

Module 5 – Mernstack – HTML5

Theory Assignment

Question 1: Difference b/w HTML & HTML5?

HTML	HTML5
Cookies are used to store temporary data.	SQL databases and application cache are used to store offline data.
It works with all old browsers.	It supported all new browsers like Mozilla, Firefox, etc.
It is less mobile friendly.	It is more mobile friendly.
It didn't support audio and video without the use of flash player support.	It supports audio and video controls with the use of <audio> and <video> tags.
It is not fast as compared to HTML5.	It is faster compared to HTML.
Character encoding is long and complicated.	Character encoding is simple and easy.
It does not allow drag and drop effects.	It allows drag and drop effects.
HTML does not allow drawing shapes like rectangles, triangles, etc.	HTML5 allows drawing shapes like rectangles, triangles, etc.

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

HTML5 introduced new tags to improve the structure, semantics, and functionality of webpages. Here's a categorized list of the additional tags:

1. **Semantic Tags:**

- <header>, <footer>, <article>, <section>, <nav>, <aside>, <main>, <figure>, <figcaption>, <mark>, <time>.

2. **Multimedia Tags:**

- <audio>, <video>, <source>, <track>.

3. **Graphics Tags:**

- <canvas>, <svg>.

4. Form-Related Tags:

- <datalist>, <output>, <progress>, <meter>.

5. Interactive Tags:

- <template>, <dialog>, <details>, <summary>, <embed>.

These tags improve structure, interactivity, and multimedia support for modern web development.

Lab Assignment

- Task: Create a audio video tag

- Also applied properties like muted loop autoplay

- Create some shape using canvas tag in html

- Create some shape using svg tag in html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>HTML Multimedia and Graphics</title>
</head>
<body>
  <h1>HTML Multimedia and Graphics</h1>

  <!-- Audio -->
  <audio controls muted loop autoplay>
    <source src="romantic-song-tera-roothna-by-ashir-hindi-top-trending-viral-song-231771.mp3" type="audio/mpeg">
  </audio>

  <!-- Video -->
  <video controls muted loop autoplay width="400">
    <source src="1721303-hd_1920_1080_25fps.mp4" type="video/mp4">
  </video>

  <!-- Canvas -->
  <canvas id="canvas" width="300" height="200" style="border: 1px solid black;"></canvas>
  <script>
    const ctx = document.getElementById('canvas').getContext('2d');
    ctx.fillStyle = 'blue'; ctx.fillRect(20, 20, 100, 50); // Rectangle
    ctx.beginPath(); ctx.arc(200, 100, 40, 0, Math.PI * 2); ctx.fillStyle = 'red'; ctx.fill(); // Circle
  </script>

  <!-- SVG -->
  <svg width="300" height="200" style="border: 1px solid black;">
    <rect x="20" y="20" width="100" height="50" fill="blue" />
    <circle cx="200" cy="100" r="40" fill="red" />
  </svg>
</body>
</html>
```

Output:

HTML Multimedia and Graphics

0:00 / 4:20

