

Module 5 – Frontend – HTML5

Theory Assignment

• Question 1: Difference b/w HTML & HTML5?

✓ Difference Between HTML and HTML5

Feature	HTML	HTML5
Version	Older versions (HTML 4.01 is most common)	Latest version of HTML
Doctype Declaration	Long and complex (<code><!DOCTYPE HTML PUBLIC...></code>)	Simple and short: <code><!DOCTYPE html></code>
Multimedia Support	Requires third-party plugins like Flash	Built-in support for <code><audio></code> , <code><video></code> tags
Semantic Elements	Lacks many semantic tags	Introduces semantic tags like <code><header></code> , <code><footer></code> , <code><section></code> , <code><article></code>
Form Enhancements	Limited input types and validations	New input types like date, email, range, search etc.
Browser Support for APIs	No built-in support	Supports APIs like Geolocation, Web Storage, Canvas, etc.
Mobile Support	Not optimized for mobile	Designed with mobile-first approach
Graphics and Animation	Uses Flash or external libraries	Includes <code><canvas></code> and <code><svg></code> for graphics
Error Handling	Less consistent error handling	Improved and more consistent error handling in browsers
Offline Storage	Not supported	Web Storage (localStorage & sessionStorage) supported

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

◆ 1. Semantic Tags (For better structure and readability)

Tag	Purpose
<code><header></code>	Defines the top section of a webpage or section (like a logo or navigation)
<code><footer></code>	Defines the bottom section (like copyright, links)

Tag	Purpose
<nav>	Represents a block of navigation links
<section>	Groups related content into sections
<article>	Represents a self-contained piece of content (e.g., a blog post)
<aside>	Defines content that is tangentially related (e.g., sidebars)
<main>	Highlights the main content of the page
<figure>	Wraps media (images, diagrams, etc.) with caption
<figcaption>	Caption for the <figure> element
<mark>	Highlights text
<time>	Represents time/date

◆ 2. Multimedia Tags

Tag	Purpose
<audio>	Embeds sound/audio
<video>	Embeds video files
<source>	Specifies media resources for <audio> and <video>
<track>	Adds subtitles or captions to videos

◆ 3. Graphics Tags

Tag	Purpose
<canvas>	Used to draw graphics via JavaScript
<svg>	Scalable Vector Graphics for 2D graphics

◆ 4. Form Input Enhancements

Tag/Type	Purpose
<datalist>	Provides autocomplete options
<output>	Shows the result of a calculation
<progress>	Displays progress bar
<meter>	Shows a scalar measurement within a range (e.g., battery level)

◆ 5. Scripting & API Tags

Tag	Purpose
<template>	Defines HTML fragments that are not rendered until used
<script type="module">	For using JavaScript ES6 modules

