type of image they are working with. Common extensions are *.jpg, .jpeg, .gif, .png.* Make sure to put quotation marks around your image filename. 3. The *alt* attribute is short for alternative text. While you won't see this text on your web page, it provides a backup in case your image doesn't download properly or for visually impaired users. In this example, if your browser failed to load the image you would see https://cdo-curriculum.s3.amazonaws.com/media/uploads/broken_image.png | |

[**Skill 17.02 Exercise 1**](https://hpluska.github.io/APCompSciPrinciples/ticketOutTheDoor/set17/Set17TicketOutTheDoorAPCompSciPrinciples.pdf)

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| **Skill 17.03: Implement the *video* tag** |

**Skill 17.03 Concepts**

The *video* tag allows you to add videos to your webpage. The video tag includes several attributes which allow you to customize how your video displays. These are described below.

|  |  |
| --- | --- |
| **Media** | **2**  **1**  **3**    **4**  **6**  **5** |
| Index.html  movie.mp4 |
| 1. The video tag is needed to tell the browser to load a video. Notice the video tag also requires a closing tag. 2. width and height are attributes define the size of the video. 3. Controls attribute adds controls like, play, stop, pause. If the word *controls* is replaced with *autoplay*, the video will play automatically when the page loads. 4. The <source> element allows you to specify alternative video files which the browser may choose from. The browser will use the first recognized format. 5. The src attribute indicates the location and name of the video file to be played. 6. The type attribute is the type of video format. | |

[**Skill 17.03 Exercise 1**](https://hpluska.github.io/APCompSciPrinciples/ticketOutTheDoor/set17/Set17TicketOutTheDoorAPCompSciPrinciples.pdf)