**ASSIGNEMENT 1**

1) What is HTML and what does it stand for?

**HTML is the standard markup language for creating Web pages.**

2) What is the difference between HTML and XHTML?

**HTML is the traditional markup language for structuring web content with more flexible syntax rules and lenient error handling.  
XHTML reformulates HTML as XML, enforcing stricter syntax rules and error handling to ensure well-formed documents.**

3) What are the basic building blocks of an HTML document?

**Building Blocks**

| **Category** | **Example** | **Description** |
| --- | --- | --- |
| **Tags** | <p> | Defines a paragraph. |
|  | <h1> to <h6> | Define headings of different levels. |
|  | <a> | Creates hyperlinks. |
|  | <img> | Embeds images. |
| **Attributes** | class | Specifies one or more class names. |
|  | id | Specifies a unique id for an element. |
|  | src | Specifies the source URL for embedded content |
|  | alt | Specifies alternative text for images. |
| **Elements** | <html> | Represents the root element of an HTML page. |
|  | <head> | Contains meta-information about the document. |
|  | <body> | Contains the content of the HTML document. |
|  | <div> | Defines a division or a section. |
|  | <span> | Defines a small section in a document. |

4) How do you create a hyperlink in HTML?

* **Use the <a> tag to create hyperlinks.**
* **The href attribute specifies the URL or path.**
* **Additional attributes like target="\_blank" and download modify the link’s behavior.**
* **Hyperlinks can direct users to web pages, sections within the page, files, email addresses, and phone numbers.**

5) What is the purpose of the "alt" attribute in the HTML "img" tag?

* **Provides a textual description of the image for users who cannot see it. This is crucial for people with visual impairments who use screen readers to browse the web.**
* **Search engines use the alt attribute to understand the content of images. Descriptive alt text can help improve a page’s search engine ranking by making the content of the image searchable and relevant to the page’s context.**
* **When an image fails to load (due to broken links, slow connections, etc.), the alt text is displayed in place of the image, providing context to the user.**

6) How can you create a table in HTML?

7) What is the purpose of the "doctype" declaration in HTML?

**The <!DOCTYPE> declaration tells the web browser which version of HTML is being used in the document.**

8) What is the difference between HTML elements and HTML tags?

**HTML tags are the fundamental building blocks of HTML that are used to create and define elements within a web page. They are the markup used to instruct the browser how to display the content.**

**HTML elements are the complete set of tags and the content they enclose. An element includes both the start tag, the content, and the end tag.**

9) How do you add comments in HTML?

**<!--This is a comment-->**

10) What is the significance of the "head" section in an HTML document?

**The <head> section is vital for:**

* **Providing metadata and document information.**
* **Defining the document title.**
* **Linking to external stylesheets, scripts, and resources.**
* **Setting up viewport and responsive design.**
* **Adding other meta-information that affects how the page is displayed and indexed.**

11) How do you define headings in HTML?

12) What is the role of the "title" element in HTML?

**The <title> element is essential for defining the title of a web page, influencing how it is presented in browser tabs, search engine results, and bookmarks.**

13) How do you create an ordered list in HTML?

14) What are the different types of form elements in HTML?

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15) How do you embed an image in an HTML document?

16) What is the purpose of the "href" attribute in an anchor tag?

17) How do you create a line break in HTML?

18) What is the purpose of the "target" attribute in an anchor tag?

19) What is the difference between block-level and inline elements in HTML?

20) How do you create a horizontal rule in HTML?

21) What is the role of the "span" element in HTML?

**The <span> element in HTML is a versatile, inline container that is used to group and apply styles or manipulate a segment of text or other inline content.**

22) How do you create a checkbox in HTML?

23) What is the purpose of the "src" attribute in the "script" tag?

24) How do you create a dropdown menu in HTML?

25) What is the purpose of the "colspan" attribute in an HTML table?

26) How do you add a background image to an HTML element?

27) What is the purpose of the "action" attribute in an HTML form?

**The "action" attribute in an HTML form specifies the URL where the form's data should be sent when the form is submitted.**

28) How do you add a video to an HTML document?

29) What is the purpose of the "disabled" attribute in an input field?

**The disabled attribute in an input field is used to make the field uneditable and unresponsive to user interactions.**

**When an input field is disabled:**

1. **User Interaction: Users cannot click on or type into the field.**
2. **Submission: The field's value is not included when the form is submitted, meaning it does not get sent to the server.**
3. **Visual Appearance: Disabled fields typically have a different visual style, such as a greyed-out appearance, to indicate that they are inactive.**

30) How do you create a form in HTML?

31) What is the purpose of the "placeholder" attribute in an input field?

**The placeholder attribute in an input field provides a hint or example of what kind of information should be entered into the field.**

32) How do you create a hyperlink with an image in HTML?

33) What is the purpose of the "required" attribute in an input field?

**The required attribute in an input field indicates that the field must be filled out before the form can be submitted.**

34) How do you create a responsive layout in HTML?

**The charset attribute in the <meta> tag specifies the character encoding for the HTML document. Character encoding determines how characters are represented in bytes and is crucial for correctly displaying text on a web page.**

35) What is the purpose of the "charset" attribute in the "meta" tag?

**The charset attribute in the <meta> tag specifies the character encoding for the HTML document. Character encoding determines how characters are represented in bytes and is crucial for correctly displaying text on a web page.**

36) What is the purpose of the "autocomplete" attribute in an input field?

37) How do you create a button in HTML?

38) What is the purpose of the "nowrap" attribute in an HTML table?

39) How do you create a responsive image in HTML?

* **max-width: 100%: Ensures the image can scale down to fit within its container but will not scale up beyond its original size.**
* **height: auto: Keeps the image’s aspect ratio intact.**

40) What is the purpose of the "target" attribute in an anchor tag?

41) How do you create a button in HTML?

**The placeholder attribute in a <textarea> (or in <input> elements) provides a hint or example of what kind of content is expected in the field.**

42) What is the purpose of the "target" attribute in an anchor tag?

43) What is the purpose of the "placeholder" attribute in a textarea?

44) What is the purpose of the "readonly" attribute in an input field?

45) How do you create a responsive video in HTML?

46) media queries to modify the video size or aspect ratio for different screen resolutions or

device orientations, ensuring a responsive video display.

47) How do you embed audio in an HTML document?

48) Advanced HTML Interview Questions and Answers

49) What is the purpose of the "span" element in HTML?

**the <span> element is a flexible tool for applying styles and scripts to parts of text or other inline elements, allowing for fine-grained control over the presentation and behavior of content within a webpage.**

50) What is the purpose of the "required" attribute in a form element?

51) How do you create a checkbox in HTML?

52) What is the purpose of the "cols" and "rows" attributes in the "textarea" tag?

**The cols and rows attributes in the <textarea> tag are used to control the dimensions of the text area input field in an HTML form. They specify the width and height of the text area in terms of character columns and text rows, respectively.**

53) What is the purpose of the "scope" attribute in an HTML table?

**The scope attribute in an HTML table is used to define the relationship between header cells and data cells within a table. It helps to improve the accessibility of tables by specifying the scope of the header cells for assistive technologies, such as screen readers.**

54) What is the purpose of the "rel" attribute in the "link" tag?

**The rel attribute in the <link> tag specifies the relationship between the current document and the linked resource.**

55) How do you create a range input slider in HTML?

**To create a range input slider in HTML, you use the <input> element with the type="range" attribute. The range input allows users to select a value from a specified range by sliding a handle along a track.**

56) What is the purpose of the "disabled" attribute in an HTML element?

**The disabled attribute in HTML is used to disable an HTML element, making it unresponsive to user interactions and preventing it from being submitted in forms. It is commonly used with form controls such as <input>, <select>, <textarea>, and <button>, as well as other interactive elements.**

57) What is the purpose of the "maxlength" attribute in an input field?

**The maxlength attribute in an HTML <input> element specifies the maximum number of characters that the user is allowed to enter into the input field.**

58) How do you create a numbered list in HTML?

59) What is the purpose of the "target" attribute in the "form" tag?

**The target attribute in the <form> tag specifies where to display the response after a form is submitted.**

60) How do you create a multi-line text input field in HTML?

**To create a multi-line text input field in HTML, you use the <textarea> element. The <textarea> tag allows users to input text over multiple lines and is often used for longer pieces of text such as comments, messages, or descriptions.**

61) What is the purpose of the "hidden" attribute in an HTML element?

**The hidden attribute in HTML is used to hide an element from the user.**

62) How do you set the background color of an HTML element?

**To set the background color of an HTML element, you use the CSS background-color property. This property allows you to define the color that will be applied to the background of the element, affecting the area behind any content within the element.**

63) How do you add a border to an HTML element?

64) How do you center-align text horizontally in an HTML element?

65) How do you set the font color of an HTML element?

66) What is the purpose of the HTML <meta> tag?

**The HTML <meta> tag is used to provide metadata about an HTML document. Metadata is information about the document that isn't directly visible on the page but helps with various functions like improving search engine optimization (SEO), specifying character encoding, or setting viewport properties for responsive design.**

67) What is the purpose of the HTML <iframe> tag?

**The HTML <iframe> tag is used to embed another HTML document within the current document.**

68) What is the purpose of the HTML <header> tag?

**The HTML <header> tag is used to define a header section in a webpage or section of a webpage. It typically contains introductory content or navigational aids and can include elements such as headings, logos, navigation menus, and other introductory or contextual content.**

69) What is the purpose of the HTML <aside> tag?

**The HTML <aside> tag is used to define content that is tangentially related to the content around it. It typically represents a sidebar, a pull quote, or other content that is supplementary to the main content of the page.**

70) What is the role of the "canvas" element in HTML5?

**The HTML5 <canvas> element is a versatile feature used for drawing graphics, animations, and interactive content directly within the web page. It provides a space where you can use JavaScript to render shapes, images, and other visual elements.**

71) How do you create a progress bar with HTML and CSS?

**<!DOCTYPE html>**

**<html lang="en">**

**<head>**

**<meta charset="UTF-8">**

**<meta name="viewport" content="width=device-width, initial-scale=1.0">**

**<title>Progress Bar</title>**

**<link rel="stylesheet" href="styles.css">**

**</head>**

**<body>**

**<div class="progress-bar">**

**<div class="progress-bar-inner" style="width: 60%;"></div>**

**</div>**

**</body>**

**</html>**

**/\* styles.css \*/**

**body {**

**font-family: Arial, sans-serif;**

**display: flex;**

**justify-content: center;**

**align-items: center;**

**height: 100vh;**

**margin: 0;**

**}**

**.progress-bar {**

**width: 80%;**

**max-width: 600px;**

**background-color: #f3f3f3;**

**border: 1px solid #ddd;**

**border-radius: 5px;**

**overflow: hidden;**

**}**

**.progress-bar-inner {**

**height: 30px;**

**background-color: #4caf50; /\* Green color \*/**

**text-align: center;**

**color: white;**

**line-height: 30px; /\* Align text vertically \*/**

**font-weight: bold;**

**transition: width 0.4s ease-in-out; /\* Smooth transition \*/**

**}**

72) What is the role of the "datalist" element in HTML5?

73) How do you center align an HTML element?

**For block-level elements like <div>, you can center-align them horizontally by setting their width and applying margin: auto.**

74) What is the role of the "mark" element in HTML5?

**Is used for text Highlighting.**

75) How do you add a video background to an HTML element?

76) What is the purpose of the "formnovalidate" attribute in an HTML form?

**The formnovalidate attribute in an HTML form is used to bypass the built-in validation for form inputs when the form is submitted. This attribute can be applied to a submit button (usually of type submit) within a form.**

77) How do you embed a Google Map in an HTML document?

78) What is the purpose of the "datetime" attribute in the "time" element?