

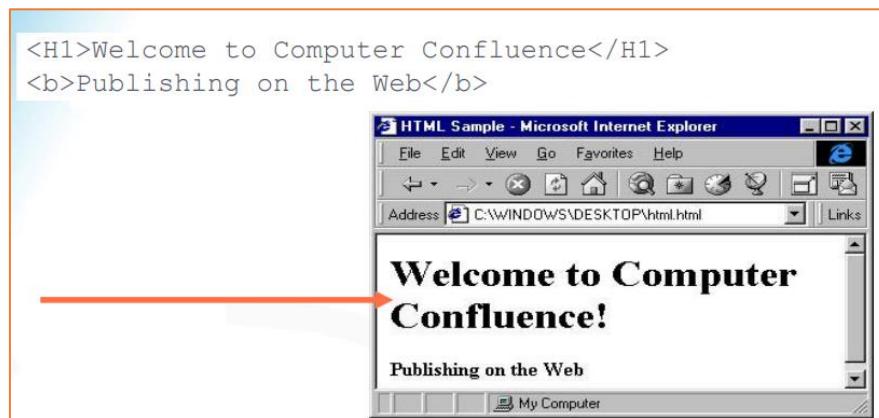
What is HTML?

HTML= HyperText Markup Language

HTML is not a programming language;

it is a markup language that **defines the structure of your content**.

HTML consists of a series of elements, which you use to enclose, or wrap, different parts of the content to make it appear a certain way.

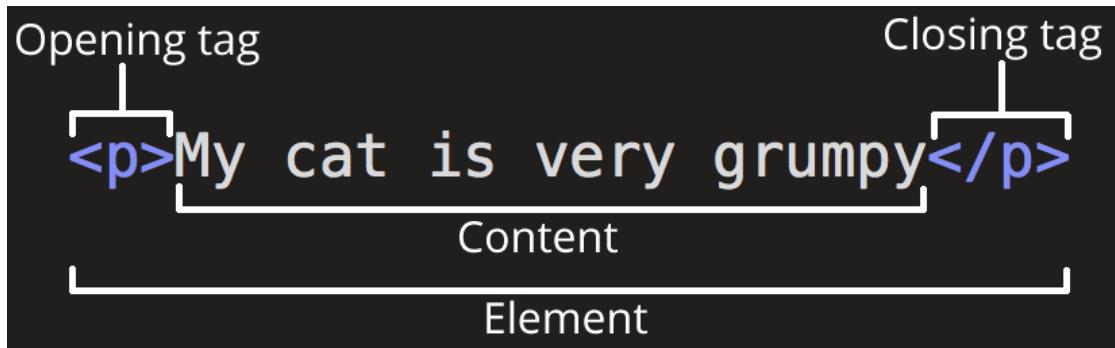


Anatomy of an HTML element

Every tag starts with '**<**' and ends with '**>**'.

There are 2 main types of tags:

- opening tags **<tag>**
- closing tags **</tag>**



- **The opening tag:** This consists of the name of the element (in this case, p), wrapped in opening and closing angle brackets. This states where the element begins or starts.
- **The closing tag:** This is the same as the opening tag, except that it includes a forward slash before the element name. This states where the element ends.
- **The content:** This is the content of the element, which in this case, is just text.
- **The element:** The opening tag, the closing tag and the content together comprise the element.

Elements can also have attributes that look like the following:



What are attributes? Attributes contain extra information about the element that you don't want to appear in the actual content

Nested elements

Elements inside other elements (nested)

```
<p><b><i>...text....</i></b></p>
```

```
<p>Hello World, <i>today you will learn <b> how
to speak html</b></i> fluently</p>
```

```
<p>My cat is <strong>very</strong> grumpy.</p>
```

Empty elements

Some elements have no content and are called empty elements.

```

```

Anatomy of an HTML document

Every document should follow a certain structure:

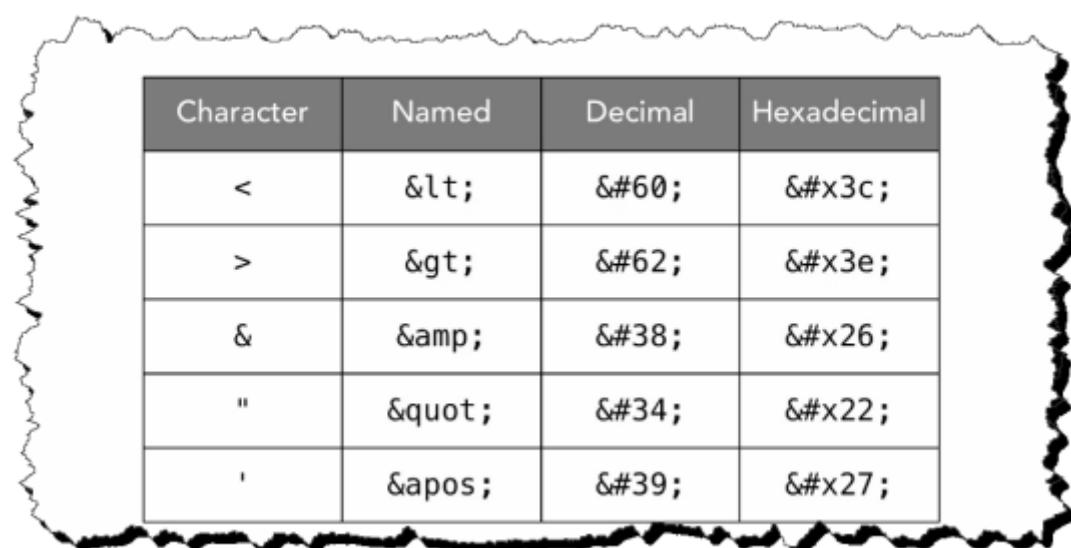
```
<html>
  <head>
    <title>...</title>
  </head>
  <body>
    .....
  </body>
</html>
```

```
1  <!DOCTYPE html>
2  <html>
3    <head>
4      <meta charset="utf-8">
5      <title>My test page</title>
6    </head>
7    <body>
8      
9    </body>
10   </html>
```

- <DOCTYPE html> — the doctype. In the mists of time, when HTML was young (around 1991/92), doctypes were meant to act as links to a set of rules that the HTML page had to follow to be considered good HTML, which could mean automatic error checking and other useful things. However these days, they don't do much, and are basically just needed to make sure your document behaves correctly.

- `<html></html>` — the `<html>` element. This element wraps all the content on the entire page and is known as the root element.
- `<head></head>` — the `<head>` element. This element acts as a container for all the material/info you want to include on the HTML page that *isn't* the content you are showing to your page's viewers.
- `<meta charset="utf-8">` — This element sets the character set your document should use to UTF-8 which includes most characters from the vast majority of written languages.
- `<title></title>` — the `<title>` element. This sets the title of your page, which is the title that appears in the browser tab the page is loaded in.
- `<body></body>` — the `<body>` element. This contains *all* the content that you want to show to web users when they visit your page, whether that's text, images, videos, games, playable audio tracks or whatever else.

Special Characters in HTML



| Character | Named | Decimal | Hexadecimal |
|-----------|--------|---------|-------------|
| < | < | < | < |
| > | > | > | > |
| & | & | & | & |
| " | " | " | " |
| ' | ' | ' | ' |