

Module 5 – Frontend – HTML5

Question 1: Difference between HTML and HTML5

HTML (Hyper Text Markup Language) is the standard language used to create web pages. **HTML5** is the **latest version** of HTML that brings improvements in structure, multimedia support, and performance.

The main differences between HTML and HTML5 are:

1. **Doctype Declaration:**

In HTML, the doctype declaration is long and complicated. For example:

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN">
```

In HTML5, it is simplified to:

```
<!DOCTYPE html>
```

2. **Multimedia Support:**

HTML requires third-party plugins like Flash to add audio or video to web pages.

HTML5 includes built-in support for `<audio>` and `<video>` tags, allowing easier embedding of media.

3. **New APIs and Features:**

HTML5 supports many new features like **Canvas API** (for graphics), **Geolocation API**, **Local Storage** (to store data in the browser), and more. These were not available in earlier versions of HTML.

4. **Semantic Tags:**

HTML5 introduced several semantic tags such as `<header>`, `<footer>`, `<article>`, `<section>`, and `<nav>` which make the structure of a webpage more meaningful.

Older HTML mainly used non-semantic tags like `<div>` and ``.

5. **Mobile-Friendly and Responsive:**

HTML5 is designed with mobile and responsive web design in mind. It provides better support for various devices and screen sizes.

6. **Performance and Browser Support:**

HTML5 is optimized for speed and works well with modern browsers. Older HTML versions are slower and not fully supported on new platforms.

In summary, HTML5 is a more powerful, cleaner, and mobile-friendly version of HTML with advanced multimedia and structural capabilities.

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

HTML5 introduced several **new tags** to improve **semantic meaning**, **structure**, and **media handling**.

□ **Semantic Tags (for better structure):**

Tag	Purpose
<code><header></code>	Top section or intro content of a page
<code><footer></code>	Bottom section with links or copyright
<code><nav></code>	Contains navigation links
<code><section></code>	Defines a section of content
<code><article></code>	Independent piece of content (e.g., blog post)
<code><aside></code>	Sidebar or additional info
<code><main></code>	Main content of the page

□ **Media Tags:**

Tag	Purpose
<code><audio></code>	Embeds audio content
<code><video></code>	Embeds video content
<code><source></code>	Defines media sources for audio/video

□ **Graphics and Interactive:**

Tag	Purpose
<code><canvas></code>	Used for drawing graphics via JavaScript
<code><svg></code>	Embeds Scalable Vector Graphics

□ **Form Input Types (new in HTML5):**

Input Type	Purpose
<code>date</code> , <code>email</code> , <code>url</code> , <code>range</code> , <code>color</code> , <code>number</code> , <code>search</code>	Enhances form usability and validation