<u>Module 5</u>: <u>Mernstack – HTML5</u>

(Theory Assignment)

Question 1: Difference b/w HTML & HTML5?

Ans:-

Feature	HTML	HTML5
Version	Older versions like HTML 4.01	Latest version of HTML
Doctype Declaration	Long and complex	Simple: html
Multimedia Support	Requires plugins (e.g., Flash) For audio/video.	Built-in support for audio and video
New Elements	Limited semantic elements	<pre>Introduces semantic tags like <header>, <footer>, <article>, <section></section></article></footer></header></pre>
Form Enhancements	Fewer input types	New input types like email, date, range, etc.
APIs and Features	No support for APIs	Supports APIs like Geolocation, Web Storage, Canvas, and Drag-and-Drop
Mobile and Responsive Design	Less support	Designed with mobile and modern devices in mind
Browser Compatibility	Works with older browsers	Works with modern browsers, backward compatible

Question 2: What are the additional tags used in HTML5? **Ans:**-

- → HTML5 introduced several **new semantic**, **multimedia**, **and functional tags** to improve structure and user experience.Here's a list of commonly used additional tags in HTML5:
- Semantic Tags (for better structure and readability):

Tag	Description
<header></header>	Defines the header section of a page or section
<footer></footer>	Defines the footer section
<article></article>	Represents a self-contained piece of content
<section></section>	Defines a section in a document
<nav></nav>	Represents navigation links
<aside></aside>	Defines content aside from the main content (like a sidebar)
<main></main>	Represents the main content of the document
<figure></figure>	Wraps media like images with captions
<figcaption></figcaption>	Caption for the <figure> element</figure>
<mark></mark>	Highlights text
<time></time>	Represents a date or time value

• Multimedia Tags:

Tag	Purpose
<audio></audio>	Embeds audio files
<video></video>	Embeds video files
<source/>	Specifies media source for <audio> or <video></video></audio>

• Graphics and Web Apps Tags:

Tag	Purpose
<canvas></canvas>	Used to draw graphics via scripting (usually JavaScript)
<svg></svg>	Embeds Scalable Vector Graphics (2D graphics)

• Form-related Tags:

Tag	Purpose
<datalist></datalist>	Provides autocomplete options for input fields
<output></output>	Represents the result of a calculation
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	Displays the progress of a task
<meter></meter>	Shows a scalar measurement (like disk usage)

(Lab Assignment)

Task: Create a audio video tag

- Also applied properties like muted loop autoplay
- Create some shape using canvas tag in html // not completed yet
- Create some shape using svg tag in html // not completed yet

Code:-

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Audio and Video Tag Example</title>
<style>
  body {
    font-family: "Segoe UI", Tahoma, Geneva, Verdana, sans-serif;
    background-color: #f4f6f8;
    margin: 0;
    padding: 0;
  }
  .main {
     height: auto;
     width: 850px;
    border: 2px solid #ccc;
     margin: 30px auto;
     background-color: #ffffff;
```

```
box-shadow: 0 8px 16px rgba(0, 0, 0, 0.1);
  border-radius: 10px;
}
.main-head {
  height: 60px;
  border-bottom: 2px solid #4a90e2;
  background-color: #4a90e2;
  color: white;
  display: flex;
  align-items: center;
  justify-content: center;
  border-top-left-radius: 10px;
  border-top-right-radius: 10px;
}
.mix {
  display: flex;
  gap: 20px;
  padding: 20px;
  justify-content: center;
}
.main-audio, .main-video {
  height: auto;
  width: 400px;
```

```
border: 2px solid #ddd;
  border-radius: 10px;
  background-color: #f9f9f9;
  box-shadow: 2px 4px 12px rgba(0, 0, 0, 0.05);
}
.audio-head, .video-head {
  height: 50px;
  background-color: #e0f7fa;
  color: #00796b;
  display: flex;
  align-items: center;
  justify-content: center;
  font-weight: bold;
  border-bottom: 2px solid #b2dfdb;
  border-top-left-radius: 10px;
  border-top-right-radius: 10px;
}
.audio, .video {
  padding: 15px;
  display: flex;
  align-items: center;
  justify-content: center;
  background-color: #fff;
  border-bottom-left-radius: 10px;
```

```
border-bottom-right-radius: 10px;
    }
    audio, video {
       width: 100%;
       border-radius: 5px;
    }
</style>
</head>
<body>
<div class="main">
<div class="main-head">
<h2>Audio and Video Tags</h2>
</div>
<div class="mix">
 <div class="main-audio">
 <div class="audio-head">
  <h4> \( \int \) Audio</h4>
  </div>
   <div class="audio">
   <audio controls loop muted autoplay>
   <source src="image/Title Track Saiyaara 128 Kbps.mp3" type="audio/mpeg">
   </audio>
   </div>
   </div>
```