

# Introduction to HTML 2

**Relevel**  
by Unacademy



# App Introduction





WIKIPEDIA  
The Free Encyclopedia

## Dogs

The dog or domestic dog (*Canis familiaris*<sup>[4][5]</sup> or *Canis lupus familiaris*<sup>[5]</sup>) is a domesticated descendant of the wolf which is characterized by an upturning tail. **The dog is derived from an ancient, extinct wolf**,<sup>[6][7]</sup> and the modern wolf is the dog's nearest living relative.<sup>[8]</sup> The dog was the first species to be domesticated,<sup>[9][8]</sup> by hunter-gatherers over 15,000 years ago,<sup>[7]</sup> before the development of agriculture

**Due to their long association with humans**, dogs have expanded to a large number of domestic individuals<sup>[10]</sup> and gained the ability to thrive on a starch-rich diet that would be inadequate for other canids.<sup>[11]</sup> Over the millennia, dogs became uniquely adapted to human behavior, and the human-canine bond has been a topic of frequent study

Dog Species		
Name	Origin	Photo
Pomeranian dog	Germany	
Golden Retriever	United States	

- We will be creating the above wikipedia page and showing dog information utilising HTML concepts learnt in past session and today's session.
- Code - <https://jsfiddle.net/TanayTapanshu/vu3qc27o/>

# App Introduction

List out all the topics that will be covered in this session.



Table



Media



iframe



video



audio



Image

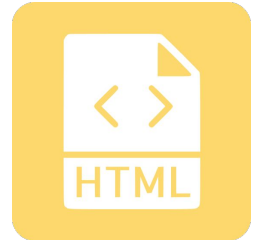
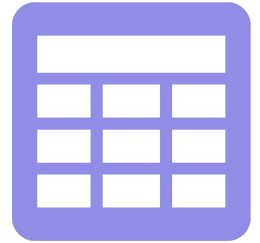


HTML Graphics  
SVG and Canvas

# Table

- HTML Table is used for organizing information in a certain dimension(Rows by Columns).
- `<table>` tag is used for displaying content in a tabulated format.
- `<tr>` tag is used for representing a row of data in the table.
- `<th>` tag is used for defining the header cell.
- `<td>` tag represents a data cell in a table.
- `<colgroup>` For formatting, specifies a group of one or more columns in a table.
- `<col>` Column properties are specified for each column inside a `<colgroup>` element.
- `<thead>` In a table, groups the header content.
- `<tbody>` In a table, groups the body content.
- `<tfoot>` The footer content of a table is grouped.
- Code -

<https://codesandbox.io/s/infallible-cartwright-9fi1o6?file=/index.html:88-171>



## Brain Teaser

Q) How do you define a cell as header of a group of table cells ?

- a) Using header tag
- b) Using `<h1>`
- c) Using `<td>`
- d) Using `<th>`



## Solution Brain Teaser

**Q)** How do you define a cell as header of a group of table cells ?

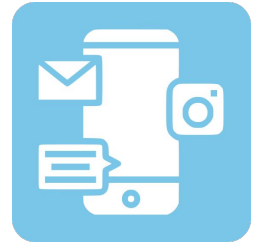
- a) Using header tag
- b) Using `<h1>`
- c) Using `<td>`
- d) Using `<th>`**

- `<th>` tag is used for defining the header cell.



# Media

- The HTMLMediaElement interface extends HTMLInputElement with the properties and methods required to handle basic audio and video media-related features.
- Media attribute can be used in the following elements :
  - <a>
  - <area>
  - <link>
  - <source>
  - <style>
- Code - <https://codesandbox.io/s/infallible-cartwright-9fi1o6?file=/index.html:88-171>



## Brain Teaser

Q) Why do we need media attribute ?





## Solution Brain Teaser

**Q)** Why do we need media attribute ?

**Answer:** The media attribute is used to specify that the destination URL is optimised for mobile devices (such as iPhones), speech, or print.



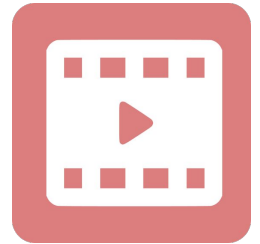
## iframes

- The iframe element defines an inline frame, which is used to embed another page into the current HTML document.
- The <iframe> HTML element represents a nested browsing context, embedding another HTML page into the current one.
- Code - <https://codesandbox.io/s/infallible-cartwright-9fi1o6?file=/index.html:88-171>



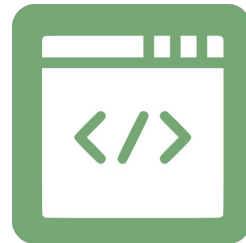
# Video

- To display a video on a web page, use the HTML `<video>` element.
- Attributes of Video are:
  - autoplay
  - controls
  - height
  - width
  - loop
  - src
  - poster
  - preload
  - muted
- Code - <https://codesandbox.io/s/infallible-cartwright-9fi1o6?file=/index.html:88-171>



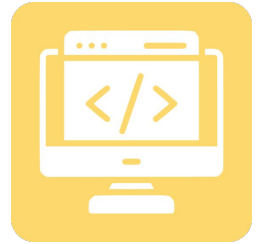
# Audio

- To construct a video player, utilise the HTML5 <video> tag. The HTML5 <audio> element is used to specify sound, such as music or other audio streams.
- Attributes of Video are:
  - autoplay
  - controls
  - loop
  - src
  - preload
  - muted
- Code -  
<https://codesandbox.io/s/infallible-cartwright-9fi1o6?file=/index.html:88-171>



# Images

- The `<img>` tag defines an image on a page. The `<img>` tag has two required attributes: `src` and `alt`.
  - `src` - Specifies the path to the image
  - `alt` - Specifies an alternate text for the image
- Attributes of `img` are:
  - `alt`
  - `crossorigin`
  - `height`
  - `loading`
  - `sizes`
  - `src`
  - `srcset`
  - `width`
  - `ismap`
  - `referrerpolicy`
- Code - <https://codesandbox.io/s/infallible-cartwright-9fi1o6?file=/index.html:88-171>



## Brain Teaser

Q) How will you add a youtube video in your HTML document ?

- a) Using iframe element
- b) Using video element
- c) Using audio element
- d) none of these



## Brain Teaser Solution

**Q)** How will you add a youtube video in your HTML document ?

- a) Using iframe element**
- b) Using video element
- c) Using audio element
- d) none of these



## Brain Teaser Solution

**Q)** How will you add a youtube video in your HTML document ? (*contd.*)

- Follow these steps to embed your movie on a web page:

i> Create a YouTube video.

ii> Take down the video ID.

iii> In your web page, create an `iframe` element.

iv> Set the video's `src` property to the video's URL.

v> To specify the player's size, use the `width` and `height` parameters.

vi> Any more arguments should be added to the URL (see below)



```
<iframe width="420" height="315"  
src="https://www.youtube.com/embed/tgbNymZ7vqY">  
</iframe>
```



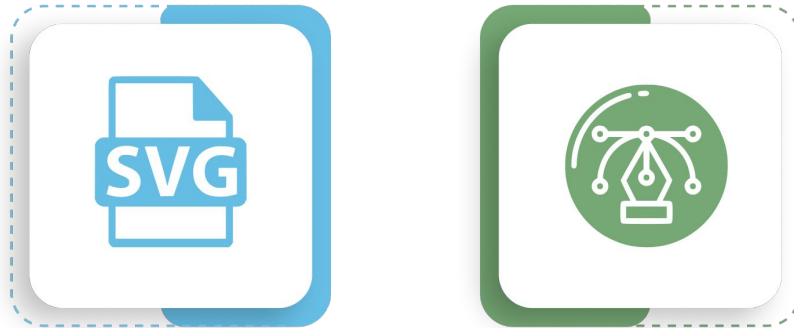
# HTML Graphics

- There are several ways to show and produce graphics in an HTML document using the HyperText Markup Language (HTML). Images that are embedded directly in the HTML page are the most commonly used sort of HTML graphics.
- Other than that we use SVG and Canvas commonly



# SVG

- SVG (Scalable Vector Images) is an XML-based picture format for defining two-dimensional vector-based graphics for the web and mobile devices. A vector image, unlike a raster image (such as .jpg, .gif, or .png), may be scaled up or down to any size without sacrificing quality.
- There are various more benefits of utilising SVG over other image formats such as JPEG, GIF, PNG, and so on.
- Example - <https://codesandbox.io/s/infallible-cartwright-9fi1o6?file=/index.html>



# Canvas

- Using scripting, the HTML element is used to draw visuals on the fly (usually JavaScript). The element is merely a container for graphics; we must use a script to create the visuals. Canvas also contains numerous ways for drawing lines, boxes, circles, text, and pictures.
- Canvas has limited scalability. As a result, it is not ideal for printing at higher resolutions, and it performs better with a smaller surface area or a greater number of objects. Canvas diagrams may be exported in PNG or JPG format and can only be edited via script.
- Example - <https://codesandbox.io/s/infallible-cartwright-9fi1o6?file=/index.html>



## Let's create the application.

- We will create the wikipedia clone and display the information of dogs in that.
- We will add logo and further details about the dog with random text.
- After that we will make a table displaying the information about the different breeds of dog.



# Output





WIKIPEDIA  
The Free Encyclopedia

## Dogs

The dog or domestic dog (*Canis familiaris*[4][5] or *Canis lupus familiaris*[5]) is a domesticated descendant of the wolf which is characterized by an upturning tail. **The dog is derived from an ancient**, extinct wolf.[6][7] and the modern wolf is the dog's nearest living relative.[8] The dog was the first species to be domesticated,[9][8] by hunter-gatherers over 15,000 years ago,[7] before the development of agriculture

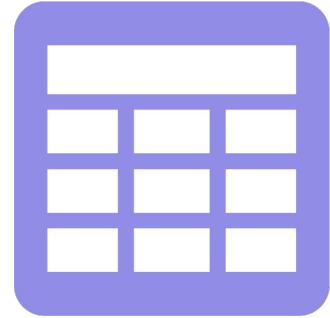
**Due to their long association with humans**, dogs have expanded to a large number of domestic individuals[10] and gained the ability to thrive on a starch-rich diet that would be inadequate for other canids.[11] Over the millennia, dogs became uniquely adapted to human behavior, and the human-canine bond has been a topic of frequent study

Dog Species		
Name	Origin	Photo
Pomeranian dog	Germany	
Golder Retriever	United States	

## MCQ

**Q1.** Which of the following HTML element is used for creating a table?

- a) `<table>`
- b) `<th>`
- c) `<tr>`
- d) `<column>`



## MCQ

**Q2.** How will you add google maps in your HTML document?

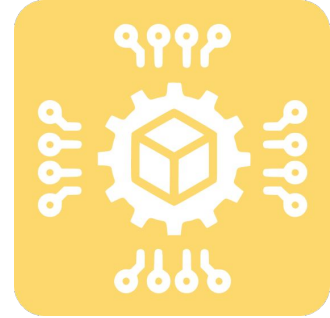
- a) Using iframe element
- b) Using video element
- c) Using audio element
- d) none of these



## MCQ

**Q3.** In the image element, what does the src property do?

- a) Specifies the alternate path to the image
- b) Specifies an alternate text for the image
- c) Specifies the path to the image
- d) none of these





## MCQ

**Q4.** Element to display a video on a web page

- a) <audio>
- b) <para>
- c) <video>
- d) <source>



## MCQ

**Q5.** Can we modify Canvas with CSS ?

- a) yes
- b) no



## Practice / HW Questions

- E-Commerce app Product Details page



# THANK YOU !