Building blocks of HTML

An HTML document consist of its basic building blocks which are:

Tags: An HTML tag surrounds the content and apply meaning to it. It is written between < and > brackets.
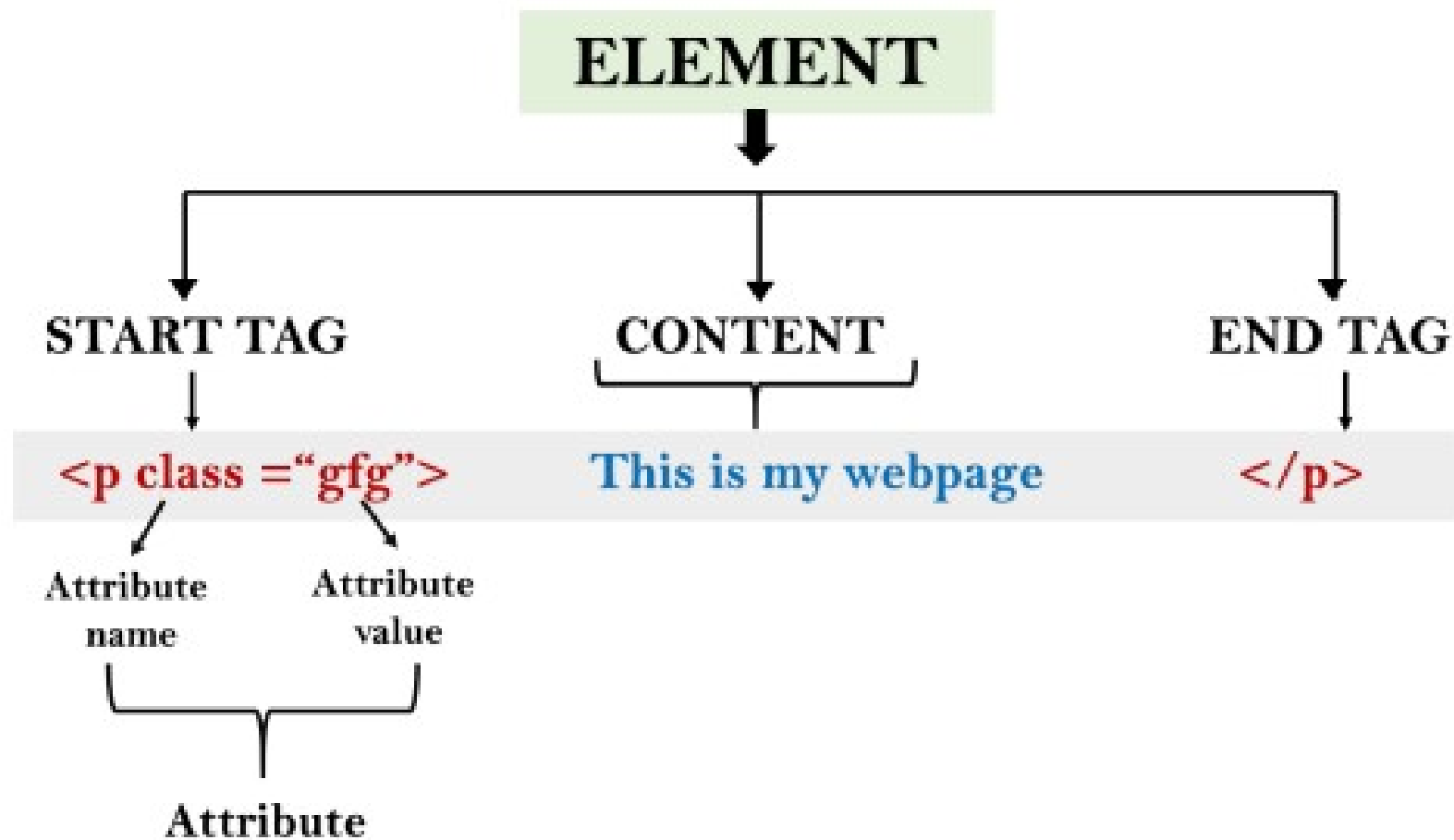
Attribute: An attribute in HTML provides extra information about the element, and it is applied within the start tag. An HTML attribute contains two fields: name & value.

Syntax

<tag name attribute_name= " attr_value"**>** content **</ tag** name>

Elements: An HTML element is an individual component of an HTML file. In an HTML file, everything written within tags are termed as HTML elements.

ELEMENT FORMAT

ELEMENT

START TAG   CONTENT   END TAG

<p class ="gfg"> This is my webpage </p>

Attribute name Attribute value

Attribute

HTML TAGS

HTML tags defines that how web browser will format and display the content. An HTML element is defined by a starting tag. If the element contains other content, it ends with a closing tag, where the element name is preceded by a forward slash.

<p>....</p> is an HTML element, <h1>...</h1> is another HTML element. There are some HTML elements which don't need to be closed, such as <img.../>, <hr /> and <br /> elements. These are known as void elements.

HTML tags contain three main parts: opening tag, content and closing tag. All HTML tags must enclosed within < > these brackets.

<u>Syntax</u>

content

HTML Attribute

HTML attributes are special words which provide additional information about the elements or attributes are the modifier of the HTML element.

Each element or tag can have attributes, which defines the behaviour of that element.

Attributes should always be applied with start tag.

The Attribute should always be applied with its name and value pair.

The Attributes name and values are case sensitive, and it is recommended by W3C that it should be written in Lowercase only.

You can add multiple attributes in one HTML element, but need to give space between two attributes.

Syntax

<element attribute_name="value"**>**content**</element>**

The <!DOCTYPE> Declaration

The <!DOCTYPE> declaration tag is used by the web browser to understand the version of the HTML used in the document. Current version of HTML is 5 and it makes use of the following declaration:
<!DOCTYPE html>

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

```
<!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>
```

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

```
<!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>
```

Line Break Tag

Anything following the **
** element starts from the next line. This tag is an example of an **empty** element, where there is no need of opening and closing tags, as there is nothing to go in between them.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>Line Break Example</title>
</head>
<body>
<p>Hello<br />
You delivered your assignment on time.<br />
Thanks<br />
Sohan</p>
</body>
</html>
```

Centering Content

<center> tag is used to put any content in the center of the page or any table cell.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>Centering 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>
```

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. **<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. For example, to give a line between two paragraphs:

Example

```
<!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>
```

Nonbreaking Spaces

** is used** instead of a normal space. Using ** ** multiple spaces can be inserted within the text.

HTML Formatting

HTML Formatting is a process of formatting text for better look and feel. There are many formatting tags in HTML. These tags are used to make text bold, italicized, or underlined.

Bold Text – Writing anything within
.... element, is shown in bold letters.

Italic Text – Writing anything within
<i>............</i> element, is shown in italic letters.

Underline Text – Writing anything within
<u>............</u> element, is shown underlined.

HTML Formatting

Strike Text

Anything that appears within **<strike>...</strike>** element is displayed with strikethrough, which is a thin line through the text

Superscript Text

The content of a **<sup>...</sup>** element is written in superscript; the font size used is the same size as the characters surrounding it but is displayed half a character's height above the other characters.

Example: 2<sup>3</sup> gives output on browser **2^3**

Subscript Text

The content of a **<sub>...</sub>** element is written in subscript; the font size used is the same as the characters surrounding it, but is displayed half a character's height beneath the other characters.

Example: H<sub>2</sub>O gives output on browser **H_2O**