

HTML BASICS

What is HTML?

HTML is a programming language, the building blocks of every website.

HTML5 is the latest set of guidelines, standards & tools that make websites more stable, beautiful & better overall.

HTML stands for **Hyper Text Markup Language**.

- **Hyper Text** does stuff when you click things on a web page.
- A **Markup Language** tells the computer how to format documents.

Websites are a collection of text, images and other media.

- HTML organises all that stuff in a way that makes sense to us – like how we format newspapers & posters.
- HTML uses a **hierarchy of tags** to organise each piece of a website into its place.
- The web browser takes the html code, interprets it and displays it in a way that we're used to seeing.

Go to your favourite website, right-click on the page and inspect source to see how it's built.

HTML Example

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

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

</body>
</html>
```

- The DOCTYPE declaration defines the document type to be HTML
- The text between **<html>** and **</html>** describes an HTML document
- The text between **<head>** and **</head>** provides information about the document
- The text between **<title>** and **</title>** provides a title for the document
- The text between **<body>** and **</body>** describes the visible page content
- The text between **<h1>** and **</h1>** describes a heading
- The text between **<p>** and **</p>** describes a paragraph

HTML Tags

HTML is a Markup language made up of Markup tags. These tags are keywords surrounded by angle brackets:

<tagname> content **</tagname>**

↑
Start tag

↑
End tag

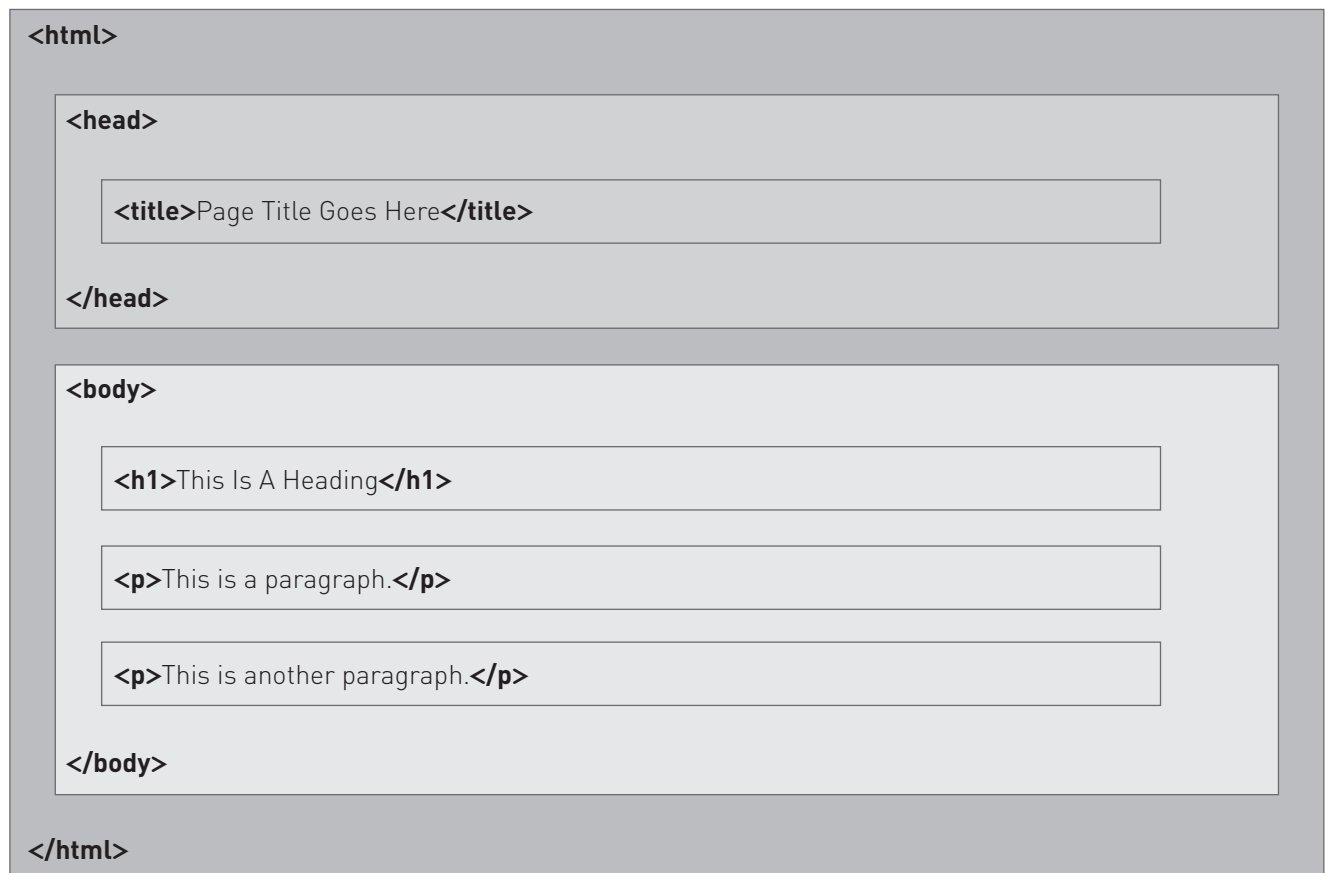
- HTML tags normally come **in pairs** like **<p>** and **</p>**
- The first tag in a pair is the **start tag**, the second tag is the **end tag**
- The end tag is written like the start tag, but with a **slash** before the tag name

HTML Document Page Structure

The `<!DOCTYPE html>` Declaration

To display a document correctly, the browser **MUST** know what type and version it is.

- All HTML documents **MUST** start with a type declaration: `<!DOCTYPE html>`.
- The HTML document itself begins with `<html>` and ends with `</html>`.
- Only the body section is displayed by the web browser – the info between `<body>` and `</body>`



HTML Elements

HTML documents are made up of HTML elements.

HTML elements have a start tag and an end tag, with the content in between:

<tagname>content**</tagname>**

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

<p>My first HTML paragraph.**</p>**

START TAG	ELEMENT CONTENT	END TAG
<h1>	My First Heading	</h1>
<p>	My first paragraph.	</p>

Nested HTML Elements

HTML elements can be nested (elements within elements).

All HTML documents consist of nested HTML elements.

This example contains 4 HTML elements:

```
<!DOCTYPE html>
<html>
<body>

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

</body>
</html>
```

How many elements can you count below?

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>
<h1>My First Heading</h1>
<h2>My First Heading</h2>
<p>My first paragraph.</p>
</body>
</html>
```

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>
```

Empty HTML Elements

HTML elements with **no content** are called **empty elements**.

**
** is an empty element without a closing tag – it defines a line break.

Empty elements can be “closed” in the opening tag like this: **
**.

HTML5 does not require empty elements to be closed. However, some older versions do require it.

HTML Tip: Use Lowercase Tags

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

The HTML5 standard does not demand lowercase tags, but it is good practise to use lowercase as some older versions of HTML require it.

HTML Attributes & Values

HTML elements can have attributes:

- Attributes provide additional information about an element
- Attributes are always specified in the start tag
- Attributes are paired with specific values, enclosed in quote marks: **attribute="value"**.

```

```

↑ ↑ ↑ ↑ ↑ ↑ ↑
Element Attribute Value Attribute Value Attribute Value

Below is an alphabetical list of common HTML attributes:

ATTRIBUTE	DESCRIPTION
alt	Specifies an alternative text for an image
disabled	Specifies that an input element should be disabled
href	Specifies the URL (web address) for a link
id	Specifies a unique id for an element
src	Specifies the URL (web address) for an image
style	Specifies an inline CSS style for an element
title	Specifies extra information about an element (displayed as a tool tip)