

## What Are HTML Attributes?

- Attributes are extra instructions placed inside the opening tag of an HTML element.
- They modify behavior, appearance, or functionality of elements.
- General syntax:

`<tagname attribute_name="attribute_value"> content... </tagname>`

### Example:

``

- **Tag:** `<img>`
  - **Attribute:** `src`
  - **Value:** `"logo.png"`
  - **Purpose:** Tells the browser where to find the image.
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## Components of an Attribute

1. **attribute\_name** → defines the property (e.g., `src`, `id`, `class`).
  2. **attribute\_value** → sets the property's value, always in quotes.
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## Types of HTML Attributes

Category	Description	Example
<b>Global Attributes</b>	Work on almost all elements	<code>id</code> , <code>class</code> , <code>style</code> , <code>title</code> , <code>lang</code>
<b>Event Attributes</b>	Trigger actions on events	<code>onclick</code> , <code>onmouseover</code>
<b>Input Attributes</b>	For <code>&lt;input&gt;</code> elements	<code>type</code> , <code>placeholder</code> , <code>value</code>
<b>Image Attributes</b>	For <code>&lt;img&gt;</code>	<code>src</code> , <code>alt</code> , <code>width</code> , <code>height</code>
<b>Link Attributes</b>	For <code>&lt;a&gt;</code> and <code>&lt;link&gt;</code>	<code>href</code> , <code>target</code>

Category	Description	Example
<b>Table Attributes</b>	For <table>, <tr>, <td>	border, colspan
<b>Media Attributes</b>	For <audio>, <video>	controls, autoplay
<b>Accessibility</b>	Improve usability	alt, aria-*
<b>Meta Attributes</b>	For <meta>	charset, name, content

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## Commonly Used Attributes with Examples

alt (Alternative Text for Images)



- Displays text if the image fails to load.
  - Improves accessibility for screen readers.
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## width and height



- Defines image size in pixels.
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## id (Unique Identifier)

<h1 id="main-title">Welcome</h1>

#main-title { color: green; }

- Targets elements with CSS or JavaScript.
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## title (Tooltip)

<p title="Extra info here">Hover over me</p>

- Shows a tooltip when hovered.

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### **href (Hyperlink Reference)**

`<a href="https://example.com" target="_blank">Visit Site</a>`

- Defines link destination.
- `target="_blank"` opens in a new tab.

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### **style (Inline CSS)**

`<h2 style="color:blue; text-align:center;">Hello World</h2>`

- Adds inline CSS styling.

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### **lang (Language Declaration)**

`<p lang="fr">Bonjour le monde</p>`

- Helps with accessibility and SEO.

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## **Important Points About HTML Attributes (Best Practices)**

### **1. Always Use Lowercase Attributes**

- Both `alt` and `ALT` work, but lowercase is recommended (W3C standard).

### **2. Always Quote Attribute Values**

- Quotes prevent errors, especially with spaces.
- Example:

`<input type="text" placeholder="Enter your name">`

### **3. Declare Quotes Inside Attribute Values**

- Use single quotes if the value contains double quotes.
- `<input type="text" placeholder="Enter your name">`

#### 4. Boolean Attributes Should Be Written Without Values

- Example:

```
<input type="checkbox" checked>
```

#### 5. Proper Attribute Order for Readability

- Suggested order: id, class, global attributes, specific attributes, event attributes.

```
<button id="btn1" class="button-class" type="submit"
onclick="handleClick()">Submit</button>
```

#### 6. Avoid Deprecated Attributes

- Don't use: align, bgcolor, border.
- Use CSS instead:

```
<p style="text-align: center;">This text is centered.</p>
```

#### 7. `<p style="text-align: center;">This text is centered.</p>`

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### Key Takeaways

- **Attributes** = extra instructions for HTML elements.
- Always use **lowercase** and **quotes** for consistency.
- Boolean attributes don't need values.
- Follow a consistent attribute order for readability.
- Avoid deprecated attributes, use CSS instead.