

# HTML Interview Questions and Answers

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## Introduction

This document provides a comprehensive list of HTML interview questions and answers, covering basic, intermediate, and advanced topics. It is designed to help candidates prepare for web development interviews in 2025.

## 1 Basic HTML Interview Questions

### 1. What is HTML?

HTML (HyperText Markup Language) is the standard markup language used to create and structure web pages using tags and attributes.

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Page</title>
  </head>
  <body>
    <h1>Welcome!</h1>
    <p>This is a paragraph.</p>
  </body>
</html>
```

### 2. What is the purpose of the <!DOCTYPE html> declaration?

It specifies the document as HTML5, ensuring browsers render in standards mode.

```
<!DOCTYPE html>
```

### 3. What are HTML tags and elements?

Tags (e.g., <p>, </p>) define elements, which include opening tags, content, and closing tags (e.g., <p>Hello</p>).

### 4. What are HTML attributes?

Attributes provide additional information in the opening tag using name-value pairs.

```
<a href="https://example.com">Link</a>
```

**5. What are void elements in HTML?**

Void elements are self-closing tags without content (e.g., `<br>`, `<img>`).

```

```

**6. What is the difference between `<div>` and `<span>`?**

`<div>` is a block-level element; `<span>` is inline.

```
<div>Block content</div>
<span>Inline text</span>
```

**7. How do you create a hyperlink in HTML?**

Use the `<a>` tag with the `href` attribute.

```
<a href="https://www.example.com">Visit Example</a>
```

**8. What is the difference between absolute and relative URLs?**

Absolute URLs include the full address; relative URLs specify paths relative to the current document.

```
<a href="https://example.com">Absolute</a>
<a href="page.html">Relative</a>
```

**9. What is the purpose of the `<head>` section?**

It contains metadata like title, charset, and links to external resources.

```
<head>
  <title>My Page</title>
  <meta charset="UTF-8">
</head>
```

**10. What are semantic elements in HTML?**

Semantic elements (e.g., `<header>`, `<footer>`) describe content meaning.

```
<header>Site Header</header>
<article>Main Content</article>
```

**11. How do you create a list in HTML?**

Use `<ul>` for unordered lists, `<ol>` for ordered lists, and `<dl>` for definition lists.

```
<ul>
  <li>Apple</li>
  <li>Banana</li>
</ul>
<ol>
  <li>First</li>
  <li>Second</li>
</ol>
```

**12. What is the difference between `<br>` and `<hr>` tags?**

`<br>` creates a line break; `<hr>` adds a horizontal line.

```
Line 1<br>Line 2
<hr>
New Section
```

13. How do you add an image in HTML?

Use <img> with src and alt attributes.

```

```

14. What is the role of the alt attribute in the <img> tag?

It provides alternative text for accessibility and displays if the image fails to load.

```

```

15. How do you create a table in HTML?

Use <table>, <tr>, <td>, and <th>.

```
<table>
  <tr>
    <th>Header</th>
  </tr>
  <tr>
    <td>Data</td>
  </tr>
</table>
```

16. What is the purpose of HTML comments?

Comments document code or disable it without affecting display.

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

17. What is the difference between block-level and inline elements?

Block-level elements (e.g., <div>) start on a new line; inline elements (e.g., <span>) flow within text.

```
<div>Block</div>
<span>Inline</span>
```

18. How do you link an external CSS file to an HTML document?

Use the <link> tag in <head>.

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

19. What is the <meta> tag used for?

It provides metadata like character encoding or SEO data.

```
<meta charset="UTF-8">
<meta name="description" content="Webpage description">
```

20. What is the difference between `<strong>` and `<b>` tags?

`<strong>` indicates semantic importance; `<b>` is for visual bold styling.

```
<strong>Important</strong>
<b>Bold</b>
```

## 2 Intermediate HTML Interview Questions

1. What are the new features introduced in HTML5?

HTML5 includes semantic elements, multimedia tags, new input types, and APIs like Geolocation.

```
<video controls>
  <source src="video.mp4" type="video/mp4">
</video>
```

2. What is the difference between HTML and HTML5?

HTML5 adds semantic elements, multimedia support, and APIs, reducing plugin reliance.

3. What is the `<iframe>` tag used for?

It embeds another webpage or content.

```
<iframe src="https://example.com" width="400" height="300"></
  iframe>
```

4. What is the `lang` attribute in HTML?

It specifies the document or element language for accessibility and SEO.

```
<html lang="en">
```

5. How do you create an HTML form?

Use `<form>` with input elements and a submit button.

```
<form action="/submit" method="post">
  <input type="text" name="username">
  <input type="submit" value="Submit">
</form>
```

6. What are HTML5's new input types?

New types include `email`, `url`, `date`, etc., for better validation.

```
<input type="email" name="email">
```

7. What is the difference between `id` and `class` attributes?

`id` uniquely identifies an element; `class` applies to multiple elements.

```
<div id="unique">Unique</div>
<div class="shared">Shared</div>
```

**8. What is the <canvas> element used for?**

It enables JavaScript-driven graphics rendering.

```
<canvas id="myCanvas" width="200" height="100"></canvas>
```

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

<canvas> is raster-based; <svg> is vector-based and scalable.

```
<svg width="100" height="100">
  <circle cx="50" cy="50" r="40" fill="red"/>
</svg>
```

**10. How do you embed JavaScript in HTML?**

Use <script> inline or with src.

```
<script src="script.js"></script>
<script>alert('Hello!');</script>
```

**11. What is the defer attribute in the <script> tag?**

It delays script execution until HTML is parsed.

```
<script src="script.js" defer></script>
```

**12. What is the async attribute in the <script> tag?**

It allows asynchronous script loading and execution.

```
<script src="script.js" async></script>
```

**13. What is the purpose of the charset attribute in the <meta> tag?**

It defines character encoding (e.g., UTF-8).

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

**14. What is the viewport meta tag?**

It controls mobile browser layout for responsive design.

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

**15. What are HTML entities?**

Codes for reserved characters or symbols (e.g., < for <).

```
< displays as <
&lt; displays as <
```

**16. What is the <noscript> tag?**

It provides fallback content when JavaScript is disabled.

```
<noscript>Please enable JavaScript.</noscript>
```

17. How do you create a marquee in HTML?

The `<marquee>` tag creates scrolling text (deprecated; use CSS).

```
<marquee>Scrolling text</marquee>
```

18. What is the difference between physical and logical tags?

Physical tags (e.g., `<b>`) style visually; logical tags (e.g., `<strong>`) convey meaning.

```
<b>Bold</b> vs. <strong>Important</strong>
```

19. How do you create a dropdown menu in HTML?

Use `<select>` and `<option>` tags.

```
<select name="options">
  <option value="1">Option 1</option>
  <option value="2">Option 2</option>
</select>
```

20. What is the purpose of the title attribute?

It provides tooltip text on hover.

```
<button title="Click me">Button</button>
```

### 3 Advanced HTML Interview Questions

1. What is the Document Object Model (DOM)?

The DOM is a tree-like representation for JavaScript manipulation.

```
<script>
  document.getElementById("demo").innerHTML = "New content";
</script>
```

2. What is the `sandbox` attribute in an `<iframe>`?

It adds security restrictions to `<iframe>` content.

```
<iframe src="page.html" sandbox="allow-scripts"></iframe>
```

3. How do you optimize images for faster load times in HTML?

Use `srcset`, compress images, and apply `loading="lazy"`.

```

```

4. What is the `srcset` attribute in the `<img>` tag?

It provides multiple image sources for different resolutions.

```

```

5. **What is the critical rendering path in HTML?**

The sequence of steps to render a page; optimize with minified CSS and deferred scripts.

6. **What are web components in HTML5?**

Reusable elements using Custom Elements, Shadow DOM, and HTML Templates.

```
<template id="my-element">
  <p>Custom Component</p>
</template>
```

7. **How do you improve accessibility in HTML?**

Use semantic tags, alt text, ARIA, and keyboard navigation.

```
<button aria-label="Close">X</button>
```

8. **What is the difference between sessionStorage and localStorage?**

localStorage persists until cleared; sessionStorage clears on tab close.

```
<script>
  localStorage.setItem("key", "value");
  sessionStorage.setItem("key", "value");
</script>
```

9. **What are HTML5 APIs?**

APIs like Geolocation, Web Storage, Canvas, and WebSockets enhance functionality.

```
<script>
  navigator.geolocation.getCurrentPosition(position => {
    console.log(position.coords.latitude);
  });
</script>
```

10. **How do you handle SEO in HTML?**

Use semantic tags, meta descriptions, and Open Graph tags.

```
<meta name="description" content="Learn HTML">
<meta property="og:title" content="HTML Guide">
```

11. **What is progressive rendering in HTML?**

Sends HTML parts as ready, using lazy loading or async fragments.

12. **What are the challenges of HTML5s local storage?**

Limited storage, security risks, and no encryption; validate inputs.

13. **How do you create a responsive layout without CSS frameworks?**

Use relative units, media queries, and <meta name="viewport">.

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

**14. What is the difference between client-side and server-side rendering?**

Client-side renders in the browser; server-side generates HTML on the server.

**15. How do you handle multilingual content in HTML?**

Use lang attribute and dynamic translations.

```
<html lang="fr">
```

**16. What is the purpose of the data- attribute?**

Stores custom data for JavaScript or CSS.

```
<div data-id="123">Content</div>
<script>
  console.log(document.querySelector("div").dataset.id);
</script>
```

**17. How do you embed audio in HTML5?**

Use <audio> with <source>.

```
<audio controls>
  <source src="audio.mp3" type="audio/mpeg">
  Your browser does not support audio.
</audio>
```

**18. What is the role of the contenteditable attribute?**

Allows users to edit element content in the browser.

```
<div contenteditable="true">Editable text</div>
```

**19. How do you implement lazy loading in HTML?**

Use loading="lazy" for <img> and <iframe>.

```

```

**20. What is the significance of the HTML5 picture element?**

Allows multiple image sources for responsive design.

```
<picture>
  <source media="(min-width: 768px)" srcset="large.jpg">
  
</picture>
```

## 4 Preparation Tips

- **Review Basics:** Master tags, attributes, and structure.
- **Understand HTML5:** Focus on new elements and APIs.
- **Practice Coding:** Solve problems like forms or tables.
- **Learn Accessibility and SEO:** Use semantic HTML and ARIA.
- **Stay Updated:** Follow web development trends.