

<!DOCTYPE html>

HTML

<meta charset="utf-8">

<title></title>

<head></head>

<body>

<h1></h1>

<h4></h4>

<h2></h2>

<h5></h5>

<h3></h3>

<h6></h6>

<p></p>

</body>



- HTML (HyperText Markup Language) is the most basic building block of the Web.
- It defines the meaning and structure of web content. Other technologies besides HTML are generally used to describe a web page's appearance/presentation ([CSS](#)) or functionality/behavior ([JavaScript](#)).

- "Hypertext" refers to links that connect web pages to one another, either within a single website or between websites. Links are a fundamental aspect of the Web.

- HTML uses "markup" to annotate text, images, and other content for display in a Web browser. HTML markup includes special "elements" such as `<head>`, `<title>`, `<body>`, `<header>`, `<footer>`, `<article>`, `<section>`, `<p>`, `<div>`, ``, ``, `<aside>`, `<audio>`, `<canvas>`, `<datalist>`, `<details>`, `<embed>`, `<nav>`, `<output>`, `<progress>`, `<video>`, ``, ``, `` and many others.

- An HTML element is set off from other text in a document by "tags", which consist of the element name surrounded by "<" and ">". The name of an element inside a tag is case insensitive. That is, it can be written in uppercase, lowercase, or a mixture. For example, the <title> tag can be written as <Title>, <TITLE>, or in any other way. However, the convention and recommended practice is to write tags in lowercase.

Introduction to HTML

- HTML is the standard markup language for creating Web pages.
- HTML stands for Hyper Text Markup Language
- HTML describes the structure of a Web page
- HTML consists of a series of elements
- HTML elements tell the browser how to display the content
- 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

Example Explained

- The `<!DOCTYPE html>` declaration defines this document to be HTML5
- The `<html>` element is the root element of an HTML page
- The `<head>` element contains meta information about the document
- The `<title>` element specifies a title for the document
- The `<body>` element contains the visible page content
- The `<h1>` element defines a large heading
- The `<p>` element defines a paragraph

- NB:meta data

```
<head lang="en">
```

```
  <meta http-equiv="content-language" content="en">
```

```
  <meta charset="UTF-8">
```

```
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
  <meta name="keywords" content="website, blog, foo, bar">
```

```
  <meta name="author" content="John Doe">
```

```
  <meta name="publisher" content="John Doe">
```

```
  <meta name="copyright" content="John Doe">
```

```
  <meta name="description" content="This short description describes my website.">
```

```
  <meta name="page-topic" content="Media">
```

```
  <meta name="page-type" content="Blogging">
```

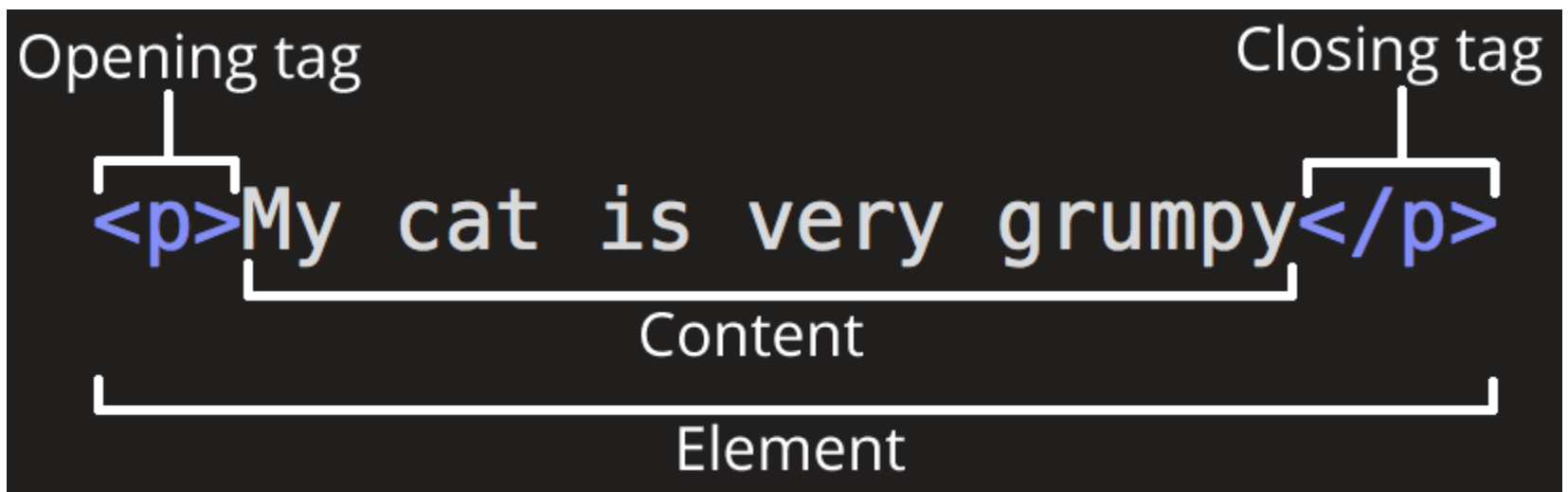
```
  <meta name="audience" content="Everyone">
```

```
  <meta name="robots" content="index, follow">
```

```
  <title>My website title</title>
```

```
</head>
```


Anatomy of an HTML element



- 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 to take effect — in this case where the paragraph begins.


- 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 — in this case where the paragraph ends. Failing to add a closing tag is one of the standard beginner errors and can lead to strange results.

- 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.

Element attributes

- Attributes contain extra information about the element that you don't want to appear in the actual content. Here, class is the attribute name and editor-note is the attribute value. The class attribute allows you to give the element a non-unique identifier that can be used to target it (and any other elements with the same class value) with style information and other things.

Attribute



```
<p class="editor-note">My cat is very grumpy</p>
```

The diagram illustrates the structure of an HTML tag. A horizontal line with vertical end-caps is positioned above the opening tag. A vertical line descends from the center of this horizontal line to the word 'class' in the tag, identifying it as the attribute being highlighted.

Nesting elements

- You can put elements inside other elements too — this is called nesting. If we wanted to state that our cat is very grumpy, we could wrap the word "very" in a `` element, which means that the word is to be strongly emphasized:
- `<p>My cat is very grumpy.</p>`

Empty elements

- Some elements have no content and are called empty elements. Take the `` element that we already have in our HTML page:
- ``
- This contains two attributes, but there is no closing `` tag and no inner content. This is because an image element doesn't wrap content to affect it. Its purpose is to embed an image in the HTML page in the place it appears.

Anatomy of an HTML document

A Simple HTML Document

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

- `<!DOCTYPE html>` — doctype. It is a required preamble. 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. That's all you need to know for now.

- `<html></html>` — the `<html>` element. This element wraps all the content on the entire page and is sometimes known as the root element. It also includes the `lang` attribute, setting the primary language of the document.

- `<head></head>` — the `<head>` element. This element acts as a container for all the stuff you want to include on the HTML page that isn't the content you are showing to your page's viewers. This includes things like keywords and a page description that you want to appear in search results, CSS to style our content, character set declarations, and more.

- `<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. Essentially, it can now handle any textual content you might put on it. There is no reason not to set this and it can help avoid some problems later on.

- `<meta name="viewport" content="width=device-width">` — This viewport element ensures the page renders at the width of viewport, preventing mobile browsers from rendering pages wider than the viewport and then shrinking them down.

- `<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. It is also used to describe the page when you bookmark/favorite it.



- `<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.

# Links for Software & Libraries

- <https://www.sublimetext.com/>
- <https://www.bleepingcomputer.com/news/google/how-to-download-google-chromes-offline-installer/>
- <https://github.com/twbs/bootstrap/releases/download/v4.5.3/bootstrap-4.5.3-dist.zip>
- Download jquery library too