1. **What is HTML? Explain different versions of HTML?**

Hypertext Markup Language (HTML) is the standard markup language for creating web pages. It's made up of elements, like tags and attributes, that tell the browser how to display content on a page.

* **HTML 1.0:** The first version of HTML, released in 1993, established the foundation for structuring web documents and hyperlinks.
* **HTML 2.0:** A predecessor to HTML 3.0.
* **HTML 3.0:** Introduced new features, including the ability to use Cascading Style Sheets (CSS) for more advanced styling of web pages.
* **HTML 4.0:** Released in 1998, and quickly replaced by HTML 4.01 in 1999.
* **HTML 4.01:**The recommended version for creating HTML documents as of 2006, when the W3C announced it would not create further versions of HTML.
* **HTML5:** The current version of HTML.

1. **What are tags? Explain different types of tags?**

Tags are the basic building blocks of a web page and are enclosed in angle brackets. They specify various elements on a web page and provide a hierarchical structure to online content. Tags can be categorized into different types, including:

* **Container tags**: Have both a start tag and an end tag
* **Empty tags:** Only have a start tag and do not enclose any data
* **Paired tags:**Used to denote content with a clear beginning and end, and are always used in pairs
* **Self-closing tags:** Close themselves and do not need to be closed separately
* **Canonical tags:** Also known as canonical links, these tags are used in SEO to help search engines index the correct URL and avoid duplicate content
* **Annotated tags:**Stored as full objects in the Git database, these tags store extra metadata such as the tagger name, email, and date
* **Meta tags:** Provide search engines with information about a web page (metadata) that is not displayed on the page itself
* **Block level tags:** Take up the full width available and by default begin on a new line, such as paragraph and heading tags
* **Text level tags:** Used to mark up parts or portions of text and do not start a new line, such as bold and subscript tags
* **Line break tags**: Used to insert line breaks in HTML content

1. **What is an iframe and how it works?**

An inline frame (iframe) is an HTML element that allows a web page to load another HTML document within itself. When a browser encounters an iframe, it creates a new HTML document environment to load the content, and then places the new website within the parent page.

1. **What are some of the common lists that can be used when designing a page?**

The three main types of lists used in HTML are unordered lists, ordered lists, and definition lists. Each type serves a specific purpose and can be customized to fit the design and content.

* **Unordered lists:** Also known as **bulleted lists**, these are used when the order of the items doesn't matter. They're often used to break down complex ideas into smaller chunks.
* **Ordered lists:** Also known as **numbered lists**, these are used when the sequence of the items is important. For example, instructions for assembling furniture or a recipe.
* **Definition lists:** Also known as **description lists**.

1. **What is the use of <img> tag in HTML & What is an image map?**

The <img> tag in HTML is used to embed an image into a web page. It creates a holding space for the referenced image and has two required attributes:

* src: Specifies the path to the image
* alt: Specifies an alternate text for the image if it cannot be displayed

An image map is an image with clickable areas that can be used to navigate to other web pages or specific sections of the same web page. To create an image map, you need to use the following HTML elements:

* <img>: Specifies the location of the image to be included in the map
* <map>: Creates a map of the image with clickable areas
* <area>: Defines the clickable areas within the map

1. **How do you create a link that will connect to another web page when clicked?**

A basic link is created by wrapping the text or other content inside an <a> element and using using the href attribute, also known as a Hypertext Reference, or target, that contains the web address.

* <a> </a> Next, add your homepage's URL using the href attribute:
* <a href="https://www.yourhomepage.com"> </a> Now, add the anchor text people will click to go to your link:
* <a href="https://www.homepage.com>Visit our homepage</a> Your anchor text should be descriptive.

1. **Name two new tags included in the HTML 5?**

<figure> It defines a self-contained content, and referenced as a single unit.

<footer> It represents the footer section of the webpage.

<header> It defines the introductory or navigational content of the webpage.

<main> It specifies the main content of the HTML document.

|  |  |
| --- | --- |
|  |  |

1. **Explain the structure of an HTML document?**

An HTML document is made up of two main parts: the head and the body. The head contains information about the document, while the body contains the content you want to display on the page.

* **DOCTYPE declaration**

This declaration tells the browser what version of HTML is used to write the document. It must be specified on the first line of the document.

* **<html> element**

This is the root element of the document and contains all other elements.

* **<head> element**

This element contains metadata about the document, such as the title, author, and character set. It can also include references to external files like stylesheets and JavaScript.

* **<body> element**

This element contains all the visible content on the page, such as headers, paragraphs, links, and images.

1. **What is attribute? Explain the target attribute in links.**

It provides extra information about HTML elements or tags, and can be used to change their behavior or appearance. Attributes are specified within the opening tag of an element and consist of a name and a value, separated by an equals sign

The **target** attribute specifies where the linked document will open when the link is clicked. The default is the current window. If target="\_blank", the linked document will open in a new tab

**\_blank** Opens the linked document in a new window or tab

**\_self** Opens the linked document in the same frame as it was clicked (default)

**\_parent**  Opens the linked document in the parent frame

**\_top**  Opens the linked document in the full body of the window

1. **What is formatting in HTML? How can you highlight text in HTML?**

Text formatting in HTML refers to the way text is displayed on the webpage. It is the process of applying various styles, colors, fonts, sizes, and other visual enhancements to text content within an HTML document.

The <mark> tag defines text that should be marked or highlighted.

1. **What does a DOCTYPE do?**

DOCTYPE declaration tells the browser what version of HTML is used to write the document. It must be specified on the first line of the document.

1. **What is the difference between a <span> and a <div>?**

A **div** element is used for block-level organization and styling of page elements, whereas a **span** element is used for inline organization and styling.

1. **Name 5 common block-level and inline HTML elements?**

|  |  |
| --- | --- |
| **Block elements:** | **Inline elements** |
| <h1>-<h6> | <a> |
| <p> | <img> |
| <table> | <button> |
| <div> | <br> |
| <blockquote> | <span> |
| form tags | <q> |
| list tags | Text formatting Tags |
| <main> | Multimedia tags |

1. **What are semantic and non-semantic elements?**

**Semantic elements:**

Semantic elements are tags that clearly define the meaning of the content they contain to both browser and the developer.

**Ex:** <header> <article> <footer> <form> <table>

**Non Semantic elements:**

Non semantic elements only hold content without indicating its role on the page.

**Ex:** <div>

1. **Define semantic markup. What are the semantic meanings for <section>, <article>, <aside>, <nav>, <header>, <footer> and when/how should each be used in structuring html markup?**

Semantic markup refers to marking up a document with information about the actual data structure behind the information, rather than styling the document with exclusively visual information.

1. **When should you use section, div or article?**

In HTML, section, article, and div tags are used to group content together. When choosing which tag to use.

* **Section**

Use for thematic grouping of content related to the same general concept. Examples include chapters, numbered sections of a thesis, or tabbed pages in a dialog box.

* **Article**

Use for independent pieces of content that are complete and self-contained. Examples include blog posts, magazine articles, user-submitted comments, or interactive widgets.

* **Div**

Use as a generic container element for styling or presentational purposes. For example, you could use a div to represent a sun symbol in a poem

1. **What is Character Encoding?**

Character encoding tells computers how to interpret digital data into letters, numbers and symbols. This is done by assigning a specific numeric value to a letter, number or symbol. These letters, numbers, and symbols are classified as “characters”.

1. **What is the purpose of meta tags?**

The <meta> tag defines metadata about an HTML document. Metadata is data (information) about data. <meta> tags always go inside the <head> element, and are typically used to specify character set, page description, keywords, author of the document, and viewport settings.

1. **What are the entities in HTML?**

Entities are reserved characters that have special meaning when used in a document. They are also known as character references, which are patterns of characters that can represent another character.

1. **What is the use of a marquee tag in HTML?**

The HTML marquee tag, <marquee>, makes text or images scroll automatically in any direction, such as left, right, up, or down.

1. **What is the difference between a division tag (<div>) and a section tag (<section>) in HTML?**

<div> is used for layout and styling, while <section> is used to group related content with a similar theme.

<section> is a semantic element that conveys meaning to the developer and browser, while <div> has no semantic meaning.

<section> is used for headers, footers, and other document sections. <div> is used to group page sections, like the header, nav, sections, and footer.

1. **What is svg tag?**

The <svg> tag in HTML defines Scalable Vector Graphics (SVG) in an HTML document. SVG is an XML-based vector image format that allows for the creation of two-dimensional graphics that can be static, dynamic, or animated.

1. **What’s the difference between an "attribute" and a "property" in HTML?**

In HTML, attributes are defined by HTML, while properties are accessed from the Document Object Model (DOM) using JavaScript.

**Multiple choice questions**

**1. In HTML5, which tag or tags embed a webpage inside of a webpage?**

a) <iframe>, <frame>, and <frameset>

b) <frame>

**c) <iframe>**

d) <frame> and <frameset>

**2. What is the best way to apply bold styling to text?**

a) <strong>

b) Use CSS.

c) <bold>

**d) <b>**

**3. With which tags is the <source> element associated?**

a) <svg>, <picture>, <audio>, and <video>

**b) <picture>, <audio>, and <video>**

c) It is interchangeable with the src attribute, so any element which uses src may use <source>

d) <audio> and <video>

**4. When should you use <ol> and <ul> elements?**

a) Use <ul> when you want a bulleted list and <ol> when you want a numbered list.

b) Use <ul> when you have a list of items in which the order of the items matters. Use <ol> when you have a list of items that could go in any order.

c) Use <ol> when you want a bulleted list and <ul> when you want a numbered list.

**d) Use <ol> when you have a list of items in which the order of the items matters. Use <ul> when you have a list of items that could go in any order.**

**5. What is the correct markup for alt attribute of an image?**

a) <img src="cubism.jpg" alt="Version of ""Whistler's Mother"" in cubist style">

b) <img src="cubism.jpg" alt="Version of "Whistler's Mother" in cubist style">

**c) <img src="cubism.jpg" alt='Version of "Whistler\'s Mother" in cubist style'>**

d) <img src="cubism.jpg" alt="Version of \"Whistler's Mother\" in cubist style">

**6. How do you confirm that a document is written in HTML5?**

a) The server wraps the webpage in an HTML5 wrapper.

**b) Use the <!DOCTYPE html> declaration that starts the document.**

c) The browser receives encoding from the server to display the document with HTML5.

d) It is enclosed in a <html> tag.

**7. What does the code shown below accomplish?**

**<picture>**

**<source srcset="image1.jpg" media="(min-width: 1000px)" />**

**<source srcset="image2.jpg" media="(min-width: 750px)" />**

**<img src="image3.jpg" />**

**</picture>**

a) It displays image1.jpg at 1000px and higher, image2.jpg at 750-999px, and image3.jpg at 749px and lower.

**b) It displays image1.jps at 1000px and higher and image2.jpg at 750-999px, image3.jpg is a default in case <picture> is not supported.**

c) It displays image1.jpg at 1000px and higher and image2.jpg at 750px and higher, image3.jpg is a default in case <picture> is not supported.

d) It displays image1.jpg, image2.jpg and image3.jpg at 1000px and higher.

**8. the \_ tag is used for marking up a short code snippet, while the \_ tag is used for marking up a longer block of code**

a) <kdb>, <pre>

b) <pre>, <code>

c) <kdb>, <mark>

**d) <code>, <pre>**

**9. To get a link to open in a new window or tab, use the \_ attribute**

**a) \_blank**

b) \_self

c) \_new

d) \_parent

**10. What is the best semantic way to indicate that text refers to keyboard entry?**

a) <p>Press the <tt>Enter</tt> key to proceed.</p>

**b) <p>Press the <kbd>Enter</kbd> key to proceed.</p>**

c) <p>Press the <samp>Enter</samp> key to proceed.</p>

d) <p>Press the Enter key to proceed.</p>

**11. What does this code do?**

**<audio controls>**

**<source src="sound.mp3" type="audio/mpeg" />**

**<source src="sound.ogg" type="audio/ogg" />**

**<source src="sound.wav" type="audio/wav" />**

**</audio>**

**a) The browser chooses the first supported format to play with the browser’s default controls.**

b) The browser chooses the best audio format to play with JavaScript-provided controls.

c) The browser plays each sound file in order automatically. The user has controls to stop playback.

d) The browser chooses the first supported sound file and will loop the sound until the user stops it.

**12. What is the correct way to code a link that, when clicked, will send an email to**

**email@example.com with a subject of “Hello”?**

a) <a href="mailto:email@example.com&subject=Hello">Click me</a>

b) <a href="mailto:email@example.com">Hello</a>

**c) <a href="mailto:email@example.com?subject=Hello">Click me</a>**

d) <a href="mailto:email@example.com?&subject=Hello">Click me</a>

**13. Which tag is the root element of an HTML document?**

a) <DOCTYPE html>

**b) <html>**

c) <body>

d) <root>

**14. What does the poster attribute do in the <video> tag?**

**a) It specifies an image that should display while the video downloads and until the video is played.**

b) It specifies an image that only displays if there is a problem with the video.

c) It specifies an image that should display until the video is played.

d) It specifies an image that should display while the video downloads.

**15. What does this code do?**

**<audio controls src="sound.mp3" type="audio/mpeg">When does this text display?</audio>**

a) The text displays over the audio controls, unless CSS is used to position it elsewhere.

b) The text displays under the audio controls.

c) The text displays when the browser cannot play the sound.

**d) The text never displays.**

**16. Which image formats can be displayed by all web browsers?**

a) JPG, GIF, TIF

b) JPG, TIF, BMP

c) TIF, BMP, GIF

**d) PNG, GIF, JPG**

**17. Review the code below. What is the absolute URL for a page called page.html?**

a) <base href="http://www.linkedin.com/dir/" />

**b) http://www.linkedin.com/dir/page.html**

c) page.html

d) http://www.linkedin.com/page.html

e) dir/page.html

**18. What is the correct way to code a comment in HTML?**

a) //this is a comment

b) /\* this is a comment \*/

c) <! this is a comment ->

**d) <!-- this is a comment -->**

**19. What is the best semantic to use Quotes in HTML?**

**Steve Kruz Said: "He will Win"**

**a) <q>**

b) <quote>

c) <blockquote>

d) <notation>

**20. What is wrong with this code?**

**<img src="https://source.unsplash.com/random">**

a) <img> should be paired with a <caption> tag.

**b) The <img> element is missing an alt attribute.**

c) <img> is not a valid HTML element. Instead, use <image src="..."/>.

d) <img> should be nested within a <figure> tag

**21.When should you use the <aside> element?**

**a) when the content can be removed without detracting from the page's message**

b) for anything you want to move to the side, like a pull quote box, a sidebar, or an image with text wrapping around it

c) for anything in parentheses

d) for anything in a sidebar

**22. What is NOT a valid attribute for the <textarea> element?**

a) readonly

**b) max**

c) form

d) spellcheck

**23. What is the difference between the post and get methods in a form?**

a) post is used for sending information to the server. get is used for retrieving form information from the server.

b) get is used for sending information to the server. post is used for retrieving form information from the server.

c) With get, data is included in the form body when send to the server. With post, the data goes through the URL.

d) With post, data is included in the form body when send to the server. With get, the data goes through the URL.

**24. What is the difference between the <div> and <span> tags?**

a) <div> is used where a generic block-level tag is needed, while <span> is used where a generic inline tag is needed.

b) <div> is used for major divisions on a page, while <span> is used to span across columns.

c) <div> is the industry-standard default tag, but you could use <span> if you prefer.

d) <div> is used where a generic inline tag is needed, while <span> is used where a generic block-level tag is needed.

**25.What should fill the blank in the HTML code below?**

**<form method="post" action="mailto:info@linkedin.com"\_\_\_\_="text/plain"></form>**

a) enctype

b) media

c) type

d) rel

**26. What is the correct markup for alt attribute of an image?**

a) <img src="cubism.jpg" alt="Version of ""Whistler's Mother"" in cubist style">

b) <img src="cubism.jpg" alt="Version of "Whistler's Mother" in cubist style">

c) <img src="cubism.jpg" alt='Version of "Whistler\'s Mother" in cubist style'>

d) <img src="cubism.jpg" alt="Version of \"Whistler's Mother\" in cubist style">

**27. How do you confirm that a document is written in HTML5?**

a) The server wraps the webpage in an HTML5 wrapper.

b) Use the <!DOCTYPE html> declaration that starts the document.

c) The browser receives encoding from the server to display the document with HTML5.

d) It is enclosed in a <html> tag.

**28. the \_ tag is used for marking up a short code snippet, while the \_ tag is used for marking up a**

**longer block of code**

a) <kdb>, <pre>

b) <pre>, <code>

c) <kdb>, <mark>

d) <code>, <pre>

**29.Which choice is NOT a legal value for the name attribute within a <meta> tag?**

a) charset

b) viewport

c) generator

d) author

**30. In the code below, what is the purpose of the lang attribute?**

a) <p lang="en-GB">Welcome to our wonderful website.</p>

b) It establishes the language for the website—in this case, English.

c) It establishes the language and dialect for the website—in this case, British English.

d) It establishes the language and dialect for the paragraph—in this case, British English.

e) It establishes the language for the paragraph—in this case, English.

**31. Review the code below. How do you include sub navigation for Link 2 that includes a link?**

**<nav>**

**<ul>**

**<li><a href="#">Link 1</a></li>**

**<li><a href="#">Link 2</a></li>**

**<li><a href="#">Link 3</a></li>**

**</ul>**

**</nav>**

**A**

<nav>

<ul>

<li><a href="#">Link 1</a></li>

<li><a href="#">Link 2</a></li>

<ul>

<li><a href="#">Link 2a</a></li>

</ul>

<li><a href="#">Link 3</a></li>

</ul>

</nav>

**B**

<nav>

<ul>

<li><a href="#">Link 1</a></li>

<li>

<a href="#">Link 2</a>

<ul>

<li><a href="#">Link 2a</a></li>

</ul>

</li>

<li><a href="#">Link 3</a></li>

</ul>

</nav>

**C**

<ul>

<nav>

<li><a href="#">Link 1</a></li>

<li>

<a href="#">Link 2</a>

<ul>

<nav>

<li><a href="#">Link 2a</a></li>

</nav>

</ul>

</li>

<li><a href="#">Link 3</a></li>

</nav>

</ul>

**D**

<nav>

<ul>

<li><a href="#">Link 1</a></li>

<li><a href="#">Link 2</a></li>

<nav>

<ul>

<li><a href="#">Link 2a</a></li>

</ul>

</nav>

<li><a href="#">Link 3</a></li>

</ul>

</nav>

**32 .Which statement is false?**

a) Inline elements can be nested inside inline elements.

b) Block elements can be nested inside block elements.

c) Inline elements can be nested inside block elements.

d) Block elements can be nested inside inline elements.

**33. What is the difference between the <head> and <header> tags?**

a) There is only one <head> tag per page, while there may be many <header> tags.

b) The <head> tag may contain CSS and Javascript links, while the <header> tag may contain headings and navigational links.

c) all of these answers

d) The <head> tag contains meta information, while the <header> tag contains navigation, logos, and other page identifying content.

**34. When should you use the <article> element?**

a) For blog posts and other social media items

b) For the main content area of your website

c) When the content stands alone as a unit, is suitable for syndication, or is reusable

d) To associate comments with a blog post

**35. Which list comprises three empty elements?**

**A**

<area />

<embed />

<strong></strong>

**B**

<input />

<br />

<p></p>

**C**

<link>

<meta>

<title>

**D**

<wbr />

<base />

<source />

**36. What is the most semantic way to mark up this sentence so that "happy talk must die" is rendered as an inline quote?**

**As Steve Krug once said, happy talk must die.**

a) <p>As Steve Krug once said, <b>happy talk must die.</b> </p>

b) <p>As Steve Krug once said, <i>happy talk must die.</i> </p>

c) <p>As Steve Krug once said, <blockquote>happy talk must die.</blockquote> </p>

d) <p>As Steve Krug once said, <q>happy talk must die.</q> </p>

**37. What is the most semantically accurate way to make up a main navigation bar, displayed in a horizontal direction?**

**A.**

<p>

<a href="index.html">Home</a>

<a href="about.html">About</a>

<a href="contact.html">Contact</a>

</p>

**B.**

<nav>

<a href="index.html">Home</a>

<a href="about.html">About</a>

<a href="contact.html">Contact</a>

</nav>

**C.**

<nav>

<ol>

<li><a href="index.html">Home</a></li>

<li><a href="about.html">About</a></li>

<li><a href="contact.html">Contact</a></li>

</ol>

</nav>

**D.**

<nav>

<ul>

<li><a href="index.html">Home</a></li>

<li><a href="about.html">About</a></li>

<li><a href="contact.html">Contact</a></li>

</ul>

</nav>

**38. What is the difference between the <svg> and <canvas>?**

a) <svg> produces vector graphics, while <canvas> produces raster graphics.

b) <svg> integrates with JavaScript, while <canvas> does not.

c) <svg> produces raster graphics, while <canvas> produces vector graphics.

d) <svg> cannot be used as a background image, while <canvas> can be used as a background

**39. What is the difference between the readonly and disabled attributes for the <textarea> element?**

a) readonly allows clicking in the <textarea> element. disabled prevents all interaction with the control.

b) readonly is invalid attribute for <textarea>, while disabled is a valid attribute.

c) disabled allows clicking in the <textarea> element. readonly prevents all interaction with the control.

d) disabled is invalid attribute for <textarea>, while readonly is a valid attribute.

**40. What is the correct way to add a submit URL to a button element?**

a) <button submit="http://example.com/process">Process data</button>

b) <button action="http://example.com/process">Process data</button>

c) <button formaction="http://example.com/process">Process data</button>

d) <button method="http://example.com/process">Process data</button>

**41. Which is the most semantically correct markup for a side comment in small print?**

a) <p> Get 10% discount <small>not valid in France</small></p>

b) <p> Get 10% discount <!--not valid in France--> </p>

c) <p> Get 10% discount <comment>not valid in France</comment></p>

d) <p> Get 10% discount <aside>not valid in France</aside></p>