**Module (HTML5) - 3**

**Q. What are the new tags added in HTML5?**

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|  |  |
| --- | --- |
| Tags (Elements) | Description |
| <article> | Represents an independent piece of content of a document, such as a blog entry or newspaper article |
| <aside> | Represents a piece of content that is only slightly related to the rest of the page. |
| <audio> | Defines an audio file. |
| <canvas> | This is used for rendering dynamic bitmap graphics on the fly, such as graphs or games. |
| <command> | Represents a command the user can invoke. |
| <datalist> | Together with the a new list  Attribute for input can be used to make comboboxes |
| <details> | Represents additional information or controls which the user can obtain on demand. |
| <embed> | Defines external interactive content or plugin |
| <figure> | Represents a piece of self- contained flow content, typically referenced as single unit from the main flow of the document. |
| <footer> | Represents a footer for a section and can contain information about the author, copyright information, et cetera. |
| <header> | Represents a group of introductory or navigational aids. |
| <hgroup> | Represents the header of a section. |
| <keygen> | Represents control for key pair generation. |
| <mark> | Represents a run of text in one document marked or highlighted for reference purposes, due to its relevance in another context. |
| <meter> | Represents a measurement, such as disk usage. |
| <nav> | Represents a section of the document intended for navigation. |
| <output> | Represents some type of output, such as from a calculation done through scripting. |
| <progress> | Represents a completion of a task, such as downloading or when performing a series of expensive operations. |
| <ruby> | Together with <rt> and <rp> allow for marking up ruby annotations. |
| <section> | Represents a generic document or application section |
| <time> | Represents a date and/or time. |
| <video> | Defines a video file. |
| <wbr> | Represents a line break opportunity. |

**Q. How to Embed audio and Video in a Webpage?**

🡪 To embed audio in HTML, we use the <audio>tag. Before

HTML5, audio cannot be added to web pages in the

Internet Explorer era. To play audio, we used web plugins

Like Flash. After the release of HTML5, it is possible.

This tag supports Chrome, Firefox, Safari, Opera, and

Edge in three audio formats- MP3, WAV, OGG. Only

Safari browser doesn’t support OGG audio format.

**Syntax:**

<audio>

<source src= “file\_name” type= “audio\_file\_type”>

</audio>

**Attributes of <audio> tag**

|  |  |  |
| --- | --- | --- |
| Attribute | Value | Description |
| autoplay | autoplay | When the page is loaded. It specifies to play audio as soon as possible. |
| controls | controls | It displays audio control. |
| loop | loop | It will start the audio again when it is finished. |
| muted | muted | When the page is loaded audio will be automatically muted. |
| preload | auto metadata none | It specifies how the author thinks the audio will be loaded when the page is ready. |
| src | URL | It specifies the URL of the audio file. |

**Example: -**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title> Audio Page </title>

</head>

<body style="background-image:url('/Users/arnavpandav/Desktop/ARNAV PANDAV/HTML /IFRAME/mc.jpg');">

<h2 style="text-align: center;"> Welcome to istock online Music Player </h2>

<h2 style="color: brown; margin-left: 5%;"> <u> Spiritual Songs</u></h2>

<h3 style="margin-left:5%;"> Hare Krishna Hare Rama / Play Online </h3>

<audio controls src="/Users/arnavpandav/Downloads/Hare Krishna Hare Rama(PagalWorld.com.se).mp3" style="margin-left: 5%;"> <br>

</audio>

<h3 style="margin-left: 5%;"> Raghu Pati Raghav Raja Ram / Play Online </h3>

<audio controls src="/Users/arnavpandav/Downloads/Raghupati-Raghav-Raja-Ram(PagalWorld).mp3" style="margin-left: 5%;">

</audio><br>

<h3 style="margin-left: 5%;"> Tum Prem Ho Tum Preet Ho / Play Online </h3>

<audio controls src="/Users/arnavpandav/Downloads/Tum-Prem-Ho-Radhe(PaglaSongs).mp3" style="margin-left: 5%;">

</audio><br>

<h3 style="margin-left: 5%;"> Achuytum Keshavam Krishna / Play Online </h3>

<audio controls src="/Users/arnavpandav/Downloads/Achyutam Keshavam(PagalWorld.com.se).mp3 " style="margin-left: 5%;">

</audio><br>

<h3 style="margin-left: 5%;"> Ram Siya Ram Siya Ram / Play Online </h3>

<audio controls src=" /Users/arnavpandav/Downloads/\_Ram Siya Ram(PagalWorld.com.se).mp3" style="margin-left: 5%;">

</audio><br> <br>

<a href="iframetask.html" style="margin-left:10%;"> Back To Home Page</a><br><br>

<a href="Bollywood.html" style="margin-left: 10%;"> Bollywood Songs</a>

</body>

</html>

Output: -

A screenshot of a music player

Description automatically generated

🡪 To embed video in HTML, we use the <video> tag. It

contains one or more video sources at a time using

<source>tag. It supports MP4, WebM, and Ogg in all

Modern browser. Only Ogg video format doesn’t

support in Safari browser.

**Syntax:**

<video>

<source src= “file\_name” type= “video\_file\_type”>

</video>

**Attributes of <video> tag.**

|  |  |  |
| --- | --- | --- |
| Attributes | Value | Description |
| autoplay | autoplay | When the page is loaded. It specifies to play video as soon as possible. |
| controls | controls | It displays video control such as play, pause, and stop |
| loop | loop | It will start the video again when it is finished. |
| muted | muted | When the page is loaded video will be automatically muted. |
| poster | URL | It specifies an image will be shown until video play. |
| preload | auto metadata none | It specifies how the author thinks the video will be loaded when the page is ready. |
| src | URL | It specifies the URL of the audio file. |
| Width | pixels | It specifies the width of the video area. The default value of width is ‘auto’. |
| height | pixels | It specifies the height of the video area. The default value of height is ‘auto’. |

**Example: -**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Document</title>

</head>

<body>

<a href="Iframec.html"> </a>

<iframe width="560" height="315" src="https://www.youtube.com/embed/hlkijvnMQkM?si=PZFHtSpbmoYSZC\_F"

title="YouTube video player" frameborder="0" allow="accelerometer; autoplay; clipboard-write; encrypted-media; gyroscope; picture-in-picture; web-share" allowfullscreen></iframe>

</body>

</html>

Output: -

A screenshot of a video game

Description automatically generated

**Q. Semantic element in HTML5?**

🡪 Semantic elements have meaningful names which tell

about the type of content. For example header, footer,

table, etc. HTML5 introduces many semantic elements

as mentioned below which make the code easier to

write and understand for the developers as well as instruct

the browser on how to treat them.

1) article: - It contains independent content which

doesn’t require any other content.

Example: - Blog Post, Newspaper, Article, etc.

2) aside: - It is used to place content in a sidebar i.e.

aside from the existing content. It is related

to surrounding content.

3) details and summary: - “details” defines additional

details that the user can hide or view. “summary”

defines a visible heading for a “details” element.

4) Figure and figcaption: - These are used to add an

Image to a web page with a small description.

5) Header: - As the name suggests, it is for the header

of a section introductory of a page. There can be

multiple headers on a page.

6) Footer: - Footer located at the bottom of any article

or document, they can contain contact details, copy

right information etc. There can be multiple footers

on a page.

7) Main: - It defines the main content of the document.

The content inside the main tag should be unique.

8) Section: - A page can be Split into section like intro-

duction, Contact information, Details, etc and each

of these sections can be in a different section tag.

9) nav: - It is used to define a set of navigation links in

The form of a navigation bar or nav menu.

10) Mark: - It is used to highlight the text.

**Q. Canvas and SVG Tags.**

🡪 Canvas tag: - The HTML <canvas> element is used to

Draw graphics.

🡪 The <canvas> element is only a container of

graphics. You must use a script to actually draw

the graphics.

🡪 Canvas has several methods for drawing paths,

boxes, circles, text, and adding images.

🡪 Script – Drawing via code

🡪 Better Performance

🡪 SVG tag: - SVG stands for Scalable Vector Graphics.

🡪 The HTML <svg> element is a container for SVG

Graphics.

🡪 SVG has several methods for drawing paths, boxes,

circles, text, and graphic images.

🡪 Document – Drawing via XML

🡪 Poor Performance when to many items.