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Tags

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Overview

When working with HTML, we use tags around our code to create different functionality. Tags tend to be come in pairs - one when opened (e.g. `<p>`), and one when closed (e.g. `</p>`).

There are exceptions where some tags are self-closing (such as the tag for an image ``), but the majority use opening and closing tags.

Paired and self-closing tags

```
<h1>This is a large heading</h1>
<h6>This is a small heading</h6>
<p>This is a paragraph</p>
```

Below is some example HTML for a self-closing tag:

```

<br/>
<hr/>
```

It is important to ensure that tags are closed in the order in which they are opened.

The below example is **incorrect** as the `` tag is closed after the `</p>` tag:

```
<p>This is some text and this is <b>important in bold</p> </b>
```

This is the **correct** way to open and close tags:

```
<p>This is some text and this is <b>important</b>in bold</p>
```

If you do not close your tags in the correct structure, the HTML DOM will simply not understand what you're trying to do due to an issue with the scope of your tags. This is very similar to programming and the ordering of closed brackets!

Required and optional attributes

There are some tags in HTML that will also contain attributes; some are **required** and some are **optional**:

```
<h1 id="myHeading"></h1>
<!-- This has an optional id attribute -->
```

```

<!-- This has a mandatory src attribute -->
```

Parsing

Advanced Testing (Theory)
Cucumber
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Pre-Project Assessment
Markdown
IDE Cheatsheet

Why does HTML use tags rather than brackets? The simple answer is **HTML parsing**.

When we save a file with the `.html` extension, we signal to the browser engine to interpret the file as an HTML document.

The browser parses the document using a process of *tokenisation*, where every starting and ending HTML tag in the file is accounted for.

Each HTML tag corresponds to a *token* which the browser knows as part of its HTML parsing rule set.

The browser understands each string in angle brackets (e.g., `<html>`, `<p>`), and pattern-matches them to the set of rules that apply to each of them. (For example, a token that represents an anchor tag will have different properties from one that represents a paragraph.)

After the tokenization is done, the tokens are then converted into *nodes* - different chunks of data, containing the tag, its rules, and the content it contains - and are built into a tree-like hierarchy: the **Document Object Model (DOM)**.

Tutorial

There is no tutorial for this module.

Exercises

1. Create a html document with the following paragraphs:

- This
- is
- a
- paragraph

▼ Solution

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