

Introduction to HTML

A photograph of a computer setup on a wooden desk. In the foreground, a silver and blue wired computer mouse is prominent, with a red light on its left button. Behind it is a white computer keyboard. In the background, a black computer monitor is visible, and to the right, a black speaker with a green light. A clear pen lies on the desk to the right of the mouse.

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HTML

Hyper **T**ext **M**ark-up **L**anguage



What exactly is HTML?

- HTML stands for Hyper Text Mark-up Language
- A language using “mark-up tags” that can be read by a web browser
- Adheres to the rules of displaying web pages within web browsers, namely: http://
which means Hyper-Text Transfer Protocol
- The language can be written in a simple text editor (Notepad for example) and saved as an HTML file using the file extension “.htm” or “.html”
- The HTML language has been updated over the years and continues to evolve with newer versions



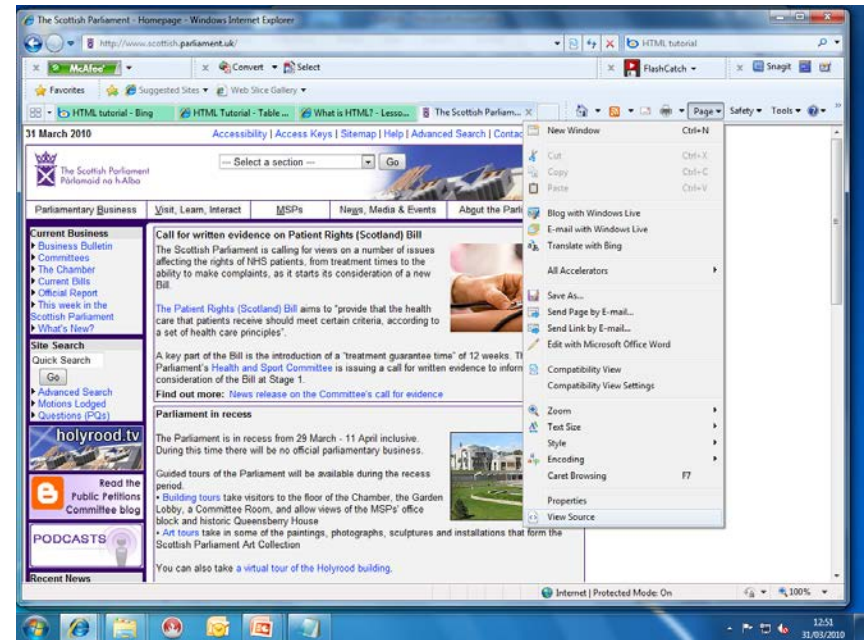
Quick Task

- Launch your web browser (for example, Microsoft Internet Explorer)
- Notice the address bar showing your home page URL (Uniform Resource Locator) with:
http://
at the start of the line
- http stands for: **H**yper **T**ext **T**ransfer **P**rotocol
- The http tells the browser what rules (protocol) to follow for the display of a file, for example: Hyper Text files – html coded files
- Protocols mean everyone around the world using these rules must abide by them for everything to run correctly, smoothly and as it is meant. As with most protocols and etiquette ...to everyone's benefit, enjoyment and understanding



Take a look

- Another wee task for you...
- Also within your web browser, either visit your home page or www.scottish.parliament.uk
- Use the Page / View menu to View Source
- Don't be frightened or confused by the code you see...this is HTML and you will be learning what it all means in due course
- Other computing languages can be employed with HTML and various advanced coding can achieve incredible results for web designers



Tags

- HTML is written using tags, enclosed within angled brackets:

`<html>`

- Web browsers will not display the tags but takes instructions from them



Structure

- Every web page should consist of the following main areas within html:

Head

Title

Body



Start and end

- Each tag within HTML has a start and an end
- Each page starts with the html instruction
- Each page ends with the ... END html instruction. The end tag uses the forward-slash within the angled bracket...

- Example:

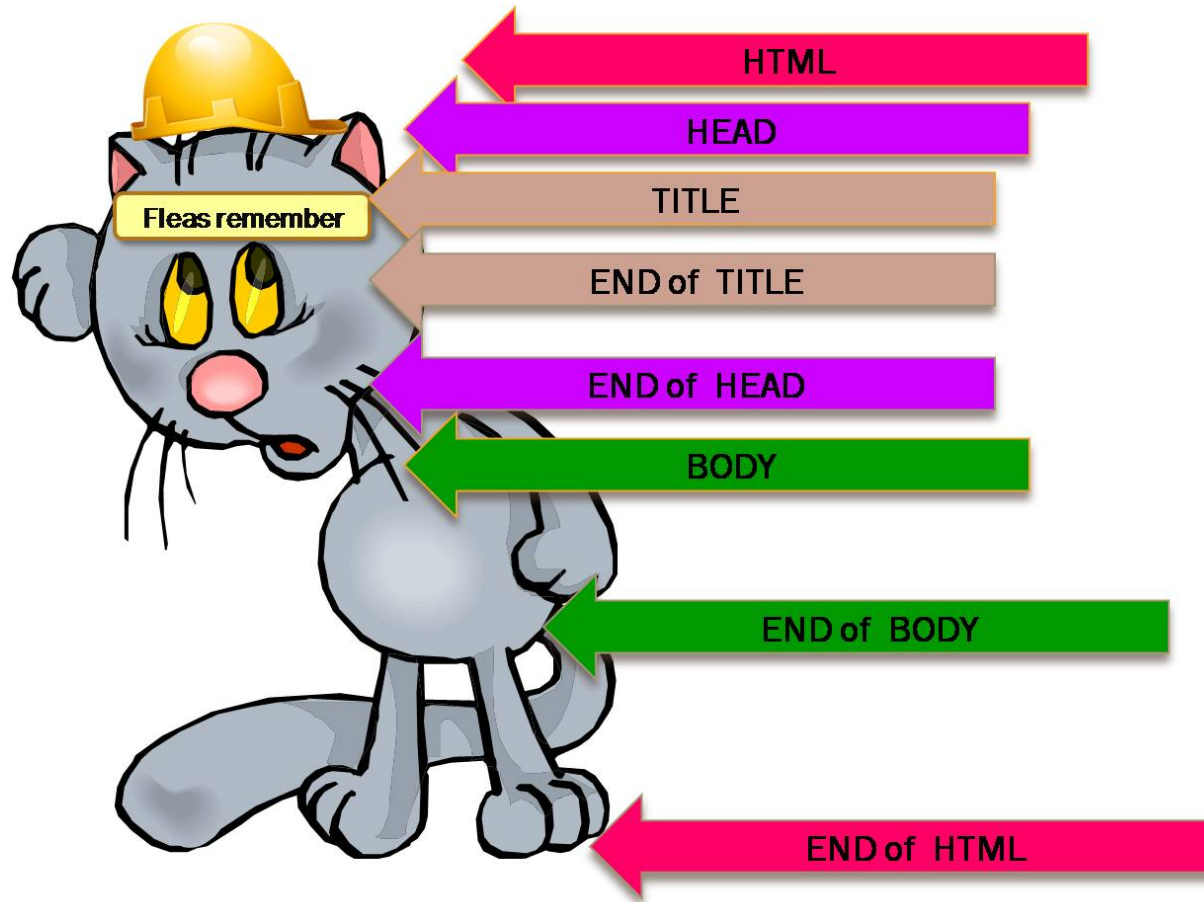
Start tag: <html>

End tag: </html>

- Notice the use of lower case throughout. It is good practice to always use lowercase when coding HTML as it will help when you come to learn other mark-up languages, so you will find I will always show you lowercase coding
- It is possible for a tag without an end tag to be displayed within some browsers but it is not correct coding. We should adhere to the coding standards for correct display across various browsers, platforms and differing systems users may have. Other mark-up languages such as XHTML (Extensible Hyper Text Mark-up Language) requires strict coding. So, good practice learning should mean continuation of standards and compatibility around the world.



Fleas Remember

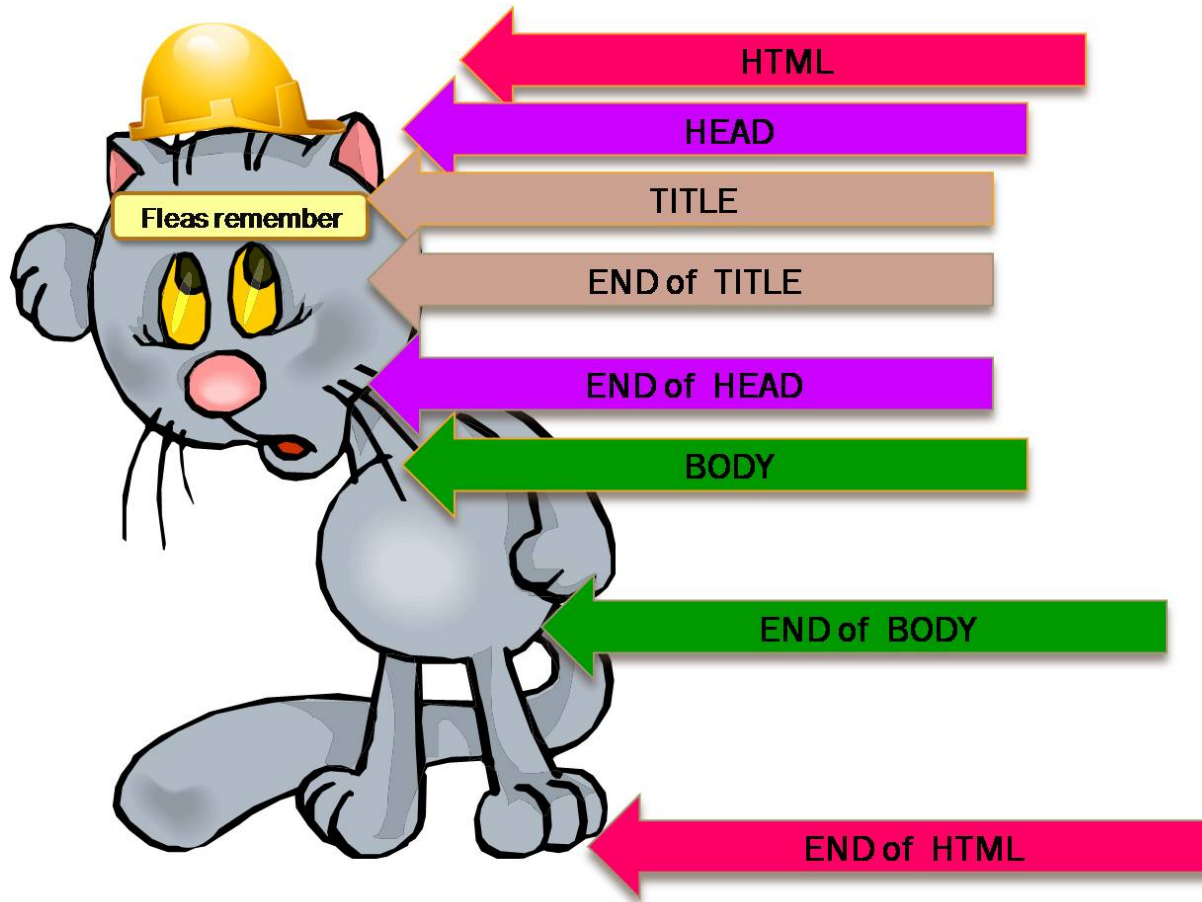


Order - Order!

- **HTML**
Imagine a cat standing in front of you, wearing its special HTML hat
- **Start Head**
Work your way down to the hat until you come to the start of the head
- **Start Title**
Continuing down to the start of the forehead where the title / label is located saying “Fleas Remember”
- **End Title**
Now itching to move down, the end of the title (end of the forehead)
- **End Head**
Moving down the face from the end of the forehead, you reach the end of the head
- **Start Body**
After the end of the head comes the start of the body. The body contains the actual content of the web page (the food in the belly)
- **End Body**
Moving downward, brings us to the end (the bottom – don’t want to be too rude about such body parts, but it is the end of the body)
- **The End**
This is where everything finishes – end HTML



Get the picture!



Explanation

- Start html `<html>` tells the browser the document is coded in html
- Start head `<head>`
- Start title within the head tags `<title>`
The title appears in the title bar of a web browser
- End title within the head tags `</title>`
- End head `</head>`
- Start body `<body>`
The body holds the actual web page content to be viewed within the web browser. This is for a web page viewer to see. The tags within the body are for layout and display of web page content
- End body `</body>`
- At the completion point, the very end ... `</html>`



Head tag

- Can contain additional coding and details for the page that is not displayed by the web browser
- Could refer to other external files such as CSS (Cascading Style Sheets) or additional coding such as Javascript files. These are another story and we will stick with HTML for this moment in time
- The title tags are contained within the head



Title tag

- Advises the browser of the web page title and will appear in the title bar of the web browser
- Located within the Head tags
- Example:

```
<head>
```

```
    <title>Title of my web page here</title>
```

```
</head>
```



Body

- The body tags hold everything that will be displayed as the web page itself
- We will learn how to format the web page within the body tags in the next chapter
- Example:
`<body>`
This is where all the images and text will be placed. This would be displayed by a web browser and can be viewed around the world if correctly coded as well as being uploaded to a web server.
`</body>`
- The end body tag is followed by the end HTML tag



So, the coding

```
<html>  
  <head>  
    <title> my first page</title>  
  </head>  
  <body>
```

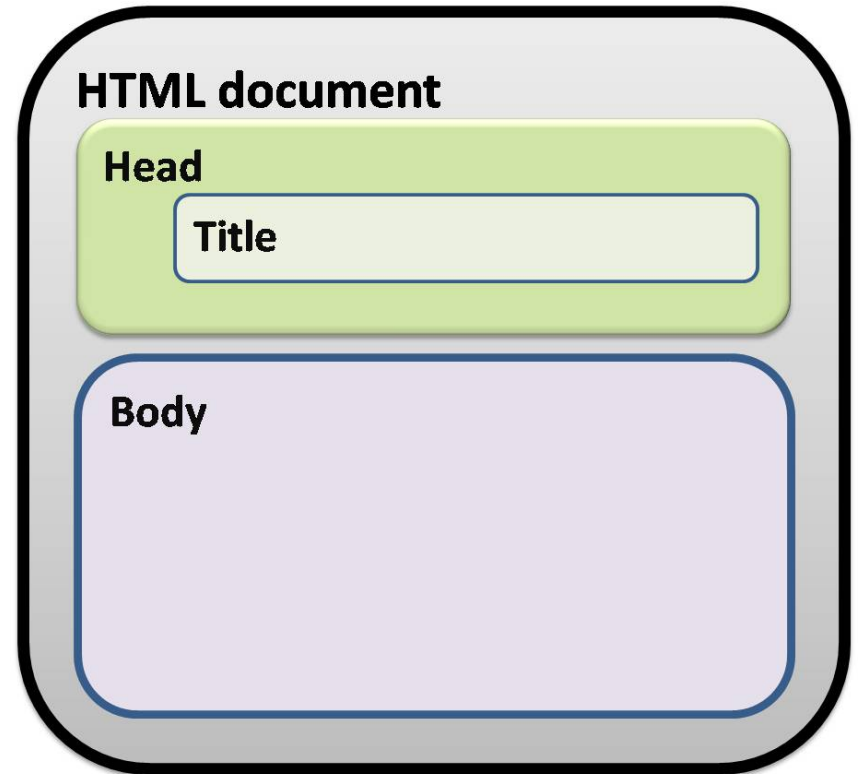
This is the body, where the text and pictures go

```
</body>  
</html>
```



Reminder

- Start HTML
- Start Head
- Start Title
- End Title
- End Head
- Start Body
- End Body
- End HTML



Exercise

- List all the main tags we have covered, without looking at the previous pages
Here is a start for you:

<html>

- Check your answer
- If you managed to record all the tags in the correct order...well done!
- If you are not able to remember them all correctly, look once back at the picture of the cat and imagine you are an HTML page. Start at the top and work your way down.
- Try the above exercise a few times over the next couple of days, ensure you know the layout without having to peek!
- Now that you remember the layout of the HTML page, look at the source code of a few web pages. You might not know or understand all the code in pages but you will probably be able to identify the main tags and locate some knowledge of the tag layout
- Most web pages nowadays use additional script and once you master HTML, you will be able to learn other mark-up languages and programming for the web will be easier

