**HTML 5 ASSIGNMENT**

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

Ans :- In HTML5, there are lots of new elements are added which provides some extra functionality to create an attractive and dynamic website. With the help of these elements, you can make your code easy and quick.

HTML5 introduced several new tags and attributes to enhance the structure, presentation, and functionality of web documents.

Here is a list of some of the new tags added in HTML5:

<article> :- It defines the independent or self-contained content of a webpage.

<aside> :- It defines the content which provide information about the main content.

<details> :- It defines additional information which only visible as per user demand.

<figure> :- It defines a self-contained content, and referenced as a single unit.

<footer> :- It represents the footer section of the webpage.

<header> :- It defines the introductory or navigational content of the webpage.

<main> :- It specifies the main content of the HTML document.

<mark> :- It represent the text which is highlighted or marked for reference or notation purposes.

<nav> :- It represents the section which contains navigation links.

<time> :- It defines data/time within an HTML document.

<audio> :- It defines sound content.

<video> :- It defines video content within HTML document.

**2 . How to embed audio and video in a webpage?**

Ans :- HTML stands for HyperText Markup Language. It is used to design web pages using a markup language. It is a combination of Hypertext and Markup language. HTML uses predefined tags and elements that tell the browser how to properly display the content on the screen. So, in this article, we will learn how to embed audio and video in HTML. In order to insert multimedia files on web pages, we already know how to insert images in HTML.

To embed audio and video in a webpage, you can use the HTML <audio> and <video> elements.

**Audio :-**

**Syntax :-**

<audio>

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

</audio>

**Example :-**

<!DOCTYPE html>

<html>

<head>

<title>Page Title</title>

</head>

<body>

<h2>Click play button to play audio</h2>

<audio src="./test.mp3" controls></audio>

</body>

</html>

**Video :-**

**Syntax :-**

<video>

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

</video>

**Example :-**

<!DOCTYPE html>

<html>

<head>

<title>Page Title</title>

</head>

<body>

<h2>Click play button to play video</h2>

<video src="./test.mp4" controls></video>

</body>

</html>

**3 . Semantic element in HTML5?**

Ans :- In HTML5, semantic elements are elements that provide meaning to the structure and content of a web page. Most of that elements are similar like ‘<div>’ and behave like it but it gives meaning to those elements.

Examples :-

<article>

<aside>

<details>

<figcaption>

<figure>

<footer>

<header>

<main>

<mark>

<nav>

<section>

<summary>

<time>

**4 . Canvas and SVG tags .**

Ans :-

SVG :- The Scalable Vector Graphics (SVG) is an XML-based image format that is used to define two-dimensional vector-based graphics for the web. Unlike raster image (Ex .jpg, .gif, .png, etc.), a vector image can be scaled up or down to any extent without losing the image quality.

An SVG image is drawn out using a series of statements that follow the XML schema — that means SVG images can be created and edited with any text editor, such as Notepad. There are several other advantages of using SVG over other image formats like JPEG, GIF, PNG, etc.

Example :-

<!DOCTYPE html>

<html>

<head>

<style>

#svgelem {

position: relative;

left: 50%;

-webkit-transform: translateX(-20%);

-ms-transform: translateX(-20%);

transform: translateX(-20%);

}

</style>

<title>HTML5 SVG</title>

</head>

<body>

<h2 align="center">

SVG Circle(Geeks For Geeks)

</h2>

<svg id="svgelem" height="200">

<circle id="greencircle" cx="60"

cy="60" r="50" fill="green" >

</svg>

</body>

</html>

Canvas :-

The HTML element is used to draw graphics on the fly, via scripting . The element is only a container for graphics. You must use a script to actually draw the graphics. Canvas has several methods for drawing paths, boxes, circles, text, and adding images.

Example :-

<!DOCTYPE html>

<html>

<body>

<canvas id="myCanvas" width="200" height="100" style="border:1px solid #000000;">

Your browser does not support the HTML canvas tag.

</canvas>

</body>

</html>