

HTML

▼ Elements & Tags

- **Normal elements** have matching start and end tags
- **Void elements** have a start tag but no matching end tag

▼ Basic Elements

▼ `<!DOCTYPE>`

- Declares the type and version of the document
- `<!DOCTYPE html>` declares that the webpage is written in HTML5

▼ `<html>`

- Must be the **root element** of the document
- Contains the entire HTML document

▼ `<head>`

- Contains **metadata** content of the document
- Must be the **direct child** of the `<html>` element

▼ `<title>`

- Contains the title of the document and **must not be empty**
- Must be the **direct child** of the `<head>` element

▼ `<body>`

- Contains all **visible** content of the document
- Must be the **direct child** of the `<html>` element

- `<!-- comments -->`

▼ Example

```
<!DOCTYPE html>
<html>
  <head>
    <title>My First Webpage</title>
  </head>
  <body>
    <h1>Heading 1</h1>
  </body>
</html>
<!-- this is a comment -->
```

▼ Headings

▼ <h1> to <h6>

- Titles or subtitles
- <h1> is the most important heading and the largest
- <h6> is the least important heading and the smallest

▼ Text Formatting

▼ <p>

- Start a new paragraph

▼

- Bold text

▼ <i>

- Italicise text

▼ <u>

- Underline text

▼

- Add a line break

▼ <hr>

- Add a horizontal line and a line break

▼ Lists

▼

- Create an unordered list

▼

- Create an ordered list

▼

- List item

▼ Example

```
<ul>
  <li>Item 1</li>
  <li>Item 2</li>
  <li>Item 2</li>
</ul>
```

▼ Tables

▼ <table>

- Create a table

▼ <th>

- Table header

▼ <tr>

- Table row

▼ <td>

- Table data within a table row

▼ Example

```
<table>
  <tr>
    <th>Subject</th>
    <th>Grade</th>
  </tr>
```

```
<tr>
  <td>English</td>
  <td>A1</td>
</tr>
<tr>
  <td>Chinese</td>
  <td>B4</td>
</tr>
</table>
```

▼ Images & Hyperlinks

▼

- Displays an image in the document
- Must be contained within the <body> element
- **src** - specifies the **path** to the image
- **alt** - specifies an alternate text for the image if the image **cannot be displayed** for some reason

▼ Example

```

```

▼ <a>

- Anchor tag to create a **hyperlink**
- Must be contained within the <body> element
- **href** - specifies the hyperlink's destination

▼ Example

```
<a href="https://www.google.com">This link goes to Google</a>
```

▼ URLs

- ▼ **Absolute URLs** are used when creating a link to an external source

- When creating a link to an external website, the link provided must be an absolute URL

▼ Example

```
<a href="https://www.google.com">
```

▼ Relative URLs are used when creating a link to a local source

- If a path for a file is **not specified**, the file is assumed to be in the same folder as the HTML file

▼ If the file is located in a folder which is in the **same folder** as the HTML file, the folder name is specified by:

- "folder_name/file_name"

▼ Example

```
<a href="images/cat.jpeg">
```

▼ If the file is located in **outside** of the HTML file's folder, the parent directory of the current folder is specified by:

- "../"

▼ Example

```
<a href="../results/about_page.html">
```

▼ <div> & Elements

▼ <div>

- Organises HTML code into blocks
- Particularly useful when adding style to a webpage

▼ Example

```
<div style="color:red">  
<h1>This is in a div</h1>
```

```
<p>This is also in a div</h1>
</div>
```

▼ ``

- Typically used to separate a line of code
- Particularly useful when adding style to a webpage

▼ Example

```
<p>My favourite colour is <span style="color:red">red</span>.</p>
```

▼ Special Characters

- Special characters must be replaced by [character references](#)

▼ `<`

- `<`

▼ `>`

- `>`

▼ `&`

- `&`

▼ `"`

- `"`

▼ Forms

▼ Form Element

▼ `<form>`

- Creates a form

▼ Input Elements

- The `"name"` attribute given to input elements allows [Flask](#) to identify which piece of data the user has submitted

▼ `<input type="text">`

- Text field

▼ Example

```
<input type="text" name="user_comments">
```

▼ <input type="checkbox">

- Checkbox

▼ Example

```
<input type="checkbox" name="receive_updates" value="Yes">
```

▼ <input type="radio">

- Radio button

▼ Example

```
<input type="radio" name="gender" value="male">  
<input type="radio" name="gender" value="female">
```

▼ <input type="file">

- File upload field

▼ Example

```
<input type="file" name="submitted_image">
```

▼ <input type="submit">

- Submit button

▼ Example

```
<input type="submit" value="Click here to submit!">
```

▼ <input type="hidden">

- Creates a hidden text field

- Typically used to include information which the user should not see

▼ Example

```
<input type="hidden" name="customerID" value="3456">
```

▼ <textarea>

- Text box for the user to input multi-line text
- **rows** - specifies number of rows
- **cols** - specifies number of columns

▼ Example

```
<textarea name="user_review" rows="4" cols="50">
```