

M1 -What is HTML?

HTML is a **markup** language for **describing** web documents (web pages).

- HTML stands for **H**yper **T**ext **M**arkup **L**anguage
- A markup language is a set of **markup tags**
- HTML documents are described by **HTML tags**
- Each HTML tag **describes** different document content

Overview of HTML

- Hypertext is a way of organizing and presenting information
 - Allows you to link documents in a non-linear way
 - Document contains links, or pointers to other information such as other pages, images, sounds, etc.
- Hypertext is a markup language
 - Tags determine structure and formatting of document
 - Subset of SGML (Standard Generalized Markup Language)
 - HTML (Hypertext Markup Language)

HTML tags are **keywords** (tag names) surrounded by **angle brackets**.

`<tagname>content</tagname>`

- HTML tags normally come **in pairs** like <p> and </p>
- The first tag in a pair is the **start tag**, the second tag is the **end tag**
- The end tag is written like the start tag, but with a **slash** before the tag name

An HTML Web Page.

Every file type has a file name made up of two parts – a “Name” and an “Extension” separated by a period. – Example: mywebpage.html

The file extension tells the computer what software (Application) is usually needed to open the file.

Typical examples are:-

- MyLetter.**doc** - Use Microsoft Word
- Annualtaxes.**XLS** - Use Microsoft Excel
- Report.**PDF** - Use Adobe Reader
- Webpage.**html** - Use a browser like Internet Explorer or Mozilla Firefox

BUT

Other applications (programs) can be made to look inside any file.

Creating an HTML document

- Each HTML document you create is at least one file. When it is displayed by a browser, it results in one page (may be scrollable so it can be as long as you want it to be.)
- It must be saved in text format.
- If you use “Notepad” as your text editor, you will get text format automatically.... There are many other HTML editors out there that provide enhanced built-in functions. We will start by using Notepad where you have to type everything in by hand.
- By convention, all HTML filenames are written in lowercase
- All HTML documents must end in the extension “.htm” or “.html”

–Example: myhomepage.html

File location and layout for the class.

The files used in this class are located in the “Library\Documents\My Documents” area of the computer that you are using in a folder initially labeled “Web_Class”. Please change this file name to *Your Name* (First and Last joined by an underscore).

Inside this root file, you will find some sub-folders:-

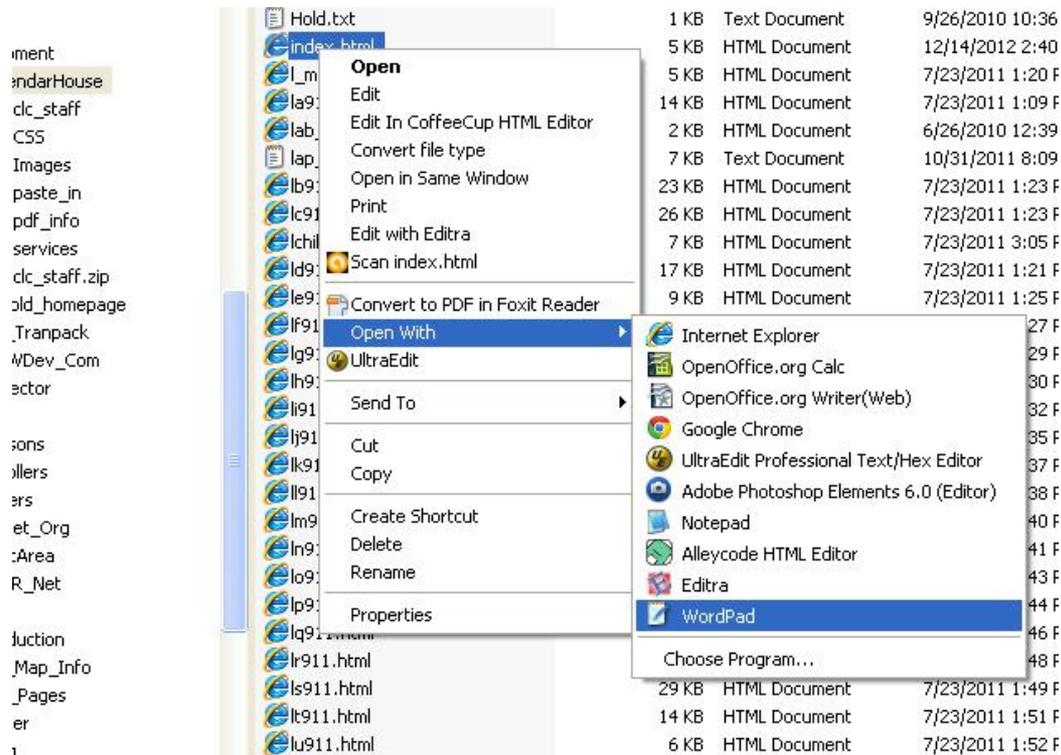
- **ClassWork** which in turn contain further sub-folders called M1, M2 ,M3 etc each of which contain the files for each **Module** of the class. They are separated this way solely to keep the various files in some semblance of order.
- **Links** which will take you to various reference places
- **Software** which we will be using later in the class
- **WWW** which we will rename uniquely for each student and which will contain the web pages that you will produce for upload to the internet.

Working with Web Files

Normally, you would open a file by double clicking on it. This would typically cause the operating system to look at the file extension to find and start the default application needed to show the file in its intended manner.

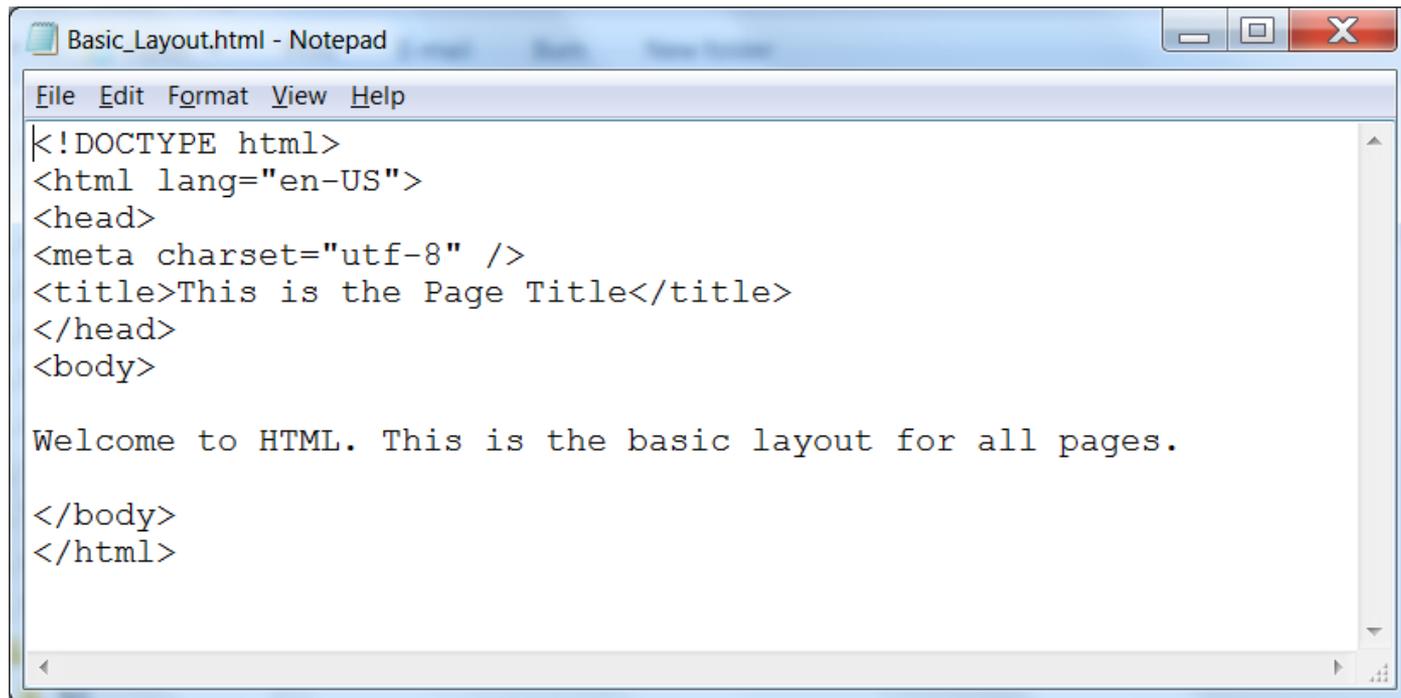
However, there are ways to open a file using other programs:

- RIGHT click on the file in Windows Explorer.
- This gives a menu of options:-
- Chose the “Open With” option:-



- This gives access to all the other potential programs that could open the selected file.
- We will initially use the Text Editor called “Notepad” to look inside our files.

Use the “Notepad “ text editor to view the file “Basic Layout.html”

A screenshot of a Notepad window titled "Basic_Layout.html - Notepad". The window contains the following HTML code:

```
<!DOCTYPE html>
<html lang="en-US">
<head>
<meta charset="utf-8" />
<title>This is the Page Title</title>
</head>
<body>

Welcome to HTML. This is the basic layout for all pages.

</body>
</html>
```

Example Explained

- The **DOCTYPE** declaration defines the document type to be HTML
- The text between **<html>** and **</html>** describes an HTML document
- The `lang="en-US"` statement defines the language used
- The text between **<head>** and **</head>** provides information about the document
- The `<meta charset="utf-8" />` defines the character set that is used
- The text between **<title>** and **</title>** provides a title for the document
- The text between **<body>** and **</body>** describes the visible page content

The `<!DOCTYPE>` declaration helps the browser to display a web page correctly.

There are different document types on the web.

To display a document correctly, the browser must know both type and version.

The doctype declaration is not case sensitive. All cases are acceptable:

All HTML documents must start with a type declaration: `<!DOCTYPE html>`.

The HTML document itself begins with `<html>` and ends with `</html>`.

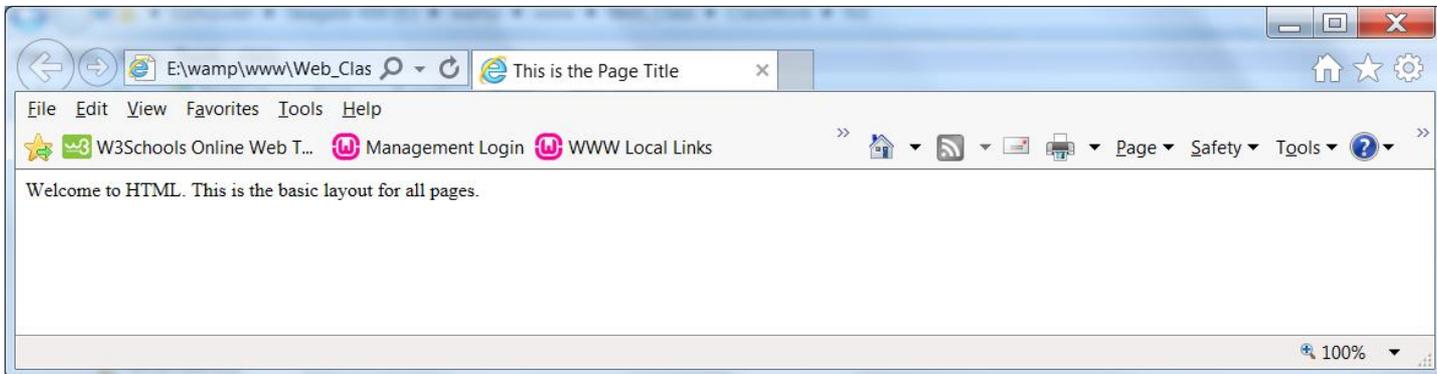
The visible part of the HTML document is between `<body>` and `</body>`.

The document language can be declared in the `<html>` tag by the **lang** attribute. `<html lang="en-US">`

Declaring a language is important for accessibility applications (screen readers) and search engines:

The first two letters specify the language (en). If there is a dialect, use two more letters (US).

Now check out the “Basic Layout.html” page in your browser.



Notice the page title to the right of the page address (URL).

The content started right at the top of the page and to the extreme left.

The font type and size were the browser default values.