



Design your own Web page

In last month's computer class, Jane Dorner gave a step-by-step guide to creating a dummy home page on the Web. This month, she talks about the mechanics of getting on line for real

Last month we designed a pair of linked pages using the HTML editor Hotmetal and the Web browser I-view from the cover disc. Both are supplied again this month with the graphics editor Paint Shop Pro. Our step-by-step guide took you through:

- Understanding HTML.
- How to lay out a home page in Hotmetal.
- Testing the layout with a browser program.
- Putting in spacing, emphasis and rules.
- Adding graphics with the Image button
- Creating a second page (called an inside page).
- Linking the two pages together with the Anchor tag.

This month we're going to find out how to:

- Jump to different parts of one page.
- Create bullets and indents.
- Use your own graphics.
- Put an e-mail contact address on your site.
- Link to other pages on the Internet.
- Find an Internet provider and mount your pages on the Web.

If you missed last month's class, you will need to install the computer programs from our CD onto your hard disk. In the C:\HOMEPAGE directory you'll find HTM files of the two screens (right) which were produced in last month's class.

We have hidden the images in Hotmetal so that more of the screen is visible. To do this yourself, move up to the menu bar and first click on View/Hide Inline Images.

Our screenshots will hide the images from now on so that you can see how the coding beneath them works. You will find this more useful when you come to look at other people's pages.



INDEX.HTM in Hotmetal (left) and I-view (below).



Competition

To encourage you to try out the techniques which Jane Dorner outlines in this computer class, we've got some great prizes to give away, courtesy of Microsoft.

For the winner, there's a copy of Microsoft Office for Windows 95 and for four runners-up we have copies of Microsoft Word for Windows 95. All the prizes will be accompanied by Microsoft's Internet Assistant software, which ties in specifically with Microsoft's software to make Web page creation a breeze.

All you have to do is send us a copy of a home page (or pages) created with Hotmetal.

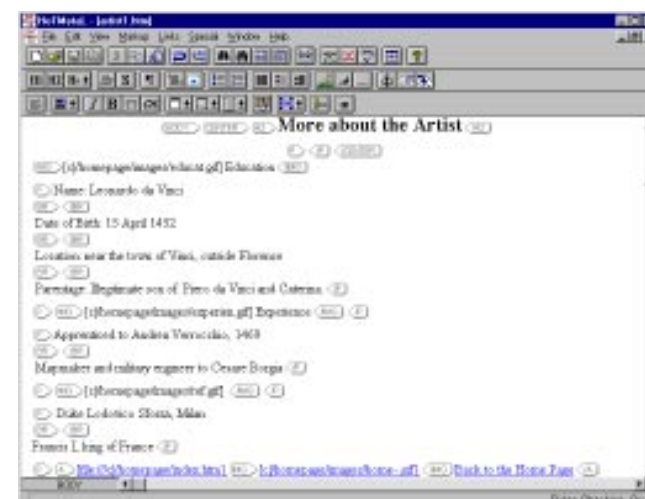
We will judge entries by using the I-view browser. There are only two rules:

1 Your home page (or pages) should not exceed 250Kb in size (including all graphics).

2 At least one mention should be made of a Microsoft product on your page(s).

Entries (on a single floppy disk) should be addressed to Computer Class Competition, What PC?, 32-34 Broadwick Street, London, W1A 2HG, to arrive before 31 July 1996.

Prizes will be awarded to the most interesting and creative pages, not to the most technically complex. Content and style are more important than sophistication.



Above: ARTIST.HTM in Hotmetal. Below: ARTIST.HTM in I-view.



First things first

Before you start to design Web pages, you should think about the overall plan of the whole site. It's easy enough to link two pages, but you will find that structuring up to a hundred of them is complex. This is because hypertext pages are not sequential, but dynamic. There are several possible paths through a Web site (or there should be) and you can never be sure which route a reader will take. This means that you need to be very clear about where you want your visitors to go next, how they get back again, and what features you are going to have running through all the pages (eg, a Back Home button). Above all, you should make sure that your visitors don't get lost down dead ends.

The more you think about the whole site at the beginning

of the design, the easier you will find it to be flexible later. So you should make it a priority to draw a route map – you could think of this as a tree structure similar to Dos with its directories or folders.

Good design leads to ease of navigation through your pages, and that's not easy to achieve. Above all, be consistent: position headings similarly on each page and if an item is called a gizmo in one place, don't call it a whatnot on another. Think about how readers will step through your pages and what happens when they follow one of the hot-links: so if you make choice A here, what are the ramifications are there for choice B? Web writing isn't static – that's the beauty of it. If you get something wrong, change your mind or the information

How to install the software

Although all the software you need to carry out your Web page design is on the CD, it cannot be installed automatically, so here's how to install it yourself:

Windows 3.1 users

- Start File Manager.
- Highlight C:\ in the left-hand pane of File Manager.
- Choose File, Create Directory and call it Homepage.
- Highlight the new directory called Homepage.
- Choose File, Create Directory and call it Images.
- Highlight the new directory called Homepage.
- Choose File, Create Directory and call it Iview.

Windows 95 users

- Start Windows Explorer.
- Highlight (C:) in the left-hand pane of Explorer.
- Choose File, New, Folder and call it Homepage.
- Highlight the new directory called Homepage.
- Choose File, New, Folder and call it Images.
- Highlight the new directory called Homepage.
- Choose File, New, Folder and call it Iview.

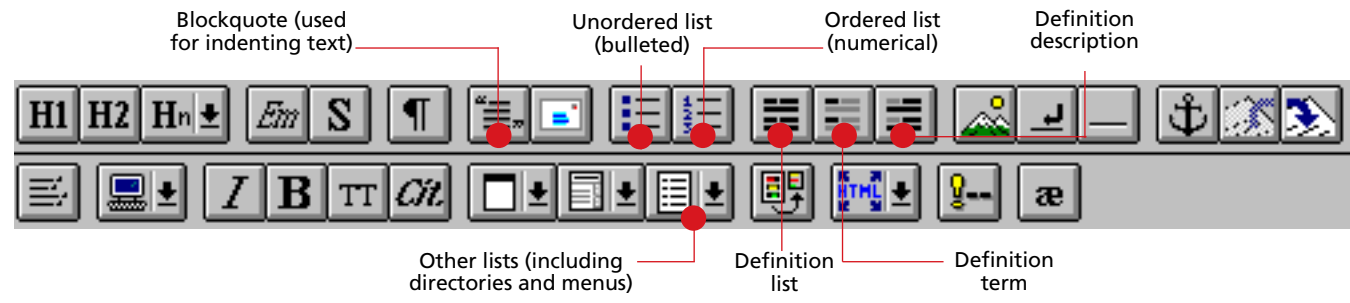
All users

The CD contains exactly the same directories (folders) as you have just created on your hard disk. The main one is called Homepage, and inside this are two others called Images and Iview.

● Use Windows File Manager or Explorer to drag the entire contents of Homepage\Images from the CD (usually designated as D:) into Homepage\Images on drive C:

● Use File Manager or Explorer to drag the entire contents of Homepage\Iview from the CD into \Homepage\Iview on drive C:

● To install Hotmetal, double-click on the file called Setup.exe in the directory \Homepage\HM2 and follow the instructions on screen.



The icons used for lists and indents.

updates, you just alter the Web page. But writing dynamicaly requires a new way of thinking – and the keys are logic and consistency.

Remember that people visit home pages to:

- read text
- view images
- interact with other links

So make sure you offer something for everyone.

Hands on

There are five hands-on sections: the first two can be done even if you don't have an Internet account: the others only make sense if you are going to put your pages on the World Wide Web.

The instructions are no longer step-by-step but will assume some familiarity with the programs. Remember that the HTML tags in Hotmetal appear in print within angled brackets.

Section 1: lists and indents

A long page with links to different parts of the page would probably start with a list. The viewer would jump from the list to the appropriate part of the page and then back again. These tags are associated with making lists:

 ordered list. Items in this list are numbered automatically. unordered list. Items in this list start with a list mark such as a bullet. Both are followed by for List Item.

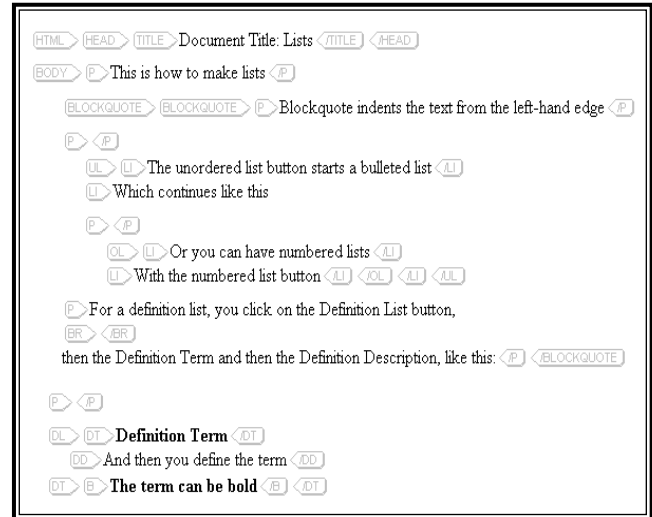
<DIR> unordered directory lists for short items.

<MENU> menu list for items no longer than one line.

<DL> list of definitions consisting of head information <DT> and then an indented definition <DD>.

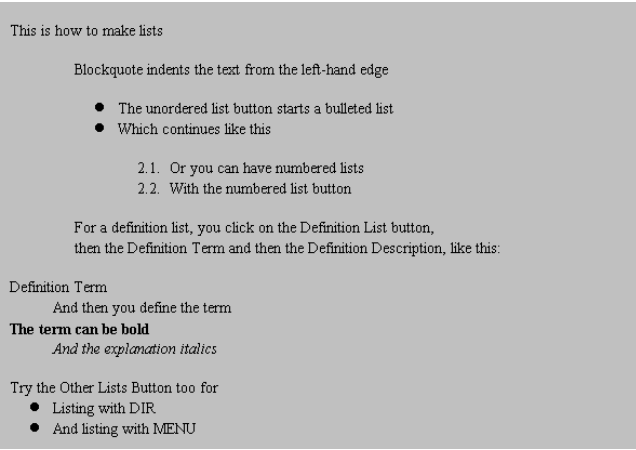
<BLOCKQUOTE> this indents text – you can use the command more than once to move blocks of text further to the right.

Experiment with these buttons yourself to create the Hotmetal file below. Remember that you must move the cursor past the tags that turn off the previous instruction (as we did before) – but don't worry, Hotmetal won't let you do anything incorrect but will remain inert until you have the cursor point in the correct place.



Above: Tags for nested lists.

Here's what the new file should look like in the browser.



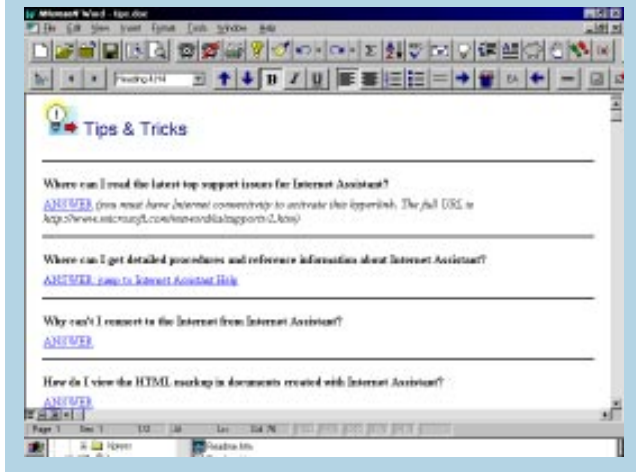
Above: Lists and indents.

Other ways of creating pages

HotmetaL and I-view are useful starting points, but there are many other excellent tools for creating Web pages. Netscape Navigator Gold is very user-friendly and has the advantage of combining browser, HTML editor and Mail and News services in one package.

For those who use Word for Windows, there is very little to beat Microsoft's Internet Explorer used in conjunction with the Word add-on Internet Assistant. The real advantage of Internet Assistant is that you can create all your documentation without leaving Word and using all the macros, autotext entries and so on that you are used to. Help is good and a plus is that you can switch easily from uncluttered page views to an inspection of the source code. (See Internet Assistant's Tip Page below.)

Compuserve has a Home Page Wizard and a Publishing Wizard that takes you through HTML coding without getting into the mechanics of it. It is very simple, if somewhat limited. To create good pages, you need to understand the principles.



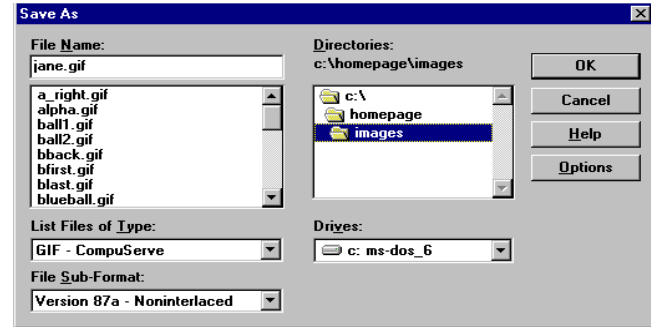
Section 2: using your own graphics

In the home page we created last month, we used a picture of Mona Lisa. But how can you change that picture to one of your-self? Or use the company logo or a picture of a product? This is easy if you have a colour scanner. If not, you may need the services of a bureau which can convert colour photos into PC-compatible picture files.

Ask the bureau to convert the pictures into .PCX or .TIF files. These are recognised by most PC graphics packages. Specify a minimum of 256 colours and a screen resolution of 600x800 (dots per inch).

Remember, though, that Web browsers only recognise two types of image file, those with the three-letter extensions .GIF and .JPG (see glossary, right). These are universally recognised on the Internet. Generally speaking, the .GIF files are larger, more detailed files and .JPGs are smaller files that will load reasonably quickly (under about 18Kb works well). In Paint Shop Pro, you can save your edited file in either of these two formats. You will probably want to crop the pictures yourself. The steps are these:

- Load Paint Shop Pro.
- Open the scanned image file of your choice.
- Using the cropping tool in the Select Toolbox (a broken square third down on the left), outline the part of the picture you wish to use (eg, the head only).
- Use Image/Crop to cut down the picture to the selected area.
- Move the cursor to the Menu bar and click on File and then Save As.
- Select 'GIF – Compuserve' or 'JPG – JPEG – JFIF Compliant'.
- Select the directory (eg, c:\homepage\images) and give the file a name.
- Click OK.



Saving a file in GIF format.

At this point you can stop the computer class if you have no interest in going on line.

You could distribute your Web pages on disk using I-view as the browser. Read the registration details if you wish to do this.

Section 3: getting your site ready to upload

To complete the class, you will need to sign up with an Internet provider – if you have not already done so. Before uploading your pages make yourself available by e-mail and create links to other URLs (sites on the World Wide Web). Putting in a link that will send an e-mail message back to you is far easier than it sounds. Just do this:

- In Hometal, load a new template and enter the sample text: Mailing back from a Web page.
- Click on the Anchor icon
- In the Edit URL box, type the word mailto as the scheme and your full e-mail address (eg, fredblogs@anywhere.com) as the path.
- Click OK and add the words Click here to send me an email (blue).
- Save as mail.htm.

You cannot test this in I-view as it is not an on-line browser. Once you have an Internet provider, test mail.htm in the brows

Glossary

Browser: Software used to display Web pages on the internet.

Bookmark: A record of sites marked by the user as of interest for further visits.

Cyberspace: A fairly meaningless bit of jargon referring to the 'virtual world' used in computer communication. You can usually substitute 'Internet' for 'Cyberspace'.

Digital: Transformation of all materials (works, performances and productions) into numerical data capable of being read and transmitted by a computer.

Electronic publishing: Electronic publishing provides material that is only available for reading on a screen. Web pages count as publishing because they make materials available to the public. They are, therefore, bound by all the conventional rules of publishing (for example, libel laws and so on).

GIF: Graphics Interchange Format, one of the standard formats for transferring graphics on the Web.

Home Page: A 'contents' page leading to other pages in a Web site.

HTML: Hypertext Markup Language, the basic code in which Web documents are written.

HTTP: Hypertext Transfer Protocol, the way in which Web pages are transferred between servers and clients.

Hypertext: Chunks of information connected by links which are activated by hot spots.

Internet: A super-network of computers spanning 73 countries, several thousand networks and millions of users, all of whom are potential customers for products with textual input.

JPEG: Joint Photographic Experts Group – this group developed an image compression standard for pictures displayed on the Internet (names of such files end in JPG).

Link: Coding that joins two or more pages and allows the user to jump between them.

Net: Another term to refer to the Internet.

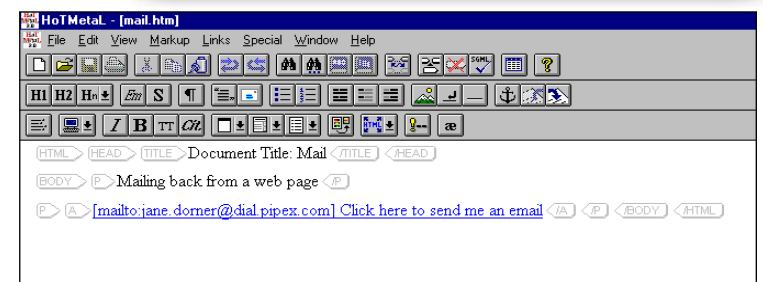
On line: Equipment, devices and systems that are in direct communication with a computer (through telephone networks or local area networks).

Transmission: The electronic counterpart of distribution – making works available to the public by electronic means.

URL: Uniform Resource Locator – basically the address of a Web page.

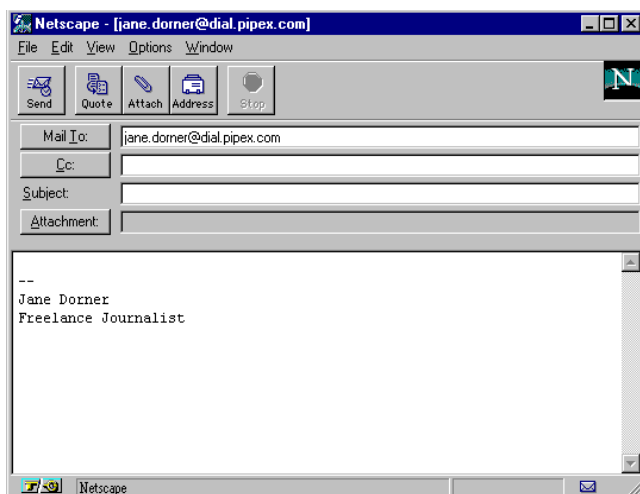
Web site: A collection of pages about an individual, society or commercial organisation, all dependent on the home page.

World Wide Web: A section of the Internet connecting millions of pages publicising goods, services and people.



Above: Hotmetal with the mailto link.

er that comes as part of the suite of software. When you activate 'Click here to send me an email' a new mail message form will pop up. Visitors will be able to mail you directly from your Web page once your material is on line. You should have this facility on your main pages, certainly on those advertising a product or service.



Above: New mail form attached to a Web page.

Section 4: links to other URLs

You can try out a live link to the outside world with the Mona Lisa Home Page you created last month. It can't be used unless you go on line. Live links are addresses or URLs to other sites in any country (*it is important to transcribe every single character with absolute accuracy*). Follow these steps:

- Load the artist.htm we created last month into Hotmetal and hide the inline image as before.
- Place the cursor just after the </HR> tag.
- Click on the Anchor button and type into the Edit URL boxes:

Scheme: http:

Host: www.paris.org.

Path: /Musees/Louvre/

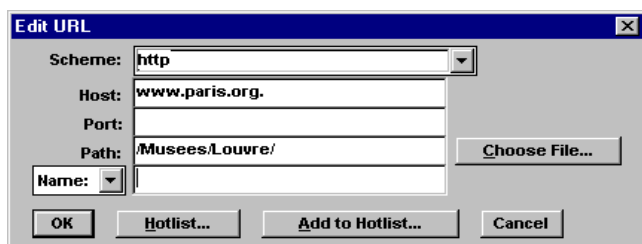
- Click OK.

● At the cursor, type Visit the Louvre now (blue). This line will be added to your page:

```
<P><A HREF="http://www.paris.org./Musees/Louvre/">
Visit the Louvre now</A></P>
```

- Save your work

When you go on line this link will activate and take you straight to the Web site of the Louvre in Paris.



Above: Edit URL box.

Below: Mona Lisa home page with Internet link added.

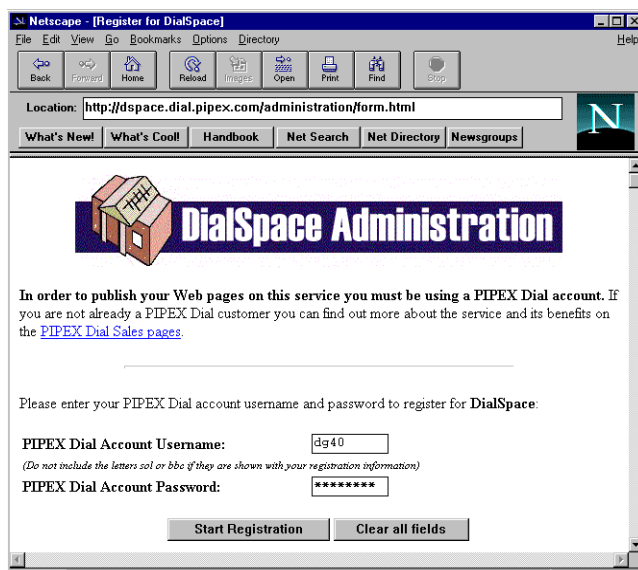


Above: Link to the Louvre.

You can follow this procedure to add hot-links to any part of your own document. Use such linking sparingly if you want people to return to your own site. You may lose their attention.

Section 5: uploading your pages onto the Web

Choose your Internet provider: our chart on the next page of this article shows some of those providers who include free Web space as part of the subscription. Our June feature on Internet





Some key service providers

Provider	Tel	E-mail	URLhttp://www.	Start-up	Mthly	Web space
Cityscape	01223 566950	sales@cityscape.co.uk	cityscape.co.uk	£50	£15	1Mb free
Compuserve	0800 289378	70006.101@compuserve.com	compuserve.com		£6.50 plus usage	1Mb free
Demon	0181 371 1234	sales@demon.net	demon.co.uk	£12.50	£10	5Mb £25 a month
Direct Connection	0181 297 2200	helpdesk@dircon.co.uk	dircon.co.uk	£7.50	£10	0.5 Mb free
Poptel	0171 249 2948	info@geo2.poptel.org.uk	poptel.org.uk	£25	£10	0.5Mb £10 a month
Pipex Dial	01223 250100	sales@dial.pipex.com	dial.pipex.com	£50	£15	1Mb free
U-Net	01925 633144	hi@u-net.com	u-net.com	£12	£12	0.5Mb £12 a month

Choosing a modem and a service provider

Many new computers are fitted with a fax modem card and this will be suitable for first forays into the Internet. The modem goes straight into your phone outlet and your telephone plugs into the modem. If your PC is not kitted up with a modem, buy one that runs at 28,800 bits per second (V34bis) – internal or external. Speed matters because getting pictures, sound or film clips over the wires can otherwise be a

slow and costly process. A V34 modem will halve the cost of connecting with a standard 14,400bps modem.

You must also subscribe to a server which will connect you to the networks. Choose a provider that offers some free Web space. Half a megabyte is quite adequate – enough for roughly 30 short linked pages and 30 small pictures. In comparing costs, bear in mind that Compuserve,

although it looks the cheapest, can start getting expensive if you are on line for more than the minimum five hours allowed for in the fee of £6.50. Similarly, Demon looks good value for unlimited Internet access, but expensive if you want a home page. However, Demon is happy for you to sub-let Web space to friends, as long as one person is responsible for maintaining the whole site.

Service Providers gave a more comprehensive list. Each provider has a slightly different procedure for transferring pages from your computer to their own Web server. This is called uploading and is done with File Transfer Protocol, or FTP for short. We will take you through the process using Pipex Dial as the supplier.

- Test all your pages and all your links before transfer.
- Next you must register for your Web space in order to get your own URL, so connect to Pipex Dial.
- Register for DialSpace.
- In the dialog box enter details of your account and password, as shown at the bottom of the preceding page in this article.
- Click on Start Registration. This will take you on to a request screen for personal details which may be updated at a later stage

Ten tips for good Web pages

1. Ask yourself what you are trying to do. Do you want to entertain, provide information or graphics, establish some unique service, or give your CV? Tell visitors in the first few lines of your home page.
2. Make sure you have text alternatives for all the graphics, especially if your site is mainly informational.
3. Don't make the user guess where to click. Be careful of bullets that can be mistaken for buttons or of using graphic elements for links. It is annoying for the user to guess what to do.
4. Make your site easy to navigate. Think carefully how all your different elements are linked, whether a visitor can tell what they have and have not seen. If you are trying to attract customers, is it easy for them to find what they are looking for?
5. Cultivate simplicity; use technical cleverness to enhance your message, but not overpower it.
6. Think about repeat visits. Have you got a good source of reference material in your area of interest? If so, think how people will know what is new since their last visit.
7. Use colour sparingly. Coloured backgrounds seem appealing, but are distracting, making text hard to read.
8. Make sure your pages look good when they are printed out. They may get circulated in printed form.
9. Make sure an e-mail contact address has been included on key pages.
10. Put the date of the last revision at the foot of each page.

if you change your mind. Getting a good page description is important as the search engine is initially built on what you put here. Make sure keywords about yourself are here, but keep the description short.

Personal details box.

- Follow the on-screen instructions and make a note of the URL you are given. First time round it will be an impersonal name such as 'http://dialspace.dial.pipex.com/town/plaza/dg40/' but you can change it to something slightly easier to remember such as 'http://dialspace.dial.pipex.com/jane.dorner/'. (Don't forget that every slash and dot is vital.)
 - Return to the Starting Points Menu.
 - Print out the upload instructions under 'Upload your Web page(s) to DialSpace' (there are 2 versions).
 - Stay on line and follow the printed instructions carefully after starting the FTP software supplied by your service provider.
 - Click on Connect and continue to follow the guide, copying the files from the directory containing your pages to the directory DialSpace has allotted you.
 - Return to Netscape.
 - In the Open Location bar, type your own URL and press Return.
- Your home page should appear and you are now ready to test whether all your live links work. That's all there is to it. Of course there are many refinements, but you can pick these up as you go along.