**HTML - Overview**

HTML stands for **H**yper**t**ext **M**arkup **L**anguage, and it is the most widely used language to write Web Pages.

* **Hypertext** refers to the way in which Web pages (HTML documents) are linked together. Thus, the link available on a webpage is called Hypertext.
* As its name suggests, HTML is a **Markup Language** which means you use HTML to simply "mark-up" a text document with tags that tell a Web browser how to structure it to display.

Originally, HTML was developed with the intent of defining the structure of documents like headings, paragraphs, lists, and so forth to facilitate the sharing of scientific information between researchers.

Now, HTML is being widely used to format web pages with the help of different tags available in HTML language.

Basic HTML Document

In its simplest form, following is an example of an HTML document −

[Live Demo](http://tpcg.io/tryL9g)

<!DOCTYPE html>

<html>

<head>

<title>This is document title</title>

</head>

<body>

<h1>This is a heading</h1>

<p>Document content goes here.....</p>

</body>

</html>

**HTML Tags**

As told earlier, HTML is a markup language and makes use of various tags to format the content. These tags are enclosed within angle braces **<Tag Name>**. Except few tags, most of the tags have their corresponding closing tags. For example, **<html>** has its closing tag **</html>** and **<body>** tag has its closing tag **</body>** tag etc.

Above example of HTML document uses the following tags −

|  |  |
| --- | --- |
| **Sr.No** | **Tag & Description** |
| 1 | **<!DOCTYPE...>**  This tag defines the document type and HTML version. |
| 2 | **<html>**  This tag encloses the complete HTML document and mainly comprises of document header which is represented by <head>...</head> and document body which is represented by <body>...</body> tags. |
| 3 | **<head>**  This tag represents the document's header which can keep other HTML tags like <title>, <link> etc. |
| 4 | **<title>**  The <title> tag is used inside the <head> tag to mention the document title. |
| 5 | **<body>**  This tag represents the document's body which keeps other HTML tags like <h1>, <div>, <p> etc. |
| 6 | **<h1>**  This tag represents the heading. |
| 7 | **<p>**  This tag represents a paragraph. |

To learn HTML, you will need to study various tags and understand how they behave, while formatting a textual document. Learning HTML is simple as users have to learn the usage of different tags in order to format the text or images to make a beautiful webpage.

World Wide Web Consortium (W3C) recommends to use lowercase tags starting from HTML 4.

# HTML - Basic Tags

## Heading Tags

Any document starts with a heading. You can use different sizes for your headings. HTML also has six levels of headings, which use the elements **<h1>, <h2>, <h3>, <h4>, <h5>,** and **<h6>**. While displaying any heading, browser adds one line before and one line after that heading.

### **Example**

[Live Demo](http://tpcg.io/Oevfe8)

<!DOCTYPE html>

<html>

<head>

<title>Heading Example</title>

</head>

<body>

<h1>This is heading 1</h1>

<h2>This is heading 2</h2>

<h3>This is heading 3</h3>

<h4>This is heading 4</h4>

<h5>This is heading 5</h5>

<h6>This is heading 6</h6>

</body>

</html>

This will produce the following result −

## Paragraph Tag

The **<p>** tag offers a way to structure your text into different paragraphs. Each paragraph of text should go in between an opening <p> and a closing </p> tag as shown below in the example −

### **Example**

[Live Demo](http://tpcg.io/Uo5jZe)

<!DOCTYPE html>

<html>

<head>

<title>Paragraph Example</title>

</head>

<body>

<p>Here is a first paragraph of text.</p>

<p>Here is a second paragraph of text.</p>

<p>Here is a third paragraph of text.</p>

</body>

</html>

This will produce the following result −

## Line Break Tag

Whenever you use the **<br />** element, anything following it starts from the next line. This tag is an example of an **empty** element, where you do not need opening and closing tags, as there is nothing to go in between them.

The <br /> tag has a space between the characters **br** and the forward slash. If you omit this space, older browsers will have trouble rendering the line break, while if you miss the forward slash character and just use <br> it is not valid in XHTML.

### **Example**

[Live Demo](http://tpcg.io/aWg5PG)

<!DOCTYPE html>

<html>

<head>

<title>Line Break Example</title>

</head>

<body>

<p>Hello<br />

You delivered your assignment ontime.<br />

Thanks<br />

Mahnaz</p>

</body>

</html>

This will produce the following result −

## Centering Content

You can use **<center>** tag to put any content in the center of the page or any table cell.

### **Example**

[Live Demo](http://tpcg.io/mVrRPS)

<!DOCTYPE html>

<html>

<head>

<title>Centring Content Example</title>

</head>

<body>

<p>This text is not in the center.</p>

<center>

<p>This text is in the center.</p>

</center>

</body>

</html>

This will produce following result −

## Horizontal Lines

Horizontal lines are used to visually break-up sections of a document. The **<hr>** tag creates a line from the current position in the document to the right margin and breaks the line accordingly.

For example, you may want to give a line between two paragraphs as in the given example below −

### **Example**

[Live Demo](http://tpcg.io/4iAnXc)

<!DOCTYPE html>

<html>

<head>

<title>Horizontal Line Example</title>

</head>

<body>

<p>This is paragraph one and should be on top</p>

<hr />

<p>This is paragraph two and should be at bottom</p>

</body>

</html>

This will produce the following result −

Again **<hr />** tag is an example of the **empty** element, where you do not need opening and closing tags, as there is nothing to go in between them.

The **<hr />** element has a space between the characters **hr** and the forward slash. If you omit this space, older browsers will have trouble rendering the horizontal line, while if you miss the forward slash character and just use **<hr>** it is not valid in XHTML

# HTML - Attributes

We have seen few HTML tags and their usage like heading tags **<h1>, <h2>,** paragraph tag **<p>** and other tags. We used them so far in their simplest form, but most of the HTML tags can also have attributes, which are extra bits of information.

An attribute is used to define the characteristics of an HTML element and is placed inside the element's opening tag. All attributes are made up of two parts − a **name** and a **value**

* The **name** is the property you want to set. For example, the paragraph **<p>** element in the example carries an attribute whose name is **align**, which you can use to indicate the alignment of paragraph on the page.
* The **value** is what you want the value of the property to be set and always put within quotations. The below example shows three possible values of align attribute: **left, center** and **right**.

Attribute names and attribute values are case-insensitive. However, the World Wide Web Consortium (W3C) recommends lowercase attributes/attribute values in their HTML 4 recommendation.

### **Example**

[Live Demo](http://tpcg.io/rJQ2Po)

<!DOCTYPE html>

<html>

<head>

<title>Align Attribute Example</title>

</head>

<body>

<p align = "left">This is left aligned</p>

<p align = "center">This is center aligned</p>

<p align = "right">This is right aligned</p>

</body>

</html>

This will display the following result −

## Core Attributes

The four core attributes that can be used on the majority of HTML elements (although not all) are −

* Id
* Title
* Class
* Style

### **The Id Attribute**

The **id** attribute of an HTML tag can be used to uniquely identify any element within an HTML page. There are two primary reasons that you might want to use an id attribute on an element −

* If an element carries an id attribute as a unique identifier, it is possible to identify just that element and its content.
* If you have two elements of the same name within a Web page (or style sheet), you can use the id attribute to distinguish between elements that have the same name.

We will discuss style sheet in separate tutorial. For now, let's use the id attribute to distinguish between two paragraph elements as shown below.

**Example**

<p id = "html">This para explains what is HTML</p>

<p id = "css">This para explains what is Cascading Style Sheet</p>

### **The title Attribute**

The **title** attribute gives a suggested title for the element. They syntax for the **title** attribute is similar as explained for **id** attribute . The behavior of this attribute will depend upon the element that carries it, although it is often displayed as a tooltip when cursor comes over the element or while the element is loading.

**Example**

[Live Demo](http://tpcg.io/Xq2ok1)

<!DOCTYPE html>

<html>

<head>

<title>The title Attribute Example</title>

</head>

<body>

<h3 title = "Hello HTML!">Titled Heading Tag Example</h3>

</body>

</html>

This will produce the following result −

Now try to bring your cursor over "Titled Heading Tag Example" and you will see that whatever title you used in your code is coming out as a tooltip of the cursor.

### **The class Attribute**

The **class** attribute is used to associate an element with a style sheet, and specifies the class of element. You will learn more about the use of the class attribute when you will learn Cascading Style Sheet (CSS). So for now you can avoid it.

The value of the attribute may also be a space-separated list of class names. For example −

class = "className1 className2 className3"

### **The style Attribute**

The style attribute allows you to specify Cascading Style Sheet (CSS) rules within the element.

[Live Demo](http://tpcg.io/FreFRI)

<!DOCTYPE html>

<html>

<head>

<title>The style Attribute</title>

</head>

<body>

<p style = "font-family:arial; color:#FF0000;">Some text...</p>

</body>

</html>

This will produce the following result −

At this point of time, we are not learning CSS, so just let's proceed without bothering much about CSS. Here, you need to understand what are HTML attributes and how they can be used while formatting content.