📌 **HTML Interview Questions & Answers (For 2 Years Experience)**

Basic Level Questions

1. What is HTML and why is it used?

Answer:

- **HTML (HyperText Markup Language)** is the standard markup language for creating web pages.

- It provides the structure of a webpage using elements like headings, paragraphs, images, links, tables, and forms.

- **Why used:** Without HTML, web browsers would not know how to display content properly.

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2. Difference between HTML and HTML5?

Answer:

Feature	HTML	HTML5
Doctype	Long (<!DOCTYPE HTML PUBLIC ...>)	Short (<!DOCTYPE html>)
Multimedia	Needs external plugins (Flash, Silverlight)	Built-in support for audio & video tags
Semantic Tags	Limited (div, span)	New tags like <header>, <footer>, <article>, <section>
Storage	Cookies only	LocalStorage, SessionStorage, IndexedDB
API Support	Limited	Geolocation, Canvas, Web Workers, etc.

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3. What are semantic tags in HTML5?

Answer:

- **Semantic tags** describe the meaning of the content inside them.

- Examples:

  o   <header> → Represents page header

  o   <footer> → Represents page footer

  o   <article> → Independent content

  o   <section> → Thematic grouping of content

- Helps in **SEO** and **accessibility**.

4. What is the difference between <div> and ?

Answer:

- <div> → Block-level element (takes full width, starts on a new line).

- → Inline element (does not break line, wraps text or inline elements).

- Example:

- <div>This is a block element</div>

- This is inline

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5. What is the difference between id and class?

Answer:

- id → Unique identifier for a single element.

- class → Can be used by multiple elements for grouping styles.

- Example:

- <div id="header">Header</div>

- <div class="btn">Button 1</div>

- <div class="btn">Button 2</div>

Intermediate Level Questions

6. Difference between inline, internal, and external CSS in HTML?

Answer:

1. **Inline CSS** → Inside element (style attribute).

2. <p style="color:red;">Hello</p>

3. **Internal CSS** → Inside <style> in <head>.

4. <style> p { color: red; } </style>

5. **External CSS** → In separate .css file.

6. <link rel="stylesheet" href="style.css">

- External CSS is preferred for **reusability and cleaner code**.

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7. What are HTML entities?

Answer:

- Special characters represented with &entity_name; or &#entity_number;.
- Example:
  - < → <
  - > → >
  - & → &
  - © → ©
- Used when you want to display reserved characters.

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8. Difference between <script>, <noscript>, and <defer>?

Answer:

- <script> → Runs JavaScript inside HTML.
- <noscript> → Fallback content if browser does not support JavaScript.
- defer → Ensures script executes after the HTML is parsed.
- <script src="app.js" defer></script>

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

Answer:

- **Block-level** (div, p, h1-h6, section):
  - Starts on a new line.
  - Occupies full width.
- **Inline** (span, a, strong, em):
  - Does not start on new line.
  - Takes only as much width as needed.

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10. What are meta tags in HTML?

Answer:

- Tags inside <head> providing metadata about webpage.
- Examples:
- <meta charset="UTF-8">
- <meta name="viewport" content="width=device-width, initial-scale=1.0">
- <meta name="description" content="This is my portfolio">

- Important for **SEO**, responsiveness, accessibility.

Advanced Level Questions

11. Difference between cookies, localStorage, and sessionStorage?

Answer:

Feature	Cookies	localStorage	sessionStorage
Storage	4KB	5-10MB	5-10MB
Expiry	Manually set	Never (until cleared)	Ends with session
Accessibility	Server + Client	Client only	Client only

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12. Explain the difference between <canvas> and <svg>.

Answer:

- <canvas>:
  - Pixel-based rendering.
  - Good for dynamic graphics (games, animations).
- <svg>:
  - Vector-based (XML markup).
  - Scales without losing quality.
- Example:
- <canvas id="myCanvas"></canvas>
- <svg width="100" height="100">
-   <circle cx="50" cy="50" r="40" fill="red"/>
- </svg>

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13. What are Web Workers in HTML5?

Answer:

- Background scripts running separately from main thread.
- Improves performance by handling heavy tasks (e.g., large data processing).
- Example:
- const worker = new Worker("worker.js");

- worker.postMessage("Start");

- worker.onmessage = (e) => console.log(e.data);

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14. What are ARIA attributes in HTML?

Answer:

- **Accessible Rich Internet Applications (ARIA)** provide extra meaning for assistive technologies like screen readers.

- Examples:

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

- <div role="alert">Form submission failed</div>

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15. Difference between <link> and <a>?

Answer:

- <link>:
    - Defines a relationship between document and external resource (e.g., CSS).
    - Always in <head>.

- <a>:
    - Defines hyperlinks.

- Visit

- <link rel="stylesheet" href="style.css">

16. What are semantic HTML tags and why are they important?

Answer:
Semantic tags describe their meaning both to the developer and the browser. Examples:

- <header>, <footer>, <article>, <section>, <nav>
  They improve **SEO, accessibility, and code readability**.
  Example:

<article>

 <h2>Blog Post Title</h2>

 <p>This is the blog content.</p>

</article>

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17. Difference between block-level and inline elements?

Answer:

- **Block-level elements**: start on a new line, take full width. Examples: <div>, <p>, <section>.

- **Inline elements**: do not start on a new line, take only required space. Examples: <span>, <a>, <strong>.

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18. What are meta tags in HTML?

Answer:
<meta> tags provide metadata (data about the page). Examples:

<meta charset="UTF-8">

<meta name="description" content="Free coding tutorials">

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

- Helps in **SEO**, **mobile responsiveness**, and **browser behavior**.

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19. Difference between <link> and <a> tags?

Answer:

- <link>: Defines relationship between current page and external resource. Used mostly for CSS.

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

- <a>: Defines hyperlinks to navigate.

Click Me

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20. What is the difference between <script> and <noscript>?

Answer:

- <script>: Adds JavaScript to HTML.

- <noscript>: Provides fallback content if JS is disabled.

<noscript>Your browser does not support JavaScript.</noscript>

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21. What are data attributes in HTML5?

Answer:
They allow custom attributes prefixed with data-.

<button data-user-id="123" data-role="admin">Click Me</button>

In JS:

```
let btn = document.querySelector("button");

console.log(btn.dataset.userId); // 123
```

22. Difference between HTMLCollection and NodeList?

Answer:

- **HTMLCollection**: live collection (auto-updates when DOM changes). Returned by getElementsByTagName.

- **NodeList**: static collection (does not auto-update). Returned by querySelectorAll.

23. What is the difference between inline, internal, and external CSS in HTML?

Answer:

1. **Inline**: style inside HTML element.

2. <p style="color:red">Hello</p>

3. **Internal**: inside <style> tag.

4. <style> p { color: red; } </style>

5. **External**: using a CSS file.

6. <link rel="stylesheet" href="style.css">

24. What is the difference between <figure> and <img>?

Answer:

- <img>: just inserts an image.

- <figure>: groups image + caption.

```
<figure>

  <img src="pic.jpg" alt="Nature">

  <figcaption>Beautiful Nature</figcaption>

</figure>
```

25. What is the difference between id and class in HTML?

Answer:

- **id**: unique identifier for one element.

- **class**: reusable identifier for multiple elements.

```
<p id="unique">One</p>

<p class="common">Two</p>
```

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26. What is the difference between <em> and <strong>?

Answer:

- <em>: emphasizes text (usually italic).

- <strong>: indicates importance (usually bold).
  Both are **semantic tags** for accessibility.

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27. What is the difference between HTML and XHTML?

Answer:

- **HTML**: flexible syntax (not strict).

- **XHTML**: stricter, follows XML rules.

  o   All tags lowercase

  o   All tags closed (<br />)

  o   Attributes in quotes

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28. What is the difference between localStorage, sessionStorage, and cookies in HTML5?

Answer:

- **localStorage**: Stores data with no expiry.

- **sessionStorage**: Stores data until tab/browser closed.

- **cookies**: Store small data (4KB), can be sent to server.

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29. What are void elements in HTML?

Answer:
Elements that don't need a closing tag.
Examples: <br>, <img>, <input>, <meta>, <hr>

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30. Difference between relative, absolute, and fixed paths in HTML?

Answer:

- **Relative**: images/pic.png → relative to current file.

- **Absolute**: http://example.com/pic.png → full URL.

- **Root-relative**: /assets/img/pic.png → from website root.

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31. What are ARIA roles in HTML?

Answer:
ARIA (**Accessible Rich Internet Applications**) improves screen reader accessibility.
Example:

<button role="switch" aria-checked="false">Toggle</button>

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32. Difference between <iframe> and <embed>?

Answer:

- <iframe>: Embed another webpage.
- <embed>: Embed external content (video, PDF, Flash).

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33. What are progressive web apps (PWA) and how does HTML5 help?

Answer:

- PWAs use **service workers**, **offline caching**, **manifest.json** for app-like experience.
- HTML5 APIs like localStorage, cache, and offline mode help build PWAs.

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34. What is the difference between inline SVG and <canvas>?

Answer:

- **SVG**: scalable, DOM-based, resolution-independent.
- **Canvas**: pixel-based, better for dynamic graphics like games.

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35. What are the differences between <b> vs <strong> and <i> vs <em>?

Answer:

- <b>: bold **without semantic meaning**.
- <strong>: bold **with importance**.
- <i>: italic **without semantic meaning**.
- <em>: italic **with emphasis**.
- 16. **What is the difference between <em> and <i>, <strong> and <b>?**
- <em> and <strong> give semantic meaning (emphasis, importance).
- <i> and <b> are only for styling (italic/bold).

- Modern practice: Prefer <em> and <strong> for accessibility & SEO.

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17. **What are semantic and non-semantic HTML elements? Give examples.**

- **Semantic**: Elements that describe meaning (e.g., <header>, <footer>, <article>, <nav>).

- **Non-semantic**: Elements that don't describe meaning, only layout (e.g., <div>, <span>).

- Important for accessibility & SEO.

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18. **Difference between inline, block, and inline-block elements?**

- **Block** → Takes full width, starts on a new line (<div>, <p>, <h1>).

- **Inline** → Takes only needed width (<span>, <a>, <em>).

- **Inline-block** → Behaves like inline but respects width & height.

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19. **What is the difference between HTML Collection and NodeList?**

- HTMLCollection: Live (auto-updates when DOM changes), returned by methods like getElementsByTagName.

- NodeList: Static (doesn't auto-update), returned by querySelectorAll.

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20. **Why do we use srcset and sizes attributes in <img>?**

- To serve **responsive images** based on screen resolution/device.

- Example:

- <img

-   src="image-small.jpg"

-   srcset="image-medium.jpg 768w, image-large.jpg 1200w"

-   sizes="(max-width: 768px) 100vw, 50vw"

-   alt="Responsive image">

- Browser chooses the best image for performance.

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21. **Difference between <link> and @import in CSS?**

- <link>: Loads CSS faster, supports parallel loading, better for performance.

- @import: Slower, loads CSS sequentially, not recommended.

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22. Why is accessibility (a11y) important in HTML? How do you implement it?

- Accessibility makes websites usable for disabled people.

- Use ARIA roles, semantic HTML, alt attributes, keyboard navigation (tabindex).

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23. Difference between HTML and XHTML?

- **HTML**: More lenient, not case-sensitive, doesn't require closing tags always.

- **XHTML**: Strict, follows XML rules (case-sensitive, must close all tags).

- Today: HTML5 is preferred.

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24. What are data attributes in HTML5?

- Custom attributes to store extra data.

- Example:

- <button data-user-id="123">Profile</button>

- document.querySelector("button").dataset.userId // "123"

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25. Difference between relative, absolute, and fixed paths in HTML?

- **Relative**: Based on current file location (./img.png).

- **Absolute**: Full URL (https://example.com/img.png).

- **Fixed root**: From project root (/assets/img.png).

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26. Why is the <meta charset="UTF-8"> important?

- Ensures browser renders text correctly.

- Without it, special characters (€, ♥, ä, etc.) may break.

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27. What is the difference between cookies, localStorage, and sessionStorage?

- **Cookies**: Small data sent to server with every request (used for auth/session).

- **localStorage**: Stores data in browser permanently (until cleared).

- **sessionStorage**: Stores data only for one browser tab session.

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28. What are Progressive Web Apps (PWAs)? How is HTML involved?

- PWA = Web app with offline support, push notifications, installable like native apps.

- Uses **HTML + Service Workers + Web App Manifest**.

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29. **Why should we use semantic HTML instead of only <div>?**

- Better SEO, accessibility (screen readers), code readability.

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30. **Difference between inline SVG and image SVG?**

- **Inline SVG** (<svg>...</svg>) → Can style with CSS & animate.

- **Image SVG** (<img src="file.svg">) → Just displays, can't manipulate directly.