Shailesh Diwanji

100 HTML & 100 CSS Interview Questions with Answers

HTML Interview Questions (100)

1. What is HTML?

HTML (HyperText Markup Language) is the standard markup language used to create web pages. It describes the structure and content of a webpage using tags and elements.

2. What is the difference between HTML and HTML5?

HTML5 is the latest version of HTML with new semantic elements (header, footer, article, section), multimedia support (audio, video), canvas for graphics, local storage, geolocation API, and better form controls.

3. What are semantic HTML elements?

Semantic elements clearly describe their meaning to both the browser and developer. Examples: `<header>`, `<nav>`, `<article>`, `<section>`, `<aside>`, `<footer>`.

4. What is the DOCTYPE declaration?

DOCTYPE tells the browser which version of HTML the page is written in. In HTML5, it's simply `<!DOCTYPE html>`.

5. What are void/self-closing elements?

Elements that don't have closing tags: `<img>`, `<br>`, `<hr>`, `<input>`, `<meta>`, `<link>`.

6. What is the difference between div and span?

`<div>` is a block-level element that takes full width available. `<span>` is an inline element that only takes up necessary space.

7. What are data-* attributes?

Custom attributes that allow storing extra information on HTML elements without using non-standard attributes. Example: `<div data-user-id="123">`.

8. What is the alt attribute in images?

Provides alternative text for images when they can't be displayed. Important for accessibility and SEO.

9. Difference between id and class attributes?

id is unique and can only be used once per page. class can be reused on multiple elements. id has higher CSS specificity.

10. What are HTML entities?

Special characters represented by codes starting with & and ending with ;. Examples: `&lt;` for <, `&gt;` for >, ` ` for space.

11. What is the purpose of the meta tag?

Provides metadata about the HTML document like character set, viewport settings, description, keywords, and author information.

12. What are inline and block elements?

Block elements start on new line and take full width (div, p, h1-h6). Inline elements don't start

on new line and only take necessary width (span, a, img).

13. What is the purpose of the viewport meta tag?

Controls the page's dimensions and scaling on mobile devices: `<meta name="viewport" content="width=device-width, initial-scale=1.0">`.

14. What are HTML forms used for?

Forms collect user input and submit it to a server for processing using various input types like text, email, password, checkbox, radio, etc.

15. What is the difference between GET and POST methods?

GET appends data to URL (visible, limited size, can be bookmarked). POST sends data in request body (secure, unlimited size, cannot be bookmarked).

16. What are input types in HTML5?

text, email, password, number, date, time, color, range, tel, url, search, checkbox, radio, file, submit, button, hidden.

17. What is the required attribute?

HTML5 form validation attribute that makes an input field mandatory before form submission.

18. What is the placeholder attribute?

Provides a hint to the user about what to enter in an input field. Disappears when user starts typing.

19. What is the difference between section and article?

`<article>` represents independent, self-contained content. `<section>` groups related content together.

20. What is the canvas element?

HTML5 element used to draw graphics on the fly using JavaScript. Used for charts, animations, games, and image manipulation.

21. What are the new HTML5 form attributes?

autocomplete, autofocus, form, formaction, formenctype, formmethod, formnovalidate, formtarget, height/width, list, min/max, multiple, pattern, placeholder, required, step.

22. What is the difference between localStorage and sessionStorage?

localStorage persists data with no expiration time. sessionStorage stores data for one session (cleared when browser tab is closed).

23. What is SVG?

Scalable Vector Graphics - XML-based format for vector images that can be scaled without losing quality. Can be embedded directly in HTML.

24. What are semantic benefits of HTML5?

Better SEO, improved accessibility for screen readers, clearer code structure, easier maintenance, and better browser interpretation.

25. What is the figure and figcaption element?

`<figure>` wraps self-contained content like images. `<figcaption>` provides a caption for the figure.

26. What are empty elements?

Elements with no content between opening and closing tags. Examples: `<br>`, `<hr>`, `<img>`, `<input>`.

27. What is the purpose of the iframe element?

Embeds another HTML page within the current page. Commonly used for embedding videos, maps, or external content.

28. What is the difference between link and anchor tags?

`<link>` links external resources (CSS, favicon) in the head. `<a>` (anchor) creates hyperlinks in the body.

29. What are HTML comments?

Used to add notes in code that aren't displayed in browser: `<!-- This is a comment -->`.

30. What is the difference between strong and b tags?

`<strong>` indicates semantic importance (bold + emphasis). `<b>` is purely stylistic bold without semantic meaning.

31. What is the difference between em and i tags?

`<em>` indicates emphasis (italic + meaning). `<i>` is purely stylistic italic without semantic meaning.

32. What is the target attribute in anchor tags?

> Specifies where to open the linked document: _blank (new tab), _self (same frame), _parent, _top.

33. What is the title attribute?

> Provides additional information about an element, displayed as a tooltip when mouse hovers over the element.

34. What are the different list types in HTML?

> Ordered list `<ol>`, unordered list `<ul>`, and description list `<dl>`.

35. What is the table structure in HTML?

> `<table>` contains `<thead>` (header), `<tbody>` (body), `<tfoot>` (footer), with `<tr>` (rows), `<th>` (header cells), and `<td>` (data cells).

36. What is colspan and rowspan?

> colspan merges cells horizontally. rowspan merges cells vertically in a table.

37. What is the audio element?

> HTML5 element for embedding audio files with controls: `<audio controls><source src="audio.mp3"></audio>`.

38. What is the video element?

> HTML5 element for embedding videos: `<video controls width="320"><source src="video.mp4"></video>`.

39. What are HTML attributes?

> Additional information about HTML elements provided in the opening tag. Examples: id, class, style, src, href, title.

40. What is the lang attribute?

> Specifies the language of the element's content, helping search engines and browsers: `<html lang="en">`.

41. What is the difference between head and header?

> `<head>` contains metadata, title, links to CSS/JS. `<header>` represents introductory content or navigation section.

42. What are the HTML5 storage options?

> localStorage, sessionStorage, IndexedDB, cookies, and Cache API.

43. What is the purpose of the nav element?

> Semantic element representing a section of navigation links.

44. What is the aside element used for?

> Represents content tangentially related to main content, like sidebars, pull quotes, or advertisements.

45. What is the time element?

> Represents specific time or date: `<time datetime="2024-01-01">January 1, 2024</time>`.

46. What is the progress element?

Displays completion progress of a task: `<progress value="70" max="100">70%</progress>`.

47. What is the meter element?

Represents a scalar measurement within a known range: `<meter value="6" min="0" max="10"></meter>`.

48. What is the details element?

Creates a disclosure widget where information is visible only when toggled. Works with `<summary>`.

49. What is the mark element?

Highlights text to indicate relevance or importance: `<mark>highlighted text</mark>`.

50. What is the difference between header and h1?

`<header>` is a structural container. `<h1>` is the highest level heading for content hierarchy.

51. What is the purpose of the main element?

Represents the dominant content of the document. Should be unique and not repeated across pages.

52. What is the difference between HTML and XHTML?

XHTML is stricter, requires well-formed XML syntax, all tags must be closed, lowercase tags required, and all attributes must have values.

53. What are the HTML heading levels?

Six levels: h1 (most important) through h6 (least important). Important for SEO and document structure.

54. What is the tabindex attribute?

Controls the tab order of elements and makes non-interactive elements focusable. Positive values set custom order.

55. What is the contenteditable attribute?

Makes an element's content editable by the user: `<div contenteditable="true">Edit me</div>`.

56. What is the draggable attribute?

Makes an element draggable using HTML5 Drag and Drop API: `<div draggable="true"></div>`.

57. What are HTML event attributes?

Attributes that trigger JavaScript when events occur: onclick, onload, onmouseover, onchange, onsubmit, etc.

58. What is the abbr element?

Represents an abbreviation with optional title explaining the full form: `<abbr title="HyperText Markup Language">HTML</abbr>`.

59. What is the cite element?

Represents the title of a creative work like a book, movie, or song.

60. What is the code element?

Represents a fragment of computer code, typically styled in monospace font.

61. What is the pre element?

Preserves whitespace and line breaks. Text is displayed in monospace font exactly as written.

62. What is the blockquote element?

Represents a section quoted from another source, typically indented.

63. What is the q element?

Represents a short inline quotation, automatically adds quotation marks.

64. What is the sub element?

Displays text as subscript: H_2O uses `<sub>`.

65. What is the sup element?

Displays text as superscript: x^2 uses `<sup>`.

66. What is the del element?

Represents deleted text, typically shown with a strikethrough.

67. What is the ins element?

Represents inserted text, typically shown with an underline.

68. What is the kbd element?

Represents keyboard input or user input from other devices.

69. What is the samp element?

Represents sample output from a computer program.

70. What is the var element?

Represents a variable in mathematical expressions or programming contexts.

71. What is the picture element?

Contains multiple `<source>` elements for responsive images with different sizes or formats.

72. What is the source element?

Specifies multiple media resources for `<picture>`, `<audio>`, or `<video>` elements.

73. What is the track element?

Specifies text tracks (subtitles, captions) for `<audio>` and `<video>` elements.

74. What is the datalist element?

Provides autocomplete options for input elements: used with the list attribute on input.

75. What is the output element?

Represents the result of a calculation or user action, typically in forms.

76. What is the fieldset element?

Groups related form elements together, typically with a border and optional `<legend>`.

77. What is the legend element?

Provides a caption for a `<fieldset>` element.

78. What is the label element?

Associates text with form input, improving accessibility and usability. Clicking label focuses input.

79. What is the optgroup element?

Groups related options within a `<select>` dropdown.

80. What is the textarea element?

Multi-line text input control with rows and cols attributes to set size.

81. What is the button element?

Creates a clickable button with types: submit, reset, or button.

82. What is the select element?

Creates a dropdown list containing `<option>` elements.

83. What is the option element?

Defines an option in a `<select>`, `<optgroup>`, or `<datalist>`.

84. What is the form attribute in HTML5?

Allows form elements to be placed outside the form tag while still being associated with it.

85. What is the novalidate attribute?

Disables HTML5 form validation when present on a form element.

86. What is the download attribute?

Makes a link download the resource instead of navigating to it: `<a href="file.pdf" download>`.

87. What is the href attribute?

Specifies the URL that a link points to in anchor `<a>` tags.

88. What is the src attribute?

Specifies the URL of external resources like images, scripts, or iframes.

89. What is the rel attribute?

Specifies the relationship between current document and linked resource: stylesheet, icon, canonical, etc.

90. What is the type attribute in input?

Specifies the type of input control: text, email, password, checkbox, radio, file, submit, etc.

91. What is the name attribute?

Identifies form elements when submitting data to the server.

92. What is the value attribute?

Specifies the default value for input elements.

93. What is the action attribute in forms?

Specifies the URL where form data should be submitted.

94. What is the method attribute in forms?

Specifies the HTTP method to use when submitting the form: GET or POST.

95. What is the autocomplete attribute?

Controls whether browser should automatically complete input values: on or off.

96. What is the autofocus attribute?

Automatically focuses on an input element when the page loads.

97. What is the disabled attribute?

Disables an input element, making it unclickable and unusable.

98. What is the readonly attribute?

Makes an input field read-only, preventing user modifications while still allowing selection and submission.

99. What is the maxlength attribute?

Specifies the maximum number of characters allowed in an input field.

100. What is the pattern attribute?

Specifies a regular expression that the input value must match for validation.

CSS Interview Questions (100)

1. What is CSS?

CSS (Cascading Style Sheets) is a stylesheet language used to describe the presentation and styling of HTML documents, including colors, layout, fonts, and animations.

2. What are the different ways to include CSS?

Inline CSS (style attribute), Internal CSS (style tag in head), External CSS (separate .css file linked via link tag).

3. What is the CSS box model?

The box model consists of content, padding, border, and margin. Total element width = content width + padding + border + margin.

4. What is the difference between padding and margin?

Padding is space inside the element between content and border. Margin is space outside the element between border and other elements.

5. What are CSS selectors?

Patterns used to select HTML elements: element selector, class (.class), id (#id), attribute, pseudo-class, pseudo-element, descendant, child, etc.

6. What is CSS specificity?

Determines which CSS rule applies when multiple rules target the same element. Order: inline styles > IDs > classes/attributes/pseudo-classes > elements.

7. What is the difference between class and id?

class can be used on multiple elements and has lower specificity. id should be unique per page and has higher specificity.

8. What are pseudo-classes?

Selectors for special states of elements: :hover, :active, :focus, :first-child, :last-child, :nth-child(), :visited, etc.

9. What are pseudo-elements?

Style specific parts of elements: ::before, ::after, ::first-letter, ::first-line, ::selection.

10. What is the difference between display: none and visibility: hidden?

display: none removes element from layout. visibility: hidden hides element but preserves its space in layout.

11. What are the different display property values?

block, inline, inline-block, flex, grid, none, table, table-cell, inline-flex, inline-grid.

12. What is flexbox?

A one-dimensional layout model for arranging items in rows or columns with flexible sizing and alignment options.

13. What are the main flexbox properties?

Container: display, flex-direction, flex-wrap, justify-content, align-items, align-content. Items: flex-grow, flex-shrink, flex-basis, flex, order, align-self.

14. What is CSS Grid?

A two-dimensional layout system for creating complex grid-based layouts with rows and columns.

15. What is the difference between flexbox and grid?

Flexbox is one-dimensional (row or column). Grid is two-dimensional (rows and columns). Flexbox is content-first, Grid is layout-first.

16. What are CSS Grid properties?

grid-template-columns, grid-template-rows, grid-gap, grid-column, grid-row, grid-area, grid-template-areas, justify-items, align-items.

17. What is the position property?

Controls element positioning: static (default), relative, absolute, fixed, sticky.

18. What is the difference between absolute and relative positioning?

relative positions element relative to its normal position. absolute positions relative to nearest positioned ancestor or viewport.

19. What is z-index?

Controls stacking order of positioned elements. Higher values appear in front of lower values.

20. What is the float property?

Allows elements to float left or right, letting other content wrap around it. Commonly used for layouts before flexbox/grid.

21. How do you clear floats?

Using clear property (both, left, right), clearfix hack with ::after pseudo-element, or display: flow-root on container.

22. What are CSS units?

Absolute: px, pt, cm, mm, in. Relative: em, rem, %, vw, vh, vmin, vmax, ch, ex.

23. What is the difference between em and rem?

em is relative to parent element's font size. rem is relative to root element's font size, more predictable.

24. What are viewport units?

vw (viewport width), vh (viewport height), vmin (smaller of vw/vh), vmax (larger of vw/vh). 1vw = 1% of viewport width.

25. What is the !important rule?

Overrides all other declarations. Should be used sparingly as it makes debugging difficult. Example: color: red !important;

26. What is CSS inheritance?

Some properties automatically pass from parent to child elements (color, font-family). Others don't (padding, border, margin).

27. What is the cascade in CSS?

Algorithm determining which CSS rule applies when multiple rules target same element, based on specificity, source order, and importance.

28. What are CSS variables?

Custom properties defined with -- prefix and used with var() function. Example: --main-color: blue; color: var(--main-color);

29. What is the calc() function?

Performs calculations in CSS: width: calc(100% - 50px); Can mix different units.

30. What are media queries?

Apply styles based on device characteristics like screen width, height, orientation. Used for responsive design.

31. What is mobile-first design?

Design approach starting with mobile styles, then using min-width media queries to add styles for larger screens.

32. What are breakpoints in responsive design?

Screen width thresholds where layout changes. Common: 320px (mobile), 768px (tablet), 1024px (desktop), 1200px (large desktop).

33. What is the overflow property?

Controls what happens when content overflows element: visible, hidden, scroll, auto.

34. What is the difference between overflow: auto and overflow: scroll?

auto shows scrollbars only when needed. scroll always shows scrollbars even if content fits.

35. What is the box-sizing property?

content-box (default): width/height applies to content only. border-box: width/height includes padding and border.

36. What are CSS transitions?

Smoothly animate property changes: transition: property duration timing-function delay;

37. What are CSS animations?

More complex animations using @keyframes: define keyframes with %, then apply with animation property.

38. What is the difference between transitions and animations?

Transitions animate between two states on trigger (hover, focus). Animations can have multiple keyframes and run automatically.

39. What are transform properties?

Modify element appearance: translate(), rotate(), scale(), skew(), matrix(). Don't affect document flow.

40. What is the opacity property?

Controls transparency from 0 (fully transparent) to 1 (fully opaque). Affects element and all children.

41. What is the difference between opacity and rgba?

opacity affects entire element including children. rgba only affects specific property (like background-color) without affecting children.

42. What are CSS filters?

Apply visual effects: blur(), brightness(), contrast(), grayscale(), hue-rotate(), invert(), saturate(), sepia(), drop-shadow().

43. What is the background property?

Shorthand for background-color, background-image, background-position, background-size, background-repeat, background-origin, background-clip, background-attachment.

44. What is the difference between background-size: cover and contain?

cover scales image to cover entire container (may crop). contain scales to fit within container (may show empty space).

45. What are CSS gradients?

Smooth transitions between colors: linear-gradient(), radial-gradient(), conic-gradient().

46. What is the text-align property?

Aligns text horizontally: left, right, center, justify.

47. What is the vertical-align property?

Aligns inline/inline-block elements vertically: baseline, top, middle, bottom, sub, super, text-top, text-bottom.

48. What is the line-height property?

Controls space between lines of text. Unitless values (1.5) multiply font-size. Can center text vertically when equal to height.

49. What is the text-transform property?

Changes text capitalization: uppercase, lowercase, capitalize, none.

50. What is the text-decoration property?

Adds decoration to text: none, underline, overline, line-through. Can specify line style, color, and thickness.

51. What are web fonts?

Custom fonts loaded from external sources using @font-face or services like Google Fonts.

52. What is @font-face?

CSS rule allowing custom fonts to be loaded: defines font-family, src, font-weight, font-style.

53. What is font-weight?

Controls text boldness: normal (400), bold (700), or numeric values 100-900.

54. What is font-style?

Sets font style: normal, italic, oblique.

55. What is the cursor property?

Changes mouse cursor appearance: pointer, default, text, move, help, not-allowed, crosshair, etc.

56. What is the outline property?

Draws line outside border, doesn't affect layout. Often used for focus states. Similar to border but doesn't take space.

57. What is the difference between outline and border?

border is part of box model, affects layout. outline doesn't take space, drawn outside border, can't have individual sides.

58. What is the pointer-events property?

Controls whether element responds to mouse events: auto, none. none makes element ignore clicks.

59. What is the user-select property?

Controls whether text can be selected: none, auto, text, all.

60. What is the object-fit property?

Controls how img/video fits container: fill, contain, cover, none, scale-down.

61. What is the aspect-ratio property?

Maintains element's width-to-height ratio: aspect-ratio: 16 / 9;

62. What are CSS combinators?

Define relationships between selectors: descendant (space), child (>), adjacent sibling (+), general sibling (~).

63. What is the :nth-child() selector?

Selects elements based on position: :nth-child(odd), :nth-child(3n), :nth-child(2). Uses 1-based indexing.

64. What is the :not() selector?

Negation pseudo-class excluding elements: p:not(.special) selects paragraphs without "special" class.

65. What is the :is() selector?

Matches any element matching one of the selectors in the list: :is(h1, h2, h3) selects all h1, h2, and h3.

66. What is the :where() selector?

Like :is() but with 0 specificity, doesn't affect cascade calculations.

67. What is the will-change property?

Hints browser about upcoming changes to optimize performance: will-change: transform, opacity;

68. What is the contain property?

Indicates element's subtree is independent, allowing browser to optimize rendering: layout, paint, size, style.

69. What is the clip-path property?

Creates clipping region defining visible area: circle(), ellipse(), polygon(), inset().

70. What is the mask property?

Hides element portions by masking or clipping image at specific points.

71. What is the mix-blend-mode property?

Blends element with background: multiply, screen, overlay, darken, lighten, color-dodge, etc.

72. What is the backdrop-filter property?

Applies filters to area behind element: blur(), brightness(). Creates frosted glass effect.

73. What are CSS counters?

Automatic numbering using counter-reset, counter-increment, and counter() function.

74. What is the content property?

Inserts generated content with ::before and ::after: content: "text", url(), counter(), attr().

75. What is the @import rule?

Imports external stylesheets: @import url("style.css"); Less efficient than link tag.

76. What is the @media rule?

Applies styles based on media features: @media (max-width: 768px) { ... }

77. What is the @supports rule?

Feature queries checking if browser supports specific CSS: @supports (display: grid) { ... }

78. What is the @keyframes rule?

Defines animation sequences: @keyframes slide { 0% { left: 0; } 100% { left: 100px; } }

79. What is CSS specificity calculation?

Inline: 1000, IDs: 100, Classes/attributes/pseudo-classes: 10, Elements/pseudo-elements: 1. Add up matching selectors.

80. What is the all property?

Resets all properties: initial (default values), inherit (parent values), unset (natural behavior).

81. What is the writing-mode property?

Sets text direction: horizontal-tb, vertical-rl, vertical-lr. Used for vertical text.

82. What is the direction property?

Sets text direction: ltr (left-to-right), rtl (right-to-left).

83. What is the white-space property?

Controls whitespace handling: normal, nowrap, pre, pre-wrap, pre-line.

84. What is the word-wrap/overflow-wrap property?

Breaks long words to prevent overflow: normal, break-word, anywhere.

85. What is the word-break property?

Controls line breaking: normal, break-all, keep-all, break-word.

86. What is the text-overflow property?

Handles overflowing text: clip, ellipsis (...). Requires overflow: hidden and white-space: nowrap.

87. What is the column-count property?

Creates multi-column layout: column-count: 3; Also column-width, column-gap.

88. What is the resize property?

Allows user to resize element: none, both, horizontal, vertical.

89. What is the scroll-behavior property?

Controls scrolling animation: auto (instant), smooth (animated).

90. What is the scroll-snap-type property?

Creates scroll snapping: x mandatory, y proximity. Works with scroll-snap-align on children.

91. What is CSS Grid auto-placement?

Browser automatically places items in grid when no explicit placement specified. Controlled by grid-auto-flow.

92. What are CSS Grid lines?

Numbered lines dividing grid. Used to position items with grid-column-start/end, grid-row-start/end.

93. What is the fr unit?

Flexible unit for grid/flexbox representing fraction of available space: grid-template-columns: 1fr 2fr;

94. What is the minmax() function?

Defines size range for grid tracks: grid-template-columns: minmax(100px, 1fr);

95. What is the repeat() function?

Repeats grid track definitions: grid-template-columns: repeat(3, 1fr); Creates 3 equal columns.

96. What is auto-fit vs auto-fill?

auto-fill creates tracks even if empty. auto-fit collapses empty tracks, expanding existing ones.

97. What is the gap property?

Sets spacing between flex/grid items: gap: 20px; or row-gap and column-gap separately.

98. What is CSS nesting?

New feature allowing nested selectors like preprocessors. Requires & symbol: .parent { & .child { } }

99. What is the :has() selector?

Parent selector matching elements containing specific children: div:has(> p) selects divs with paragraph children.

100. What are container queries?

Media queries based on container size instead of viewport: @container (min-width: 400px) { }. Requires container-type.

linkedin: Shailesh diwanji