# HTML Introduction

## What is HTML?

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
* Browsers do not display the HTML tags, but use them to render the content of the page
* (The <!DOCTYPE html> declaration defines this document to be HTML5)

## 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 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 tag name

**Tip:** The start tag is also called the **opening tag**, and the end tag the **closing tag**.

## Web Browsers

The purpose of a web browser (Chrome, IE, Firefox, Safari) is to read HTML documents and display them.

The browser does not display the HTML tags, but uses them to determine how to display the document.

# HTML Editors

Web pages can be created and modified by using professional HTML editors.

However, for learning HTML we recommend a simple text editor like

Notepad / Notepad++ (PC) or TextEdit (Mac).

We believe using a simple text editor is a good way to learn HTML.

* HTML STRUCTURE

<!DOCTYPE HTML>

<html>

<head>

<title>RTD\_OUTOURCING</title>

</head>

<body>

<p>Content to Display on your Browser</p>

</body>

</html>

* HTML Basic

## 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>How are you Students?</h1>  
<p>Today is your first Html Class with RTD OUTSOURCING IT ZONE.</p>  
  
</body>  
</html>

## HTML Headings

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

<h1> defines the most important heading.

# HTML Elements

## 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>

|  |  |  |
| --- | --- | --- |
| **Start tag** | **Element content** | **End tag** |
| <h1> | My First Heading | </h1> |
| <p> | My first paragraph. | </p> |
| <br> |  |  |

HTML elements with no content are called empty elements. Empty elements do not have an end tag, such as the <br> element (which indicates a line break).

## Nested HTML Elements

HTML elements can be nested (elements can contain elements).

All HTML documents consist of nested HTML elements.

This example contains four HTML elements:

### Example

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

### Example Explained

The **<html>** element defines the **whole document**.

It has a **start** tag <html> and an **end** tag </html>.

The element **content** is another HTML element (the <body> element).

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

The **<body>** element defines the **document body**.

It has a **start** tag <body> and an **end** tag </body>.

The element **content** is two other HTML elements (<h1> and <p>).

<body>  
  
<h1>My First Heading</h1>  
<p>My first paragraph.</p>  
  
</body>

The **<h1>** element defines a **heading**.

It has a **start** tag <h1> and an **end** tag </h1>.

The element **content** is: My First Heading.

<h1>My First Heading</h1>

The **<p>** element defines a **paragraph**.

It has a **start** tag <p> and an **end** tag </p>.

The element **content** is: My first paragraph.

<p>My first paragraph.</p>

## Do Not Forget the End Tag

Some HTML elements will display correctly, even if you forget the end tag:

### Example

<html>  
<body>  
  
<p>This is a paragraph  
<p>This is a paragraph  
  
</body>  
</html>

The example above works in all browsers, because the closing tag is considered optional.

**Never rely on this. It might produce unexpected results and/or errors if you forget the end tag.**

## 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. But if you want stricter validation, or if you need to make your document readable by XML parsers, you must close all HTML elements properly.

## Use Lowercase Tags

HTML tags are not case sensitive: <P> means the same as <p>.

The HTML5 standard does not require lowercase tags, but W3C **recommends** lowercase in HTML, and **demands** lowercase for stricter document types like XHTML

Summary:

1. We need Notepad++ Software to create our webpage / edit our page easily.
2. We need a Browser to display our work.

Let’s Go to Our Computer Notepad++ Software to Create a Webpage structure now.