

ASSIGNMENT – 1 (19/12/2024)

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Batch: MEARN DEC 2024 B1

1) List out the features of HTML5?

1) Semantic Elements

When constructing an HTML script, the term semantic refers to the meaning of the text. Semantic, to put it simply, is the use of HTML tags that accurately reflect the content they contain. For instance, using the `<div>` tag doesn't suggest the content it will carry, however using the `<p>` tag suggests it can be used to hold paragraph information.
eg: `<header>` , `<article>` , `<footer>` , `<section>`

2) Audio and Video Support

HTML5 reduced the dilemma of relying upon third-party services such as Adobe Flash player. To embed Audio and Video into your HTML document, you may use the following two tags, `<audio>` and `<video>` tags.

3) Canvas Elements

Canvas element has provided a lot of support for graphics developers. we can draw on screen with the help of javascript

4) Geolocation API

The Geolocation API is an HTML feature that is used to access the geographical position of a user, however, it is not accessed unless the user approves of it. Applications of this feature is implemented in google maps , location based discounts in ecommerce sites etc

5) Local Storage

It is a modern feature of HTML and several browsers that typically store data in the user's browsers and can access them with the help of JavaScript APIs. This feature is useful for creating offline applications where data is need to be stored locally.

6) Enhanced Form elements:

Html 5 introduced new input types and attributes.

Input type: email, date, color, url, number, search, range, etc.

Attributes: placeholder, required, pattern, etc.

7) Responsive design :

Introduction of <meta name=" viewport"> tag for creating responsive web designs.

8) Websockets:

WebSockets are a new protocole which allows devices to engage in real-time two-way communication between server side and client side.

eg: WhatsApp , Online POV Games

2) Differentiate between HTML and HTML5

HTML	HTML5
uses cookies to store temporary data	uses SQL databases and application cache to store offline data
Does not allow JavaScript to run in the browser.	Allows JavaScript to run in the background. This is possible due to JS Web worker API in HTML5.
Vector graphics are possible in HTML with the help of various technologies such as VML, Silver-light, Flash, etc	Vector graphics are additionally an integral part of HTML5 like SVG and Canvas.
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.
Not possible to draw shapes like circle, rectangle, triangle etc.	HTML5 allows to draw shapes like circle, rectangle, triangle etc.

<HTML>,<body> , and <head> tags are mandatory while writing a HTML code.	These tags can be omitted while writing HTML code.
Older version of HTML are less mobile-friendly.	HTML5 language is more mobile-friendly.
Elements like nav, header were not present.	New element for web structure like nav, header, footer etc.
Character encoding is long and complicated.	Character encoding is simple and easy.
Being an older version , it is not fast , flexible , and efficient as compared to HTML5.	It is efficient, flexible and more fast in comparison to HTML.
Attributes like charset, async and ping are absent in HTML.	Attributes of charset, async and ping are a part of HTML 5.

3) What is formatting in HTML?

In HTML, formatting refers to the way content is structured and styled to improve its readability and appearance on web pages. It involves various HTML tags to emphasize, highlight, organize text and incorporate other media in a way that is visually appealing and user-friendly.

HTML Formatting Elements:

 : Bold text (displayed in bold)
 : Important text (displayed in bold)
 <i> : Italic text (displayed in italic)
 <small> : Smaller text
 : Emphasized text (displayed in italic)
 <mark> : Marked text (highlighted text)
 <ins> : Inserted text (underline inserted text)
 <sub> : Subscript text (text appear below the normal line)
 <sup> : Superscript text (text appear above the normal line)
 : Deleted text

4) Difference between html elements and tags?

- HTML Tags form the basic building blocks of a HTML Page it is enclosed by an opening and closing bracket for eg: <a>, <h1></h1>. Meanwhile HTML are tags with user content in between the Tags eg: <h1>My Website</h1>
- Tags have an opening and a closing entity by using angle brackets <>. Whereas Elements have meaningful data enclosed by tags.

5)How can you make text appear in a monospace font in HTML?

A monospaced font, also called a fixed-pitch, fixed-width, or non-proportional font, is a font whose letters and characters each occupy the same amount of horizontal space. This contrasts with variable-width fonts, where the letters and spacings have different widths.

In HTML5 monospace lettering can be achieved using following methods:

- <pre> tag: it is used to display preformatted text. This tag automatically uses a monospace font in most browsers.
- <code> tag: this tag automatically renders in monospace font.
- <tt> tag: it displays text in monospace font in default. This is deprecated in HTML5
- font-family: monospace : This is a CSS technique to change text to a monospace font.