

## HTML Introduction

HTML is the standard markup language for creating Web pages.

- HTML stands for Hyper Text Markup Language
- HTML describes the structure of Web pages using markup
- HTML elements are the building blocks of HTML pages
- HTML elements are represented by tags
- HTML tags label pieces of content such as "heading",

"paragraph", "table", and so on

### Example

```
<!DOCTYPE html>  
<html>  
<head>  
<title>Page Title</title>  
</head>  
<body>  
<h1>My First Heading</h1>  
<p>My first paragraph.</p>  
</body>  
</html>
```

### Example Explained

- The <!DOCTYPE html> declaration defines this document to be HTML5
- The <html> element is the root element of an HTML page
- The <head> element contains meta information about the document
- The <title> element specifies a title for the document
- The <body> element contains the visible page content
- The <h1> element defines a large heading
- The <p> element defines a paragraph

## HTML Tags

HTML tags are element names surrounded by angle brackets:

<tagname>content goes here...</tagname>

- HTML tags normally come **in pairs** like <p> and </p>
- The first tag in a pair is the **start tag**, the second tag is the **end tag**
- The end tag is written like the start tag, but with a **forward slash** inserted before the tagname

## HTML Versions

Since the early days of the web, there have been many versions of HTML:

Version	Year
HTML	1991
HTML 2.0	1995
HTML 3.2	1997
HTML 4.01	1999
XHTML	2000
HTML5	2014

## HTML Documents

All HTML documents must start with a document type declaration:

`<!DOCTYPE html>`. The HTML document itself begins with `<html>` and ends with `</html>`.

The visible part of the HTML document is between `<body>` and `</body>`.

### Example

```
<!DOCTYPE html>
<html>
<body>
<h1>My First Heading</h1>
<p>My first paragraph.</p>
</body>
</html>
```

## HTML Headings

HTML headings are defined with the `<h1>` to `<h6>` tags.

`<h1>` defines the most important heading. `<h6>` defines the least important heading:

### Example

`<h1>This is heading 1</h1>`

`<h2>This is heading 2</h2>`

`<h3>This is heading 3</h3>`

### HTML Paragraphs

HTML paragraphs are defined with the `<p>` tag:

### Example

`<p>This is a paragraph.</p>`

`<p>This is another paragraph.</p>`

### HTML Links

HTML links are defined with the `<a>` tag:

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<a href="https://www.w3schools.com">This is a link</a>
```

```
</body>
```

```
</html>
```

The link's destination is specified in the **href attribute**.

Attributes are used to provide additional information about HTML elements.

### HTML Images

HTML images are defined with the `<img>` tag.

The source file (**src**), alternative text (**alt**), width, and height are provided as attributes:

### Example

```

```

### HTML Elements

An HTML element usually consists of a **start** tag and **end** tag, with the content inserted in between:

```
<tagname>Content goes here...</tagname>
```

The HTML **element** is everything from the start tag to the end tag:

```
<p>My first paragraph.</p>
```

## Empty HTML Elements

HTML elements with no content are called empty elements.

`<br>` is an empty element without a closing tag (the `<br>` tag defines a line break). Empty elements can be "closed" in the opening tag like this: `<br />`.

HTML5 does not require empty elements to be closed. However, if you want stricter validation, or if you need to make your document readable by XML parsers, you must close all HTML elements properly.

## HTML Attributes

- All HTML elements can have **attributes**
- Attributes provide **additional information** about an element
- Attributes are always specified in **the start tag**
- Attributes usually come in name/value pairs

like: `name="value"` **The width and height**

## Attributes

Images in HTML have a set of size attributes, which specifies the width and height of the image: Example

```

```

## The style Attribute

The style attribute is used to specify the styling of an element, like color, font, size etc. Example

```
<p style="color:red">I am a paragraph</p>
```

## HTML Headings

Headings are defined with the `<h1>` to `<h6>` tags.

`<h1>` defines the most important heading. `<h6>` defines the least important heading. Example

```
<h1>Heading 1</h1>
```

```
<h2>Heading 2</h2>
```

```
<h3>Heading 3</h3>
```

```
<h4>Heading 4</h4>
```

```
<h5>Heading 5</h5>
```

```
<h6>Heading 6</h6>
```

## Bigger Headings

Each HTML heading has a default size. However, you can specify the size for any heading with the `style` attribute:

### Example

```
<h1 style="font-size:60px;">Heading 1</h1>
```

## HTML Horizontal Rules

The `<hr>` tag defines a thematic break in an HTML page, and is most often displayed as a horizontal rule.

The `<hr>` element is used to separate content (or define a change) in an HTML page: Example

```
<h1>This is heading 1</h1>  
<p>This is some text.</p>  
<hr>  
<h2>This is heading 2</h2>  
<p>This is some other text.</p>  
<hr>
```

### View HTML Source Code:

To find out, right-click in the page and select "View Page Source" (in Chrome) or "View Source" (in IE), or similar in other browsers. This will open a window containing the HTML source code of the page.

### Inspect an HTML Element:

Right-click on an element (or a blank area), and choose "Inspect" or "Inspect Element" to see what elements are made up of (you will see both the HTML and the CSS). You can also edit the HTML or CSS on-the-fly in the Elements or Styles panel that opens.

## HTML Line Breaks

The HTML `<br>` element defines a **line break**.

Use `<br>` if you want a line break (a new line) without starting a new paragraph:

Example:

```
<p>This is<br>a paragraph<br>with line breaks.</p>
```



The HTML `<pre>` Element

The HTML `<pre>` element defines preformatted text.

The text inside a `<pre>` element is displayed in a fixed-width font (usually Courier), and it preserves both spaces and line breaks:

### *Example*

```
<pre>
```

```
My Bonnie lies over the ocean. My Bonnie lies over the sea.
```

```
My Bonnie lies over the ocean.
```

```
Oh, bring back my Bonnie to me.
```

```
</pre>
```