HTML Interview Questions

1. What is HTML?

HTML stands for HyperText Markup Language. It is the standard markup language used to create and structure the content of web pages.

2. What are the different types of HTML elements?

HTML elements are defined by tags, which are enclosed in angle brackets (<>). There are two types of elements:

- **Block-level elements:** Occupy the full width available and start on a new line. Examples: `<h1>`, `<p>`, `<div>`.
- **Inline elements:** Do not start on a new line and only occupy the width of their content. Examples: `<b>`, `<i>`, `<span>`.

3. What is the difference between HTML and XHTML?

HTML is a markup language, while XHTML is a strict version of HTML that follows XML syntax rules. XHTML is more strict in terms of syntax and requires proper closing tags for all elements.

4. What is the doctype declaration?

The doctype declaration specifies the document type to the browser. It helps the browser interpret the document correctly.

5. What is the head section of an HTML document?

The head section contains meta-information about the document, such as title, stylesheets, scripts, and character encoding. It is not displayed on the page but is essential for the browser to understand the document.

6. What is the body section of an HTML document?

The body section contains the visible content of the page, such as headings, paragraphs, images, links, and other elements.

7. What are semantic elements in HTML5?

Semantic elements are elements that clearly define their meaning in the document. Examples include `header`, `nav`, `section`, `article`, `aside`, `footer`.

8. Explain the difference between `<div>` and `<span>` elements.

- `<div>` is a block-level element used to group content.
- `<span>` is an inline element used to group content within a line.

9. What is an image map?

An image map is an image with clickable areas that link to different URLs.

10. What is the difference between `<img>` and `<iframe>`?

- `<img>` is used to embed an image in a webpage.
- `<iframe>` is used to embed another webpage within the current page.

11. What is the use of the `alt` attribute in an image tag?

The `alt` attribute provides alternative text for an image, which is displayed if the image cannot be loaded or for visually impaired users.

12. What is the difference between `link` and `a` tags?

- `<link>` is used to link external resources like stylesheets, but it doesn't create a clickable link on the page.
- `<a>` is used to create clickable links to other pages or resources.

13. What is the use of the `target` attribute in an anchor tag?

The `target` attribute specifies where to open the linked document. Common values are "_self", "_blank", "_parent", and "_top".

14. What is the difference between internal and external linking?

- Internal linking is linking to other pages within the same website.
- External linking is linking to pages on different websites.

15. What is the use of the `<form>` element?

The `<form>` element is used to create HTML forms for user input.

16. What are the different types of input elements in HTML?

There are various input types, including text, password, email, number, radio, checkbox, submit, reset, etc.

17. What is the use of the `placeholder` attribute in an input element?

The `placeholder` attribute provides a hint to the user about the expected value for the input field.

18. What is the difference between `get` and `post` methods in a form?

- The `get` method appends form data to the URL, while the `post` method sends form data as a separate HTTP request body.

19. What is the use of the `required` attribute in an input element?

The `required` attribute makes an input field mandatory, preventing form submission without a value.

20. What is the use of the `<fieldset>` and `<legend>` elements?

- `<fieldset>` is used to group related elements in a form.
- `<legend>` provides a caption for the fieldset.

21. What is the use of the `<label>` element?

The `<label>` element is used to associate a label with a form element, improving accessibility.

22. What is the use of the `<textarea>` element?

The `<textarea>` element is used to create multi-line text input areas.

23. What is the use of the `<select>` and `<option>` elements?

- `<select>` is used to create dropdown lists.
- `<option>` defines available options within a select list.

24. What is the use of the `<table>` element?

The `<table>` element is used to structure data in rows and columns.

25. What are the different table elements?

Table elements include `<table>`, `<tr>`, `<th>`, `<td>`.

26. What is the use of the `colspan` and `rowspan` attributes?

- `colspan` merges multiple columns into a single cell.
- `rowspan` merges multiple rows into a single cell.

27. What is the use of the `<ul>` and `<ol>` elements?

- `<ul>` is used to create unordered lists (bulleted lists).
- `<ol>` is used to create ordered lists (numbered lists).

28. What is the use of the `<li>` element?

The `<li>` element defines list items within an unordered or ordered list.

29. What is the use of the `<dl>`, `<dt>`, and `<dd>` elements?

- `<dl>` defines a description list.
- `<dt>` defines a term in a description list.
- `<dd>` defines the description of a term.

30. What is the use of the `<meta>` tag?

The `<meta>` tag provides metadata about the HTML document, such as keywords, description, author, and viewport settings.

HTML4 vs HTML5: Key Differences

HTML5 is a significant upgrade over HTML4, introducing numerous enhancements and new features.

Structural Enhancements

- **Semantic Elements:** HTML5 introduced semantic elements like `<header>`, `<footer>`, `<nav>`, `<section>`, `<article>`, and `<aside>` to improve document structure and accessibility.
- **Removed Elements:** Some obsolete elements like `<frame>`, `<applet>`, and `<center>` were removed in HTML5 to simplify the language.

Multimedia Support

- **Audio and Video:** HTML5 directly supports audio and video elements (`<audio>`, `<video>`) without requiring external plugins like Flash.
- **Canvas:** Provides a canvas element for dynamic, scriptable rendering of 2D graphics.
- **SVG:** Offers built-in support for scalable vector graphics.

Form Enhancements

- **New Input Types:** HTML5 introduced new input types like `email`, `tel`, `date`, `time`, `number`, `range`, `search`, and `color` for improved form validation and user experience.

- **Placeholder Attribute:** Provides hints to users about expected input values.
- **Required Attribute:** Makes form fields mandatory.

Application Cache

- **Offline Support:** HTML5 introduced the application cache to store static resources locally, enabling offline access to web applications.

Other Features

- **Geolocation API:** Allows web applications to determine the user's geographical location.

Simplified Doctype

- HTML5 uses a much simpler doctype declaration: `<!DOCTYPE html>`.