

World Wide Web

WWW

Which is harder to say than
World Wide Web

What is the World Wide Web?

A combination of ...

User generated content	Web pages
Software	Browsers / Web Servers
Hardware	Computers, network devices, cables

So what is the World Wide Web?

Focus on Web Pages....

User generated content	Web pages
Software	Browsers / Web Servers
Hardware	Computers, network devices, cables

So what is the World Wide Web? Web pages

The screenshot shows the BBC homepage. At the top, there's a navigation bar with links for Home, TV, Radio, Talk, Where I Live, and A-Z Index. Below this is a search bar. The main content area features a large image of Colin Jackson and a headline for the TV show 'Running in the family'. There are also links for genealogy research and a photo gallery. On the left, there's a sidebar with sections for Explore bbc.co.uk, Business & Money, Children, and Entertainment. The date 'Wednesday 20th September 2006' is displayed at the top right.

So what is the World Wide Web? Web pages

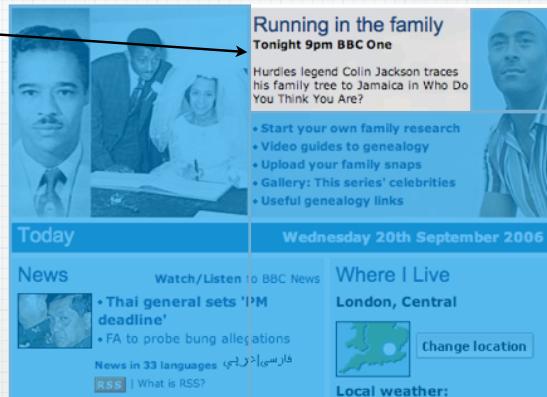


So what is the World Wide Web? Web pages



So what is the World Wide Web? Web pages

Text



So what is the World Wide Web? Web pages

Pictures

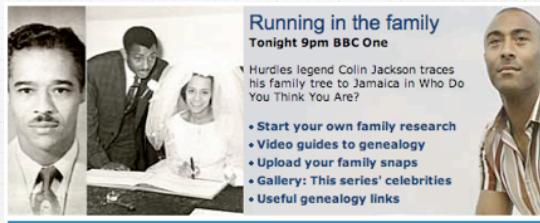


So what is the World Wide Web? Web pages

Links
to other
pages -
hyperlinks



But what else? ...



Today Wednesday 20th September 2006

News

- Watch/Listen to BBC News
 - Thai general sets 'PM deadline'
 - FA to probe bung allegations
- News in 33 languages [عربي](#) | [العربية](#)
[RSS](#) | What is RSS?

Where I Live

London, Central



Change location

Local weather:

But what else? ...



Today Wednesday 20th September 2006

News

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[RSS](#) | What is RSS?

Where I Live

London, Central



Change location

Local weather:

But what else? ...

BBC - [bbc.co.uk](http://www.bbc.co.uk) homepage – Home of the BBC on the Internet

Getting Started Latest Headlines

bbc.co.uk

Home TV Radio Talk Where I Live A-Z Index

Search

Accessibility help

Text only

Mobile/PDAs

Explore bbc.co.uk

All of the BBC The Web Search

Other people are searching for:

- reviewwise
- witch
- hurricane

See what's popular and new

Browse See full directory

Business & Money
Business News, Market Data, Your Money...

Children
CBBC, CBBC Search, CBeebies...

Entertainment
Collective, Comedy, Film...

Running in the family
Tonight 9pm BBC One

Hurdles legend Colin Jackson traces his family tree to Jamaica in Who Do You Think You Are?

- Start your own family research
- Video guides to genealogy
- Upload your family snaps
- Gallery: This series' celebrities
- Useful genealogy links

Today Wednesday 20th September 2006

News Watch/Listen to BBC News

• Thai general sets 'PM deadline'
• FA to probe bung allegations

News in 33 languages [عربي](#) | [العربية](#)
[RSS](#) | What is RSS?

Where I Live

London, Central

Change location

Local weather:

But what else? ...

Explore bbc.co.uk

All of the BBC The Web

Other people are searching for:

- revisewise
- witch
- hurricane

[See what's popular and new](#)

But what else? ... Forms

Explore bbc.co.uk

All of the BBC The Web

Other people are searching for:

- revisewise
- witch
- hurricane

[See what's popular and new](#)

But what else? ... Forms

Explore bbc.co.uk

All of the BBC The Web

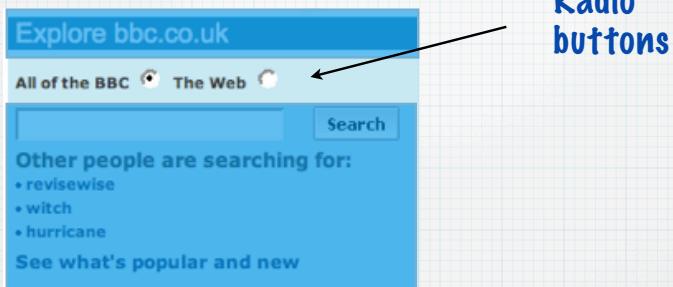
Other people are searching for:

- revisewise
- witch
- hurricane

[See what's popular and new](#)

text
boxes
and
buttons

But what else? ... Forms



Radio
buttons

Tools required to create web pages

- An editor that can produce text files
 - Notepad, WinEdt, HTMLkit
 - NOT Word !
- A browser to view (and check) the pages
 - Internet Explorer (common but poor quality)
 - Safari, Firefox, Opera

Our recommendations:

- An editor that can produce text files
 - Notepad, WinEdt, HTMLkit
 - NOT Word !
- A browser to view (and check) the pages
 - Internet Explorer (common but poor quality)
 - Safari, Firefox, Opera

Example

- Creating and saving a simple file
- Loading it into a browser locally

Plain text files

The most common file type, as all web pages are plain text files

- Only contains the characters entered at the keyboard
- Can be produced in a variety of editors

So how can we add formatting?

- Add Markup
- HTML - Hypertext Markup Language

Example - making some of the text Italic using emphasis ``

So what is HTML?

- A way to add display structure and design to a document using markup
- Done by adding tags to a plain text document

```
<tag>  
Area that tag is applied to  
</tag>
```

- In markup languages tags are called elements

Many people confuse creating web pages with programming

- Programmers create and write software



Many people confuse creating web pages with programming

- Creating web content is more like traditional word processing – use the term ‘authoring’

HTML document basic structure

```
<html>
```

Indicates the start of the HTML document

```
</html>
```

Indicates the end of the HTML document

HTML document basic structure

```
<html>
```

```
<head>
```

```
</head>
```

Indicates the head of the HTML document

```
</html>
```

HTML document basic structure

```
<html>
```

```
<head>
```

```
</head>
```

```
<body>
```

```
</body>
```

```
</html>
```

Indicates the body of the HTML document

"head" of the document

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

- Can be blank or missing
- Normally contains information about the document - called 'meta' information
- Normally nothing here will be displayed aside from the **<title>** element - used to control the text at the top of the browser

Comments

- It's good practice to add comments to your file
- Not displayed in the browser window
- Use this notation

```
<!--
Any lines between these points won't be
displayed
-->
```

Example:

```
<html>
<head>

    <!--
    Created by: Barry Avery
    Date: 15th Sept 2009
    -->

    <title>Welcome to my Web page</title>
</head>
<body>

    </body>
</html>
```

"body" of the document

```
<html>
<head>

</head>
<body>

    • Contains all the text,
      elements and links that
      will be displayed

    • Some basic elements <h1>,
      <h2>, ...<h6>, <p>,
      <strong>, <em>

</body>
</html>
```

Heading elements <h1> .. <h6>

- Heading styles rendered from large to small in order of importance

```
<h1>Important heading</h1>
<h2>Slightly less important heading</h2>
<h3>Another subheading</h3>
```

Paragraph elements <p>, </p>

- Every distinct paragraph should be a paragraph element
- The browser inserts default spacing between the paragraphs (and the headings where appropriate)

```
<h1>Important heading</h1>
<p>Some information in a paragraph.</p>
<p>Another paragraph.</p>
```

Some other elements `` ``

- Use `` elements to make text important
- Use `` elements to make text standout

You may wish to select button `one` but do
`not` select button two

You may wish to select button *one* but do **not** select
button two

Notes ...

- Most elements are pairs of start and end tags

```
<h1>Important heading</h1>
<p>Some information in a paragraph.</p>
<p>Another paragraph.</p>
```

Notes ...

- But some don't! Called empty elements

```

```

The `image` element - will be
discussed next week

Notes ...

- The text inside the tag indicates the name and purpose of the tag, called the label

```
<h1>Important heading</h1>
```



The **h1** heading label

Notes ...

- HTML was originally designed to display plain text in a variable width browser...
- ...so creating paragraphs and inserting lines not as straight forward as pressing 'return' in Word

Tables

A major way of structuring text

	Column	Column	Column
Row	Test 1	15%	Week 3
Row	Test 2	15%	Week 10/11
Row	Coursework	70%	Final 5 weeks

Tables

May have border round each cell, ... or not

Row	Column	Column	Column
Test 1	15%	Week 3	
Test 2	15%	Week 10/11	
Coursework	70%	Final 5 weeks	

Tables

So how do you mark up a table?

Test 1	15%	Week 3
Test 2	15%	Week 10/11
Coursework	70%	Final 5 weeks

Tables

Wrap the whole table in a `<table>` element

`<table>`

Test 1	15%	Week 3
Test 2	15%	Week 10/11
Coursework	70%	Final 5 weeks

`</table>`

Tables

Wrap each whole row in a table row element `<tr>`

`<table>`

Test 1	15%	Week 3
Test 2	15%	Week 10/11
Coursework	70%	Final 5 weeks

`</tr>`

`</tr>`

`</tr>`

`</table>`

Tables

Wrap each data item in a table data element `<td>`

`<table>`

Test 1	15%	Week 3
Test 2	15%	Week 10/11
Coursework	70%	Final 5 weeks

`</tr>`

`</tr>`

`</tr>`

`</table>`

Tables

Wrap each data item in a table data element `<td>`

`<table>`

<td> Test 1 </td>	<td>15%</td>	<td> Week 3 </td>	</tr>
<td> Test 2 </td>	<td>15%</td>	<td> Week 10/11 </td>	</tr>
<td> Coursework </td>	<td>70%</td>	<td> Final 5 weeks </td>	</tr>

`</table>`

Tables

Example

Table example

My example table showing assignment weightings for this course

Test 1	15%	Week 3
Test 2	15%	Week 10/11
Coursework 70% Final 5 weeks		

Tables

To add headings to each column, create a new row ...

```
<table>
<tr> <td> Test 1 </td> <td>15%</td> <td> Week 3 </td> </tr>
<tr> <td> Test 2 </td> <td>15%</td> <td> Week 10/11 </td> </tr>
<tr> <td> Coursework </td> <td>70%</td> <td> Final 5 weeks </td> </tr>
</table>
```

Tables

To add headings to each column, create a new row ...

```
<table>
<tr> <th> Assessment </th> <th> Weighting </th> <th> Date </th> </tr>
<tr> <td> Test 1 </td> <td>15%</td> <td> Week 3 </td> </tr>
<tr> <td> Test 2 </td> <td>15%</td> <td> Week 10/11 </td> </tr>
<tr> <td> Coursework </td> <td>70%</td> <td> Final 5 weeks </td> </tr>
</table>
```

Tables

...use table heading element `<th>` round each heading

`<table>`

```
<tr> <th> Assessment </th> <th> Weighting </th> <th> Date </th> </tr>
<tr> <td> Test 1 </td> <td> 15% </td> <td> Week 3 </td> </tr>
<tr> <td> Test 2 </td> <td> 15% </td> <td> Week 10/11 </td> </tr>
<tr> <td> Coursework </td> <td> 70% </td> <td> Final 5 weeks </td> </tr>
</table>
```

Tables

Example

Table example

My example table showing assignment weightings for this course

Assessment	Weighting	Date
Test 1	15%	Week 3
Test 2	15%	Week 10/11
Coursework	70%	Final 5 weeks

Images and links

Tables and lists



Running in the family

Tonight 9pm BBC One

Hurdles legend Colin Jackson traces his family tree to Jamaica in Who Do You Think You Are?

- Start your own family research
- Video guides to genealogy
- Upload your family snaps
- Gallery: This series' celebrities
- Useful genealogy links

Today

Wednesday 20th September 2006

News

Watch/Listen to BBC News



- Thai general sets 'PM deadline'
- FA to probe bung allegations

News in 33 languages | RSS | What is RSS?

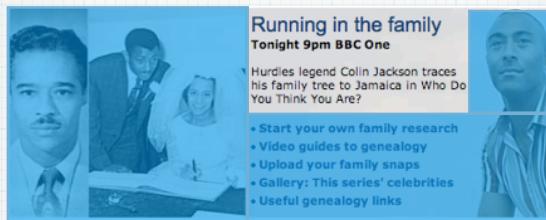
Where I Live

London, Central



Change location

Local weather:



Running in the family

Tonight 9pm BBC One

Hurdles legend Colin Jackson traces his family tree to Jamaica in Who Do You Think You Are?

- Start your own family research
- Video guides to genealogy
- Upload your family snaps
- Gallery: This series' celebrities
- Useful genealogy links

Today

Wednesday 20th September 2006

News

Watch/Listen to BBC News



- Thai general sets 'PM deadline'
- FA to probe bung allegations

News in 33 languages | RSS | What is RSS?

Where I Live

London, Central



Change location

Local weather:

<h1>Running in the family</h1>

<h2>Tonight 9pm BBC One</h2>

<p>Hurdles legend Colin Jackson traces his family tree to Jamaica in Who Do You Think You Are?</p>

Running in the family

Tonight 9pm BBC One

Hurdles legend Colin Jackson traces his family tree to Jamaica in Who Do You Think You Are?

So what about images and links to other pages

The screenshot shows a news article titled "Running in the family" from BBC One. The article features a photo of Colin Jackson and his family. Below the photo, there is a summary: "Hurdles legend Colin Jackson traces his family tree to Jamaica in Who Do You Think You Are?". A sidebar on the right lists several options: "Start your own family research", "Video guides to genealogy", "Upload your family snaps", "Gallery: This series' celebrities", and "Useful genealogy links". At the bottom of the article, there are two tabs: "Today" and "Wednesday 20th September 2006". The "Today" tab is selected. On the left side, there is a "News" section with a thumbnail of a news item about a Thai general and a link to "Watch/Listen to BBC News". On the right side, there is a "Where I Live" section for "London, Central" with a map and a "Change location" button. There is also a "Local weather:" section.

So what about images and links to other pages

This screenshot is identical to the one above, displaying the same news article about Colin Jackson's family tree. It includes the main article content, the sidebar with genealogy links, the "Today" and "Wednesday 20th September 2006" tabs, the "News" section, the "Where I Live" section for London, Central, and the "Local weather:" section.

Tools required to create Images

An image editor

- Simple free software - Paint, Image editor
- Professional expensive packages - Coral Draw, Fireworks
- Lots of other choices

Saving and file formats

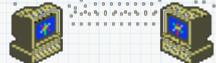
- Choices about how to save the file
- Various image file formats
- What distinguishes them?

image file characteristics

Compression



Animation



Transparency



- Lossy (lose information)
- Lossless (keep everything)

Cost - do patents apply?

- Is it possible that we may have to pay to use it

Saving and file formats

	BMP	GIF	JPEG	PNG
Compression	x	✓	✓	✓
Patents apply	x	x	✓*	x
Animation	x	✓	x	✓
Transparency	x	✓	x	✓
Works in Internet Explorer 7+	✓	✓	✓	✓

* rejected by United States Patent and Trademark Office May 26, 2006

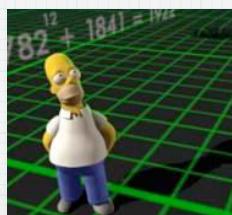
Most popular formats - GIF, JPEG, PNG

- **GIF (graphics interchange format)**
- **Good at compressing limited ranges of colours**
- **Best used for cartoons, logos**



JPEG

- **JPEG (Joint Photographic Experts Group)**
- **Good at compressing fuller ranges of colours**
- **Best used for photos/ images with lots of colours**



PNG - Portable Network Graphics

- **Offers many of the features of GIF and JPEG**



- **Developed to ensure a free graphics format**
- **Problem - poor support in IE versions prior to IE7**

Using images in web pages

- Keep the image and the HTML page in the same location (save to the same place) for the moment

Use the `` tag to point to the image

To change the way a tag behaves when displayed, we need to set the **attributes** of the tag

Example

- Including a banner called `banner.gif`

```

```

- This will include (and display) the image where the `` tag is placed
- the `` tag is an example of an element that doesn't require a separate end tag - called an empty element
- Close the tag with `/>`

Example - `imageexample.html`

```
<html>
<head>
<title>Text with an image</title>
</head>
<body>
Here is an added image

With some text here

</body>
</html>
```

Attributes

- Are always added in this style

```
<tag attribute="value" ..>
```

- Some tags need many attributes separated by at least 1 space

```
<tag attribute="value" attribute="value" ..>
```

- The attributes used by a tag vary

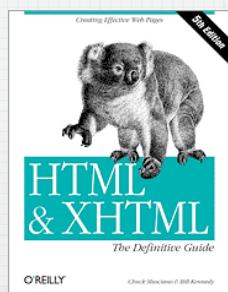
Attributes

- To find them out, use a reference

On-line

http://www.w3schools.com/tags/tag_img.asp

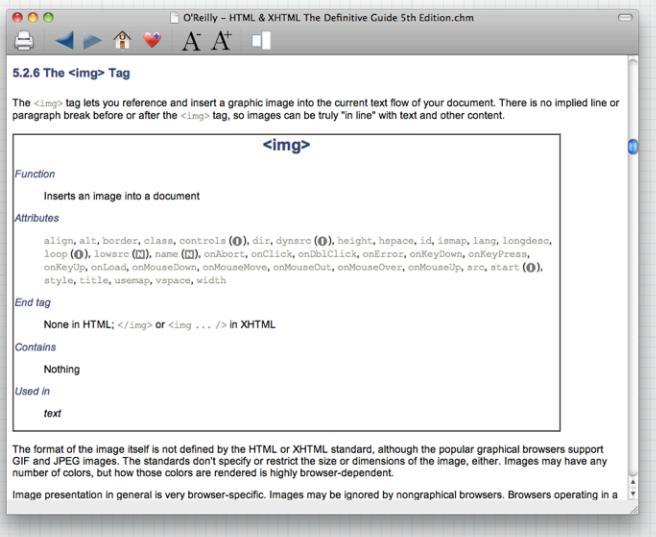
Book



Important point

- No-one remembers all these
- New skill required "i don't know, but I know where to look"!

O'Reilly HTML book, guide to element



Some of the other tag attributes

- alt = "text"

Text displayed if the image cannot be displayed

- border = "value"

Width of the image around the border

- align = "value"

How the image is aligned in the page next to surrounding text - top, bottom, middle, left or right

Imageexample2.html with extra attributes

```
<html>
<head>
<title>128MB flash drive</title>
</head>
<body>
Here is a picture of a flash drive
![picture of drive](memoryusb.jpg)
```

- Note the effect of changing the border number (to 0, 1, 2) and removing the image from the folder

Links

- A key part of Hypertext documents
- Links to other documents
- Could be links to our own pages or links to other peoples documents
- Normally text, which when clicked, redirects the user to another page

Using links in web pages

- Decide on text that will be the link

You may wish to look at
the **next page** for
further information.

Using links in web pages

- Decide on text that will be the link

You may wish to look at
the **next page** for
further information.

Using links in web pages

- Use the anchor tag `<a>` to wrap the link

You may wish to look at
the `<a>next page` for
further information.

...but how do we indicate where to link to?

- Use the href attribute inside the `<a>` tag

You may wish to look at
the `next page` for
further information.

- Will appear on the page like this

You may wish to look at
the `next page` for
further information.

Notes

- We can link to "our" pages i.e. pages in the same location just by specifying the name of the file
- To link to "outside" files use `http://` before the web address

You may wish to look at
the `next` page for further
information. Alternatively you can check the
`BBC web site`

Notes

Often Web addresses are called URLs

- Uniform Resource Locators

As with the `img` tag, other attributes are available.

Tables - Attributes

Recap

Table example

My example table showing assignment weightings for this course

Assessment	Weighting	Date
Test 1	15%	Week 3
Test 2	15%	Week 10/11
Coursework	70%	Final 5 weeks

Tables - Attributes

Row	Column	Column
Test 1	15%	Week 3
Test 2	15%	Week 10/11
Coursework	70%	Final 5 weeks

Tables

Wrap the whole table in a `<table>` element

`<table>`

Test 1	15%	Week 3
Test 2	15%	Week 10/11
Coursework	70%	Final 5 weeks

`</table>`

Tables

Wrap each whole row in a table row element `<tr>`

`<table>`

Test 1	15%	Week 3
Test 2	15%	Week 10/11
Coursework	70%	Final 5 weeks

`</tr>`
`</tr>`
`</tr>`

`</table>`

Tables

Wrap each data item in a table data element <td>

<table>

Test 1	15%	Week 3
Test 2	15%	Week 10/11
Coursework	70%	Final 5 weeks

</tr>

</tr>

</tr>

</table>

Tables

Wrap each data item in a table data element <td>

<table>

<td>	Test 1	</td> <td>15%</td> <td>	Week 3	</td> </tr>
<td>	Test 2	</td> <td>15%</td> <td>	Week 10/11	</td> </tr>
<td>	Coursework	</td> <td>70%</td> <td>	Final 5 weeks	</td> </tr>

</table>

Tables

Example

Table example

My example table showing assignment weightings for this course

Test 1 15% Week 3

Test 2 15% Week 10/11

Coursework 70% Final 5 weeks

Tables

To add headings to each column, create a new row ...

```
<table>
```

```
<tr> <td> Test 1 </td> <td>15%</td> <td> Week 3 </td> </tr>
<tr> <td> Test 2 </td> <td>15%</td> <td> Week 10/11 </td> </tr>
<tr> <td> Coursework </td> <td>70%</td> <td> Final 5 weeks </td> </tr>
```

```
</table>
```

Tables

To add headings to each column, create a new row ...

```
<table>
```

```
<tr> <th> Assessment </th> <th> Weighting </th> <th> Date </th> </tr>
<tr> <td> Test 1 </td> <td>15%</td> <td> Week 3 </td> </tr>
<tr> <td> Test 2 </td> <td>15%</td> <td> Week 10/11 </td> </tr>
<tr> <td> Coursework </td> <td>70%</td> <td> Final 5 weeks </td> </tr>
```

```
</table>
```

Tables

...use table heading element **<th>** round each heading

```
<table>
```

```
<tr> <th> Assessment </th> <th> Weighting </th> <th> Date </th> </tr>
<tr> <td> Test 1 </td> <td>15%</td> <td> Week 3 </td> </tr>
<tr> <td> Test 2 </td> <td>15%</td> <td> Week 10/11 </td> </tr>
<tr> <td> Coursework </td> <td>70%</td> <td> Final 5 weeks </td> </tr>
```

```
</table>
```

Tables

Example

Table example

My example table showing assignment weightings for this course

Assessment	Weighting	Date
Test 1	15%	Week 3
Test 2	15%	Week 10/11
Coursework	70%	Final 5 weeks

Tables - Attributes

Use attributes to change the way the table is displayed

<... width = "percentage"> To change a table or column width

<... border = "value"> To see a border

Tables

To change the width of the whole table

<table>

```
<tr> <th> Assessment </th> <th> Weighting </th> <th> Date </th> </tr>
<tr> <td> Test 1 </td> <td> 15% </td> <td> Week 3 </td> </tr>
<tr> <td> Test 2 </td> <td> 15% </td> <td> Week 10/11 </td> </tr>
<tr> <td> Coursework </td> <td> 70% </td> <td> Final 5 weeks </td> </tr>
</table>
```

Tables

To change the width of the whole table

```
<table width="65%>
<tr> <th> Assessment </th> <th> Weighting </th> <th> Date </th> </tr>
<tr> <td> Test 1 </td> <td> 15% </td> <td> Week 3 </td> </tr>
<tr> <td> Test 2 </td> <td> 15% </td> <td> Week 10/11 </td> </tr>
<tr> <td> Coursework </td> <td> 70% </td> <td> Final 5 weeks </td> </tr>
</table>
```

Tables

Table example

My example table showing assignment weightings for this course

Assessment	Weighting	Date
Test 1	15%	Week 3
Test 2	15%	Week 10/11
Coursework	70%	Final 5 weeks

Table example

↔ 65% of browser width

My example table showing assignment weightings for this course

Assessment	Weighting	Date
Test 1	15%	Week 3
Test 2	15%	Week 10/11
Coursework	70%	Final 5 weeks

Tables

To change the width of individual columns

```
<table width="65%>
<tr> <th> Assessment </th> <th> Weighting </th> <th> Date </th> </tr>
<tr> <td> Test 1 </td> <td> 15% </td> <td> Week 3 </td> </tr>
<tr> <td> Test 2 </td> <td> 15% </td> <td> Week 10/11 </td> </tr>
<tr> <td> Coursework </td> <td> 70% </td> <td> Final 5 weeks </td> </tr>
</table>
```

Tables

To change the width of individual columns

```
<table width = "65%">  
<tr> <th width = "50%"> Assessment </th> <th> Weighting </th>  
<tr> <td> Test 1 </td> <td> 15% </td> <td> Week 3 </td> </tr>  
<tr> <td> Test 2 </td> <td> 15% </td> <td> Week 10/11 </td> </tr>  
<tr> <td> Coursework </td> <td> 70% </td> <td> Final 5 weeks </td> </tr>  
</table>
```

Tables

To change the width of individual columns

```
<table width = "65%">  
<tr> <th width = "50%"> Assessment </th> <th width = "20%"> Weighting </th> ...  
<tr> <td> Test 1 </td> <td> 15% </td> <td> Week 3 </td> </tr>  
<tr> <td> Test 2 </td> <td> 15% </td> <td> Week 10/11 </td> </tr>  
<tr> <td> Coursework </td> <td> 70% </td> <td> Final 5 weeks </td> </tr>  
</table>
```

Tables

To add a border

```
<table width = "65%">  
<tr> <th width = "50%"> Assessment </th> <th width = "20%"> Weighting </th> ...  
<tr> <td> Test 1 </td> <td> 15% </td> <td> Week 3 </td> </tr>  
<tr> <td> Test 2 </td> <td> 15% </td> <td> Week 10/11 </td> </tr>  
<tr> <td> Coursework </td> <td> 70% </td> <td> Final 5 weeks </td> </tr>  
</table>
```

Tables

To add a border

```
<table width="65%" border="1pt">  
<tr> <th width="50%"> Assessment </th> <th width="20%"> Weighting </th> ...  
<tr> <td> Test 1 </td> <td> 15% </td> <td> Week 3 </td> </tr>  
<tr> <td> Test 2 </td> <td> 15% </td> <td> Week 10/11 </td> </tr>  
<tr> <td> Coursework </td> <td> 70% </td> <td> Final 5 weeks </td> </tr>  
</table>
```

Tables

Table example

My example table showing assignment weightings for this course

Assessment	Weighting	Date
Test 1	15%	Week 3
Test 2	15%	Week 10/11
Coursework	70%	Final 5 weeks

Bullet point lists

Unordered list (no order or number)

- Here is an example of two points
- Bullet points on the left

Bullet point lists

Ordered list (with number)

1. Here is an example of two points
2. Bullet points on the left

Bullet point lists

Ordered list (with letters)

- A. Here is an example of two points
- B. Bullet points on the left

Bullet point lists

Ordered list (with alternatives)

- i. Here is an example of two points
- ii. Bullet points on the left

Unordered lists

Mark up the whole unordered list

- use `` and ``

```
<ul>
Homer Simpson
Bart Simpson
Lisa Simpson
</ul>
```

Unordered lists

Now mark up each list item

- use `` and ``

```
<ul>
Homer Simpson
Bart Simpson
Lisa Simpson
</ul>
```

Unordered lists

Now mark up each list item

- use `` and ``

```
<ul>
<li>Homer Simpson</li>
Bart Simpson
Lisa Simpson
</ul>
```

Unordered lists

Now mark up each list item

- use `` and ``

```
<ul>
<li>Homer Simpson</li>
<li>Bart Simpson</li>
Lisa Simpson
</ul>
```

Unordered lists

Now mark up each list item

- use `` and ``

```
<ul>
<li>Homer Simpson</li>
<li>Bart Simpson</li>
<li>Lisa Simpson</li>
</ul>
```

Unordered lists

Will give:

- Homer Simpson
- Bart Simpson
- Lisa Simpson

Ordered lists

Change the `` elements for ordered list elements `` and ``

```
<ol>
<li>Homer Simpson</li>
<li>Bart Simpson</li>
<li>Lisa Simpson</li>
</ol>
```

Ordered lists

Will give:

1. Homer Simpson
2. Bart Simpson
3. Lisa Simpson

Lots of options with Ordered lists

- Can change the starting number or the type of numbering used
- Use the `start` and `type` attributes in the `` tag

Ordered lists with attributes

```
<ol start = "3">  
<li>Homer Simpson</li>  
<li>Bart Simpson</li>  
<li>Lisa Simpson</li>  
</ol>
```

Will give:

- 3. Homer Simpson
- 4. Bart Simpson
- 5. Lisa Simpson

Ordered lists with attributes

```
<ol type = "A">  
<li>Homer Simpson</li>  
<li>Bart Simpson</li>  
<li>Lisa Simpson</li>  
</ol>
```

Will give:

- A. Homer Simpson
- B. Bart Simpson
- C. Lisa Simpson

Ordered lists type values

- type= “ can be any of the following

type values as follows:

- A Capital Letters
- a Lower case letters
- I Capital Roman Numerals
- i Lowercase Roman Numerals
- 1 Arabic Numerals (default)

Ordered lists with attributes

```
<ol type = "i">  
<li>Homer Simpson</li>  
<li>Bart Simpson</li>  
<li>Lisa Simpson</li>  
</ol>
```

Will give:

- i. Homer Simpson
- ii. Bart Simpson
- iii. Lisa Simpson

Ordered lists with attributes

```
<ol type = "a" start="5">  
<li>Homer Simpson</li>  
<li>Bart Simpson</li>  
<li>Lisa Simpson</li>  
</ol>
```

Will give:

- e. Homer Simpson
- f. Bart Simpson
- g. Lisa Simpson