Homepages for beginners

Acrobat Reader: How to ...

Menu View:

CTRL+0 = Fit in Window
CTRL+1 = Actual size
CTRL+2 = Fit width

You can set SINGLE PAGE, CONTINUOUS VIEW or CONTINUOUS FACING

.. try them out and you will see the differences.

Navigation

ARROW LEFT/RIGHT: forward/backward one page

ALT+ARROW LEFT/RIGHT: same as in a browser: forward/back

CTRL++ zooms in AND CTRL +- zooms out

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6 Hello...

Hello

Welcome to "Web Pages for Beginners". Do you want to put your own electronic business card on the world wide web ? Or make your own home page ? Come on! It's fun and not difficult.

First let me tell you something about the world wide web, and recommend the right service provider for your aims. We'll also talk about offers and prices.

Then you'll learn exactly how to produce your own homepage and the additional programs you will need. I'll show you how to insert pictures and cross references (so-called hyperlinks) in your documents. You'll learn how to link pages together and easily create navigation options with internal anchors. Of course, I've got one or two tricks in store for you as well. But the important question for you is: How do I publish the pages? Is it hard? Well, it's not exactly child's play. But don't worry, in the last few months I've done a lot of research and have registered myself with all sorts of service providers for you. Using examples from T-Online, AOL and CompuServe I will introduce you calmly to everything. Together we'll download the web sites off the server, so to speak! Perhaps you're short of money at the moment? I can even help you here. In this booklet I'll tell you all you need to know about free internet access and free programs. And I'll also show you how to make your own homepage without paying a penny!

Fear not...

Even if you don't know so much about computers! I'll use plain English, no technical jargon -- well first plain English, then just a little jargon.

But you should at least have solid knowledge of Windows. If you have some gaps here, I can recommend the booklet "Beginners Windows" or a night school course! At best both!

The author

Johann-Christian Hanke -- I'm a young man aged 31-32, who sits in front of a mammoth technical mountain day in day out and has already gone four-eyed. Meanwhile this computer junkie beavers away as a freelance writer of text books and magazine articles. My education...computer science. Journalism? No way! I have an MA in English and German language and literature.

Up to now I've had books about Word, Excel, Windows, MS Office, StarOffice and Outlook published.

I particularly enjoy writing for Michael Maardt and his friendly publishing house in Denmark. For KnowWare I've written the booklets "Word for Students" (now in its second edition) and "All you need to know about the home computer".

Best wishes Johann-Christian Hanke!

Internet and the world wide web - a short overview

Who would have thought it. The internet is really old hat. At least its roots go back to the 1960s.

Of course the internet isn't really a hat, it's a child, a child of the Cold War. It was invented at the behest of the American military, who from the mid-sixties started work on a data network which could withstand even an atom blast. Put plainly-even if most connections fail, the information still had to reach it's destination in one piece.

So scientists developed a transfer process, which separates computer data into tiny packets which go on their way independently and join up again when they arrive! How about that? Bon voyage!

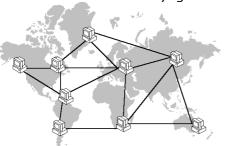


Figure 1: Computers in the Internet, schematic view

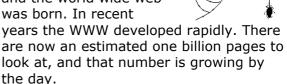
Your electronic letter – for the sake of an example- is divided up into fragments, which often travel by different paths to their destination. One fragment "journeys" by satellite or special global cable via London and America to Spain, another fragment circles the globe three times to arrive intact at its destination. It all depends on which connections are free at the time. This highly refined transfer process is called TCP/IP.

The internet is therefore a giant decentralised network spanning the world. It is much more flexible, faster and cheaper than the telephone network for example. It is owned by no-one and works without a central administration.

But here's the rub: many people confuse the internet with the world wide web. You won't be one of them after today! For the so-called word wide web is not the same as the internet, it is in fact just a part of the internet. Admittedly, it is a relatively new and the most popular part of it. The world wide web (WWW or 3W) was founded in 1989/90 by particle physicists, led by information scientist Tim Berners-Lee. The scientists wanted to exchange their research findings with each other faster and graphically using pictures and sound. Until then that had not been possible with the internet!

Until then you had to use cryptic commands and could only send dry text messages.

But after 1990/91 the colourful click-able pages, known commonly as homepages arrived and the world wide web was born. In recent



In summary a short overview of selected development stages in the net follows. We will take a more detailed look at the WWW in the following pages.

in the following pages.		
1969, Foundation of the ARPANET (Advanced Research Projects Agency- NET)	4 universities connected their giant computer systems together at the request of the US defence ministry.	
1971	First email transfer experiments (electronic post)	
1973	The first European main- frames join the net	
1985	2.000 computers are connected world-wide	
BITNET, NSFNET created	Together with ARPANET they grow together to form the INTERNET	
1990/91	Tim Berners-Lee invents the world wide web at a Swiss particle research centre in CERN.	
1992	1 million computers are connected, in the main at universities.	
1994	The internet turns commercial. The floodgates open. More and more people set up their own homepage.	

Basic components of the World Wide Web

To sum up: the Internet is not such old hat after all, but a giant network of interconnected computers. The world wide web is just a small part of it. The WWW was developed in Geneva predominately by Tim Berners-Lee.

First we should mention the so-called domain name system. Every computer, which is connected to the Internet long-term, has a unique world-wide address. This is the so-called IP-Address, which looks like this example:

127.147.5.49

These addresses are administered by a central site in California. OK. But as noone can remember these strange numbers, the domain name system was invented in the 80s. This means that computers are given symbolic names, for example

http://www.knowware.dk

More about HTTP soon, WWW stands for world wide web, KnowWare is the name of the computer, dk is the country tag for Denmark. *uk* would be the country tag for the United Kingdom, a page ending in *com* betrays its commercial character , *edu* means educational establishment etc. Special internet computers, so-called domain name servers, are responsible for turning this symbolic name in one of these cryptic addresses. They do it all by themselves!

But back to the computers, which are directly connected to the Web. These computers will be termed web-servers, the servant in the net, if you like. The web pages are on this computer. But you access these pages sitting at your own computer. In this instance your computer is called a web-client, as it is served by the web-server.

On the other hand, a program is installed on your (client) computer which allows you to view the web pages. This is the so called browser. Some well known examples of browsers are Opera, Netscape Navigator or Internet Explorer. The messenger which takes the pages from the server to the client is all that's missing now. This messenger is called HTTP.

HTTP stands for **h**yper**t**ext **t**ransfer **p**rotocol, a process for "hypertext transfer". What does hypertext mean? It means that the web pages can be linked together by the so-called cross references, hyperlinks or graphics.

Hyperlinks? Of course! On my web page there are links to my publishers. Click on them and you'll leap like lightning to the homepage of KnowWare or DATA BECKER. Even if these documents are not in Karlsruhe, like my homepage, but in Denmark or Dusseldorf!

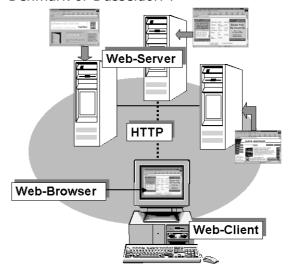


Figure 2 Basic components of the world wide web

Sitting at your computer (web client), surfing from one computer to another, you don't notice how you skip to the various sites around the world! The world wide web is pretty ingenious! Let's take a look at the detail:

Web-Server	A computer holding the Web- Pages (homepages)
Web-Client	A computer with client software (web browser), basically your computer, with which you go "surfing"
Browser	A program allowing you to view web pages
НТТР	A protocol, and a messenger transferring the pages

Stop – we forgot something very important. The mother tongue of the world wide web! Called HTML, it will be dealt with throughout this booklet in greater detail!

HTML, language of the www

HTML is inextricably linked with the development of the world wide web. Most of the amazing documents in the WWW are based around HTML. This is a code which describes the logical structure of documents. HTML defines the structure of a text document rather than the layout. For example: here a main heading, there a sub heading, there bold text, there a list, or a line etc.

Originally HTML was intended for the world-wide representation of scientific texts. Understandably so, seeing that scientists invented the whole thing. Since then new HTML versions have incorporated numerous little "tricks". How you see these individual elements depends on your browser, which interprets the HTML code and reproduces the document accordingly.

The hottest browsers are *Opera*, *Netscape Communicator* and *Microsoft Internet Explorer*. The latter is included in Windows 98. It seems currently evident that Microsoft has won the so-called "browser war". The market share of the Internet Explorer 4 or 5 is double that of the Communicator. HTML is based on ASCII, American Standard Code for Information Interchange. This is a code string which enables text representation. More complex formatting such as bold print, underscoring or centring etc. cannot be represented in ASCII. But then there is HTML.

So called HTML commands, called tags, prescribe the text structure. These commands are place in <> brackets. There is usually one command to switch a characteristic on and another to turn it off. (A few commands are stand alone.) For example before a word to be printed bold you find the following symbol: , and after it this symbol: . B for bold . The switch-off command is similar to the switch-on command, with the addition of a slash /. So the example for bold is written in HTML as follows:

bold word group

The browser turns this into a **bold word group**. In either case – it does not matter

at all whether the tags are in lower or upper case letters!

So HTML files are just text files with the ending htm or html!

Why learn HTML?

First the good news: if all this HTML stuff is too complicated for you, just use an HTML generator (HTML editor). This is merely a program, which you can (almost) use like a word processor. The HTML command code is generated automatically in the background as you write the text, or at the latest on saving the document. The second piece of good news: many of these programs are free. I list some of them on pages 41 and 59. So why bother learning HTML then? Here are some arguments, why you should learn HTML anyway, if you want to make your own homepage.

- Not every HTML can cope with everything you would like to show.
- ◆ In many cases -- especially with simple programs -- you can't correct a lot of entries.
- ◆ You can work on and refine, by hand, pages produced with an editor.
- Knowledge of the commands gives you a good understanding of how the pages are built and how the web is structured.
- ♦ You can find errors in the source code faster!
- ◆ Hand-written HTML pages are less likely to run the risk that unknown special commands are used, which cannot be depicted by some browsers

I recommend that you work with both editors and the basic source code. It isn't as hard as you think! In any case with many HTML editors you can revise the code "by hand", with good reason. But first I'll explain how you get on the net in the first place!

How do I get on the net

When I gave my first homepage courses at a night school, I was really surprised that most participants knew nothing about the internet, nor were they connected to it via a service provider. If that is the same for you, no problem: here is a short overview as an introduction.

A direct connection is beyond the means of most people. Unless you want to pay a few hundred dollars of course! So you'll need to engage the services of a service provider, a so-called provider of online service. To access the internet you also need a modem (and a computer). If you already have a digital phone socket, then you will need an ISDN card (internal) or an ISDN terminal adapter (external). The modem is a small electronic box, which connects you with the provider or online service. The latter is a service provider who gives you access by phone to the internet, for a fee, of course. What role does the modem play in all this? This component bridges the path through the phone network. Your computer and the computers in the internet talk to each other digitally, that is by an exchange of zeros and ones. But the phone network works - except for ISDN -- is analog. Therefore both ends need a modem: at your home connection and at the provider/on-line service end. This modem (**Mo**dulator/**Dem**odulator) converts (modulates) digital data to analog and vice versa.

modem. A 56k-modem costs ca. Euro 75-105. It should meet the standard V.90. Theoretically this modem enables a connection rate of up to 56 kb/second. That's almost as fast as ISDN (64 kb/s.)! And how do I get online? For simple internet access a so called local provider will offer the best option for most people. You won't have to pay money for extra (perhaps unwanted) services. So you need to buy a modem, own a computer and have installed Windows. You can usually install internet software yourself by following the prompts. If you experience problems you can call the hot-

Today it is best to purchase an up to date

line or ask an experienced friend.

AOL/CompuServe distribute CDs with access software via various computer magazines to the general public. These you can just load, install and then you can surf away without more ado. Local providers are more complicated, as you generally have to register first.

Recently "free providers" (new telephone companies): have come into he market-place They will give you internet access without registration!

Attractive web addresses cost a little extra

All members of a major online service provider can put their own page on the net, for no extra charge! Fantastic! But CompuServe gives you an address which begins like this:

http://ourworld.compuserve.com/homepages/...
Business people usually rent a site on the server of a so-called web space provider.
They usually apply for their own domain.
This means that the name of the company or organisation is right at the beginning of the web address. It is also the so-called domain name. Then the abbreviation for the domain type follows as an ending. It is usually the ending (uk) which I have already mentioned.

If you represent a small or large company you probably need your own domain. The rule is: the shorter the web address, the more it costs! Domain names have to be registered and paid for.

Back to the costs again: domain transfer is an alternative to having your own domain. The service provider supplies you with a COM domain, but your actual home page is under the old AOL- or Compu-Serve-Address. The net surfer types the attractive address in his browser and still lands on your page with its long and snake-like address.

I'm sure that there are many more of these offers! Whichever web space provider you choose, you'll also need a service provider for internet access.

Is it all about homepage then? A short confusion of terms

A short explanation of this term homepage, is long overdue. Up to now we've mixed the terms homepage, web page, and document together in any old fashion in this booklet.

Can you bear the truth? In the truly strict sense the home page is just the start page of your site. No more and no less. It is similar to the cover page or contents page of a magazine.

Experts talk about web sites and mean the whole site, much more than one page. It is really the whole of your site on the web. All right?

So in this case homepage or home means just the start page. Of course you can still use the word homepage even if you mean the whole site, as I do in this booklet.

First the plan

Well now, you want to publish a real internet brochure, a web site. Great! But wait -- it would be useful to do a bit of planning first. So take a piece of paper and make a sketch. This will give you an overview. Here is a simple example of three connected pages.

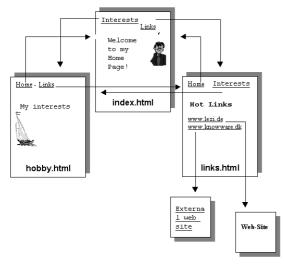


Figure 3 Your sketch could look like this.

This figure clearly shows the connection between the documents. Note that first comes a start page, the homepage. For this you should always use the file name *index.html* . Why? That's just what start pages are called, that's all.

Tip: The file extension for HTML documents can be *htm* as well as *html*. In many cases the start page (*index.html*) has to use the four digit extension, because the server frequently does not accept the three digit extension.

You then use the links, as cross-references to the other pages from your start page, which is the home page. And back again of course. The other pages in the example have the file names hobby.html and links.html.

From time to time I'll refer back to this example. We'll discuss graphics and links later.

The project file

Another tip: you should set up a file exclusively for your project, in which you'll file all documents, including the graphics. The reason for this: some providers, for example T-Online or CompuServe, will not allow you to use sub files!

We'll call the project file

Homepage

In case you have forgotten how to do this, here are the steps involved:

Start Windows-Explorer, for example using Start/Programs/Windows Explorer. Highlight the folder on the left side, in which you want to place the project file, for example click on My documents. Select now File/New/File! A file with the name New File appears.



Now type the file name, in the example *Homepage*, and then press *Enter*!

Lets work with the editor!

What do you need? A browser of course, for example *Microsoft Internet Explorer* or *Netscape Navigator/Communicator*. We'll use *Internet Explorer* as an example. Then you'll need a basic text editor, a mini nofrills word processing program. You can find this program in Windows.

You can use any word processing program as a text editor, but you then have to save the code as pure text (*text only* etc.) On saving, the file extension is then .html and not .txt for text.

Creating a new HTML document

Enough preamble! Now, together let's create the homepage, the start page of your publication. I'm assuming that you've hidden the file extensions! To do this select in Explorer in Windows 98/95 OSR 2: View/File options, go into the Menu View and check the box Hide file name extension with known file types. Don't forget it! Now let's take the bull by the horns: Make sure that you are in your project file, in the example i.e. in Homepage! Now click with the right mouse button on this file! Yes, with the right one! Select from the so called Context menu New/New text document!

Overwrite the file name. Instead type *index.html*. Now hit the *Enter* key. Beware: in connection with the changed file name you should keep your cool and answer *Yes*!



If it all worked, you should see a document bearing the symbol of the browser. I will refer in the following text to the Internet Explorer (blue e), which won't cause you any bother here.

Now double click on the document. It will open in the browser, but is now empty. Not surprising as up to now you've not written anything in the file!

Now select the command *View/Source text display*. The Windows Editor now opens!



The whole procedure is a little more complicated in Netscape browser. The programme flags an error message because your document still has no data in it. In this case you can start the editor using <code>Start/Programmes/Accessories/Notepad</code>. Select <code>File/open</code>. You must select as file type <code>All Files (*.*)</code>. Search for the file <code>in-dex.html</code>.

However you did it, by now you must have got here. Leave the browser open in the background so you can go back to it quickly!



Figure 4 Here we go!

Creating and structuring an HTML document.

So now the text editor is open, let's start creating the document! The head (${\tt HEAD}$) of an HTML document looks like this, in either lower or upper case :

```
<hr/>
<hr/>
<hr/>
<hr/>
<hr/>
<fitte>here is the title</fitte></hr>
<hr/>
</hr>
<hr/>
<hr/
```

That's all there is to it, nothing more. Enter the title between the TITLE tags. This will subsequently appear in the title bar of the browser.

Now type for example *Welcome* between the <code>TITLE</code> tags! Save your document in the editor using *File/Save*. Go back to the browser using the task bar . If you are more advanced you can also use the key combination ALT + TAB.



Figure 5 Switching easily with the task bar

Now in the browser click on the option *Actualise* or type the function key *F5*! Now look at the title line of the browser! Your welcome text appears here!



Figure 6 A greeting in the title line!

Most HTML editors put additional comments in the head. In general they "immortalise" themselves with their own names, so that everyone knows, which program created the page. To do this they use meta tags. These are put in the <HEAD> after the </TITLE> and look like this: <META>Content...</META>. Often more "meta lines" follow. Thus you can find out the program used by a home page owner. Big Brother is watching you! Most of all this information helps some search engines find their way around. These meta tags and the other features they offer will be discussed on page Error! Bookmark not defined. . It's not a problem to leave them out or delete them however.

In addition to its head, the HTML document also needs some substance, its body. This is where the actual text and the fun start. The body tag introduces the body . The body off tag comes right at the end of the page. The final tag is the HTML off tag:

```
<BODY>
This is where your text goes, just
type away!
</BODY>
</HTML>
```

Important comments

Now you can write the text, in the BODY, see above. But first some important comments: The page break is automatically made by the browser, not by the text editor. The tags can be in upper or lower case.

So that the Windows-Editor will automatically make a new line , just select edit/new line. There must now be a small arrow here. If not, the text will keep slipping to the left, to your bewilderment! Only tags count. The following rules apply:

- ◆ The Enter-Key has no effect. Instead you have to use the code for paragraph.
- ♦ More than one blank space will be ignored.
- ◆ The page break is determined by the browser window size. (Those with a small screen see more lines than large monitor users.)

All browsers show documents using the standard type face *Times* or *Times New Roman* – if no other typeface is defined.

Headings

Without more ado, the HTML document has a heading. For a main heading the ${\tt H1}$ tag is used, which is code for the largest heading possible, called Heading 1 . A sub heading (${\tt H2}$) could also be useful too. Here is an example, just to give you an idea:

<H1>Fred's fabulous world of dogs
</H1>

The browser displays the text bold and quite large . In total there are 6 different heading sizes < H1> to < H6>.

You can see HTML was developed by scientists, as scientific documents require several levels of heading for their structure to make sense.

Following this example let's look at a possible source text for "Fred's fabulous world of dogs" . Before every paragraph I've put the tag p>0 (paragraph). Although you don't have to do this, I recommend it:

```
<hr/><html>
<head>
<title>Welcome</title>
</head>
```

<BODY>

<H1>Fred's fabulous world of
dogs</H1>
Welcome to Fred's, the onlinemagazine for all tastes offering all
you could want to know about dogs.
And if you're not already dog tired,
then read on!

<H2>Fido - the family friend </H2>
This section is all about Fido, a
cute little mongrel. Pat Smith was
pretty surprised on opening her front
door to find a dog standing there
with a basket in its mouth.

```
<H2>A dark chapter - fighting
dogs</H2>
Here's a true story. A woman was
quietly walking her little dog in the
street. Suddenly...
```

```
</BODY>
```

Page 27 onwards tells you how to define further font -characteristics like font type and size with the FONT-tag. You can learn about simple possibilities for designing pages on the next pages.



Figure 7 This is how the document appears in the browser

Naturally I'm assuming you'll be making your own example here. Your start page "Welcome to my homepage" is waiting to be written. Begin with the HEAD, as in the preceding example. Then write for example:

. <H1>Welcome to my Homepage</H1>

Just add some text. We will deal with links and graphics later!

Bold, italic and underscore

You can use all sorts of tags to make the text look good. Of course there are tags for bold, italic, underscore etc. For example for bold , <I> for italic, <u> for underscored.

A word of warning; the underscore tag was not taken up by the current standard HTML 4! It's better not to use it, as it can be confused with links.

You can of course use a combination of tags. For a bold, italic text the source text looks like this:

```
<B><I>This text is bold and italic</I></B>, but the following is not .
```

Don't forget to switch the tags off, at best in reverse order.

Paragraphs and paragraph alignment

Paragraphs can also be defined by corresponding tags. <P> marks the beginning of a paragraph, and is a stand alone tag. P stands for paragraph. Each new paragraph begins on a new line.

Paragraphs are well spaced out from each other. They can also be aligned, for which special attributes are needed. A right aligned paragraph is marked as follows:

<Pra>
<Pra>
ALIGN=RIGHT>.

More attributes are centre, justify and left. The latter attribute isn't necessary however as the text is automatically left justified. Justify is also not correctly interpreted by every browser.

A right aligned paragraph looks like thisof course in source text:

<P ALIGN=RIGHT>This paragraph is
right aligned.

Creating a new line

Do you want to start a new line, without beginning a new paragraph? For this purpose use the tag

This does not alter the spacing between the lines.

Numbered and other lists

Are you familiar with bullet points? To create an "unordered" list with bullets, you need a special start tag <code></code>, the list tag <code></code> and an end tag <code></code>, which turns the whole list off again. The list tag does not need an off tag, an exception to the rule, and therefore saves work. An example?

```
This is point 1
This is point 2
This is the last point
```

For an automatically numbered list just replace the tag with , not forgetting the stop tag at the end of the list. Here's an example of a numbered unordered list, the ordered version follows:

A list

- This is point 1
- This is point 2
- This is the last point
- 1. This is point 1
- 2. This is point 2
- 3. This is the last point

Figure 8 Bullets and numbering, made easy

Don't forget to save your project regularly, using *File/Save*. If something is not shown right, it's probably just a typo! Check all your source code again carefully!

Inserting lines

Want to put a nice line in your document? Nothing could be simpler. Just type the tag

<hr>

The result can be seen. <hr> doesn't need an off tag!

The trick with spaces

There is a trick for blank lines. More than one is not understood and so even if you type 763 times in succession, it doesn't make any difference.

So to create 3 blank lines, another blank space has to be set after the tags. A non breaking blank space, that is .

The symbol is the invisible code for a protected, or non breaking space. Normally it serves to stop words being split up by a line break.

This trick also works with
!

Overview of the most important HTML commands

Forgot it all already? Here is a short overview of the most important HTML tags for text formation!

HTML-Tags	Meaning?	Characteristics	Appears as
<html> </html>	Hypertext markers-up Language	Defines start/end of the document	
<head> <td>Head</td><td>Defines start/end of the head</td><td></td></head>	Head	Defines start/end of the head	
<title>
</TITLE</td><td>Title</td><td>Part of the head, the content appears in the head line.</td><td></td></tr><tr><td><BODY>
</BODY</td><td>Body</td><td>Defines start and end of the text body</td><td></td></tr><tr><td><H1></H1></td><td>Heading 1 – Heading 1</td><td>Bold, very large</td><td>Heading 1</td></tr><tr><td><H2></H2></td><td>Heading 2</td><td>Bold, large</td><td>Heading 2</td></tr><tr><td><H3></H3></td><td>Heading 3</td><td>Bold, medium large</td><td>Heading 3</td></tr><tr><td><H4></H4></td><td>Heading 4</td><td>Bold, normal</td><td>Heading 4</td></tr><tr><td><H5></H5></td><td>Heading 5</td><td>Bold, small</td><td>Heading 5</td></tr><tr><td><H6></H6></td><td>Heading 6</td><td>Bold, very small</td><td>Heading 6</td></tr><tr><td></td><td>Bold – bold</td><td>Text attribute</td><td>An example in bold</td></tr><tr><td>< ></ ></td><td>Italics – italic</td><td>Text attribute</td><td>italic is wrong</td></tr><tr><td><U></U></td><td>Underscored</td><td>Text attribute, recently outdated, should no longer be used as it can be confused with Hyperlink!</td><td>Underscored text is all the rage</td></tr><tr><td> </td><td>Non breaking space</td><td>Protected space</td><td>12. October</td></tr><tr><td><P></P></td><td>Paragraph</td><td>Defines a paragraph, thereby creating a small space between paragraphs! An end tag is not always necessary!</td><td>This is a (short) paragraph
This is another, but some-
what longer this time</td></tr><tr><td>
</td><td>Break</td><td>Makes a line change, no end tag needed!</td><td>This is a mini sentence. This sentence begins on a new line, but isn't a new paragraph.</td></tr><tr><td><HR></td><td>Horizontal rule</td><td>Inserts a line, no end tag needed!</td><td></td></tr><tr><td><P> </td><td>Paragraph with protected space</td><td>Creates a blank paragraph, spacing</td><td></td></tr><tr><td></td><td>list</td><td>Numbered lists, the sign used for each point depends on the definition, see below</td><td>see lines below</td></tr><tr><td><0L></0L></td><td>Ordered list</td><td>Defines the start/end of a sorted numbered list, indents the list</td><td> This is the first point This is the second point </td></tr><tr><td></td><td>Unordered list</td><td>Defines Start/End of an unordered list, indents the list.</td><td> This is the first point This is the second point</td></tr></tbody></table></title>			

How to add graphics to your HTML documents

It's no big deal to add graphics to your texts. But it's a little more complicated to create or prepare them in the first place. You can't just use standard ClipArts or Corel Draw graphics because most browsers can only cope with two graphic formats: GIF and JPEG.

So you need a graphic program which can cope with these formats. If you already have a graphic program, you should find out whether files made with it can be saved in either of these two formats. Be warned – Paint from Windows 95/98 is not suitable for this!

GIF, JPEG or PNG

Why GIF and JPEG? Both formats are characterised by high compression, which is of great importance considering the long load times in the net! Where a normal bitmap graphic, perhaps created in Paint, may take 1 MB of storage, the same graphic saved in GIF or JPEG only needs a few KB!

If you save in JPEG the compression factor can be set in a range of 1-100 . You have to compromise between file size and quality. You'll find the best method by experimenting. When using JPEG at higher compression factors you get ugly "artefacts". These are blurred edges and colour layers. However JPEG is still the most suitable format for high quality true colour photos . Millions of colours can be saved in this format.

On the other hand. though GIF can only display 256 colours, it is perfectly suited for animations and for graphics with few colours. And you don't get a messy loss of quality as you do in JPEG. Page 48 lists the programs you can use to create animated GIF files.

Recently the non copyrighted format PNG has got itself established. It combines the advantages of GIF and JPEG.

Which graphic program?

Now the question is: Which graphic program is it to be? The shareware program *Paint Shop Pro.* is perfectly adapted to editing and working with graphics. Down-

load a test copy at www.jasc.de or. www.jasc.com .You can also use Corel PhotoPaint; Photo Express, Microsoft Photo Editor, Microsoft Photo Draw, Micrografx Picture Publisher etc..

These programs facilitate easy scanning and editing of photos. Many of the programs come complete with a gallery of ready made pictures.

Here is a graphic made using Paint Shop Pro 5:

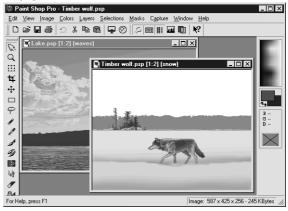


Figure 9 Professional programs at shareware prices

Tip: When you buy a scanner you often get one of these programs for free! You've got a graphic program but aren't sure if it is suited for your goal? The command *Save as* in the file menu will decide. Look in this dialogue window at the list of file formats on offer! Pull down the list of *File types*.

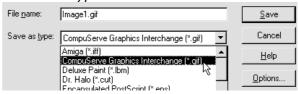


Figure 10 GIF format is on offer!

Got it? Then just select GIF, JPEG or PNG, when you want to save your graphic. Page 51 has more tips and tricks for working with graphics and graphic programs.

Putting a graphic in a HTML document

A graphic is not directly saved in the HTML documents, but a reference is created to it. In its simplest form it looks like this:

In this case the graphic *bracket.gif* must of course be saved in the same file. There is no end tag. The so-called attributes can go in the <> brackets.

means that the graphic, <code>bracket.gif</code>, will be right aligned, the text flowing around it to the left. However, <code>align=left</code> makes the text flow to the right round the graphic, which is left aligned. Without this attribute you can't have text flow.

Inside the brackets you can put a reference to a graphic on someone else's page anywhere on the web. For example:

But this isn't really fair play!.



Figure 11 Right aligned graphics

Here the source text extract for the graphic:

<HR>
<H3>OK, Office-Assistant...</H3>

My Name is Bracket, Bill Bracket.
Many people say, I am...

The exact positioning of graphics with the help of tables is shown from page .

Width and height

Up till now we have not been concerned with the width or height of the graphics. However these details are extremely important.

The details first: Graphic size is measured in pixels, graphic dots. A 20x20 pixel graphic is tiny, but a 800x640 pixel one would fill the entire screen. If your monitor is set to low resolution (e.g. 640x480 pixels), it won't be big enough!

In every good graphic editing process you can see the size of a graphic, usually in the status line at the bottom of the program. Additionally in most cases the number of colours is also shown!



Figure 12 Picture size and colour number

Now I'll show you how to give the IMG-Tag the appropriate attributes for width and height. This is how you can make sure that a frame space the size of your graphic will be kept free from the outset, even before you have created the graphic.

The example looks like this now:



Figure 13 The frame space is displayed

If you leave out the size setting, the surfer will first just see a very small graphic frame space. Only after the graphic has been created will the correct size be determined. This causes the ugly effect of "graphic wobble". This is pretty irritating, as the format of the page continually changes whilst you are viewing it!

Entering a text alternative

Surfing in a hurry ? And the page you've landed on is made up just of graphics which take an agonisingly long time to form? Then you'll probably just see a blank space, and nothing more.

It is good practice to give your graphic a so-called text alternative. Unfortunately, even professional web designers often forget this basic rule!.

With the text alternative, surfers who have turned off the graphics can also see at once what they are missing. You don't have to wait to find out what button is hiding behind a graphic. So you can click before the graphic has formed! The appropriate attribute looks like this: ALT="Here is the text"

The complete code to insert the figure

looks, for example, like this:

Another advantage of this instruction when you mouse click on a graphic which has a text alternative, a quick info in yellow pops up as for example here:

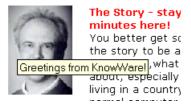


Figure 14 Quick-Info as a side effect

The web site from StarDivision really disappointed me. This German company makes a really good office package, which offers loads of internet functions and is far ahead of other packages. But their own web site throws many of the basic website writing rules to the wind. A real pity.



Figure 15 Pity - the text alternatives are missing!

Small is beautiful

Now, some important comments concerning the size of the graphics. The rule is: the smaller your graphic, the better. Large graphics take up a lot of space. It takes ages for them to build on the surfer's computer, and waiting for slow graphics to be displayed isn't fun. Perhaps the surfer will become bored and move on to another site.

But you can make graphics smaller in your graphic editing programme. Using Paint Shop Pro, just select Figure/Figure size and enter the desired size. The pixel size will be reduced.

Using JPEG? Then try out the compression factor! There is usually an additional button for this in the graphic processing program. Experiment with the compression factor too! Just look in the Save dialogue box. Using Paint Shop, you'll find it in the "Options" button.



Figure 16 Increasing the compression factor

Rule of thumb: the file size of the graphic should not be more than 35 KB. You can also reduce the size of a graphic by reducing the number of colours. In Paint Shop you can reduce the number of colours using Reduce colours/colour intensity.



Figure 17 Reducing colour intensity

More tips and tricks about graphics can be found, as mentioned earlier, from page 55! More about background graphics on the next page!

How to use background graphics

and that was that! But you can add numerous attributes. For example, to add a background graphic to your document. You do this with the attribute background

More about the other attributes after page 26.

Found a nice graphic? You can put it in the background like this:

<body background="spiders.gif">

How large is your graphic? Smaller than the screen? Then an interesting factor comes into play, which we'll take a look at now!

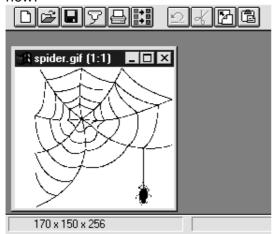


Figure 18 Picture size is 170x150 pixels

The graphic is tiled!

What monitor resolution do you have? 800x600 pixels? Or higher?

You can find out the monitor resolution as follows: Right click on *Desktop*, select the menu *Settings*.. Here is a slide control which shows you the current resolution. 800x600 pixels are ideal. Most web sites were designed for this resolution!

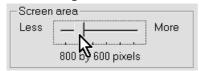


Figure 19 Monitor resolution

Watch out: If you have an old computer and a very small monitor (14 inch), you'll have to stick with 640x480 pixels. But back to the example. The monitor is huge but our example graphic is just 170x150 pixels in size. What should we do?

Well the Tom Thumb graphic just goes many times into the background. If your graphic is smaller than the monitor then it will be tiled. It will be repeated until all the area is covered, looking like this:

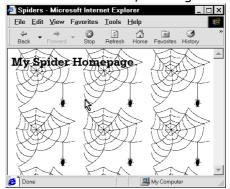


Figure 20 Repeating the graphic

You could exploit this characteristic mercilessly:

You can define the desired background colour. All you need for this is a one-coloured "graphic". A size of only 1x1 pixel is enough, after all it will be tiled. The file size is tiny, but the effect huge. You want a narrow yellow band on the left side of your web page, but the rest should be in white?

No problem! Create a very long (1200 or more pixels), but narrow graphic. This is made up of only two colours, yellow and white:

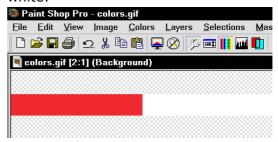


Figure 21 A long, graphic in just two colours...

As the graphic is only made up of two colours, the storage requirement is extremely small!

Using this file as background, produces the following:

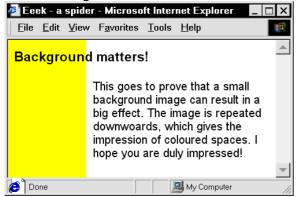


Figure 22 ...makes a big effect!

How well do you know your graphic editing program? With a little skill you can make special designs and colour fades! Create a graphic, 1200 or more pixels long and which fades perhaps from yellow to green . This graphic also only needs to be a few pixels in size. As it is repeated over and over down the screen, the effect of a colour wash is produced!



Figure 23 The famous "binder effect"

In the above figure you can see the famous binder effect. The rings were photographed in close up and scanned in. Only one ring is to be found in the left corner of the long, narrow background graphic. The effect comes from the repetition of the graphic. Notice the seamless border. A similar effect can be created with a spiral binder. All you need is a spiral and a line, and your lined writing pad is ready! Background graphics can create some really super effects.

Textures as background designs

Textures as so-called background designs are popular.. How about filling the background with wrapping paper or water drops? All you need to do it is a simple trick.

The above involves graphics, which border each other seamlessly. These graphics are then tiled repeatedly, and a carpet pattern effect appears as a texture.

It is hard to make textures yourself, as the seamless overlapping never quite works.

Looking for free textures? Surf to a search engine and enter the key word textures

You are sure to find numerous pages with offers.

If you don't know, what search engines are, read the segment on page **Error! Bookmark not defined.**

The various homepage editors and even word processing packages such as Microsoft Word or StarWriter also have a large collection of textures. And in Corel Draw you'll be overwhelmed by the many textures which come as standard!

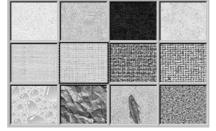


Figure 24 Some textures from Word 97

You can read how to make a home page using word processing packages from page 41 onwards!

Hyperlinks - internal/external anchors and references

Now for the real fun part – here come the famous links, the cross-references! It is not for nothing that we talk about hypertext- as: "Text with leaps".

Cast your net around the world to all the great web sites you know, so the surfer can go there too.

References to your own pages

You'll probably want to make more than just one page, a whole host of pages in fact. The surfer usually arrives at your start page. This is pre-set, even if the direct name of the start page is not in your home page address.

Going from your start page, surfers will be referred to the other pages- as long as their content is interesting. Typical names for the start page are <code>index.htm(I)</code>, in exceptional circumstances also <code>home.htm(I)</code> or <code>start.htm(I)</code>. But you know that of course. Remember the example on page 11? Here for the sake of clarity we'll talk about the relationships again:

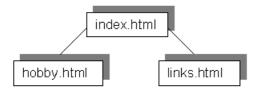


Figure 25 The relationships – one more time!

In this example we have a web site with 3 HTML documents. Reminder – in addition to *index.html* there are two more pages called *hobby.html* (for the hobbies) and *links.html* (for a collection of links). You still have to set up these pages of course. If you haven't done so already just follow the description at the beginning!

Now come the references. In the file index.html for example there are references to the document hobby.html and links.html.

The reference to the page with the interests looks like this :

```
<a href="hobby.html">Interests</a>
```

a href means **a**nchor **h**yper **ref**erence, a reference to an anchor. The anchor in this case is the filename. The text goes between the tags, which you see in the browser. Underscored and in blue! Here you could write *My Interests* or *Here you can find my hobbies* .

The complete example for the hyperlinks on the start page looks like this :

```
<HTML>
  <HEAD>
  <TITLE>Welcome</TITLE>
</HEAD>
<BODY>
<a href="hobby.html">Interests</a> -
<a href="links.html">Links</a>
<H1>Welcome to my home page</H1>
```

Anyway, you have probably noticed that links are normally underscored in blue. Visited links are coloured lilac. However, the browser does that for you! From page 26 you'll learn how to tailor the colours to your liking.

On the Hobby page there should be a link back to the start page (home) of course: Home

Also make a reference to the page with the links. In this way you should first "link up" your 3 pages. Test using the browser, to make sure this turns out the way you wanted!

References to pages in sub directories

The whole thing is easy if you just use one file. But how do you make links to sub directories?

Let's look at an example: Imagine that the hobby page is not in the same directory, but in the sub directory *hobby*.

You have to include this directory in the link like:

Interests

This entry is a reference to the document *hobby.html* in the sub directory *hobby*. This is a relative path.

Never use absolute paths like *C:\Own Files*

homepage\hobby\hobby.html!

Now an important thing: Unlike the Windows file system, a backslash (\) is not used to define the path, but a forward slash (/) is used!

Assuming you want to make a link in the file hobby.html back to the homepage . This is one directory level higher . The whole reference now looks like this:
Home

The secret lies in the two dots, meaning: one directory level up!

External Hyperlinks

You'll also want to use external crossreferences of course. You need the web address, you want to refer to – for example:

http://www.knowwareglobal.com
The reference is written like this:

This is the way to KnowWare.

The browser shows it like this: This is the way to KnowWare. The link is complete! To make several links, just copy the following text to the holding memory (highlight the text, select Edit/Copy): . Use this as often as you want. Then you just have to enter the address for the link to go to between the quote marks ("") and write the text for the link between the brackets (><). Not so difficult at all, is it?

Your task: now build a couple of external links into your web site. The page *Hot Links* is particularly good for this.

Opening a new window

There is one major problem with external links. If you offer surfers great links, they click on them and off they go.

Will they ever come back?

It would be a better idea if the page which they go to is shown in a new window, leaving your page open in the background!

I'll show you an example from a super Shareware/Freeware page, called TUCOWS, which deals with this.

Here you find great Free and Shareware

Target=blank is the decisive addition, that's why I highlight it.



Figure 26 How to make a new window

Internal page references

Now I don't know how much you write on a page. You have a lot of room, and there are no page ends, as there are in word processing programs.

If you're typing novels however, things can get out of hand. The reader can use the scroll function to page down. Great, but I'm not sure, whether the surfer would be happy to have to scroll down for miles to reach to the juicy bits.

A more elegant solution is to get him/her there via a contents page. This comes at the beginning of your site and has references to points further down.

To do this you first have to define anchors or lines in the document, a little like text markers in word processing. Write e.g.:
Chapter 1 - The mongrel or

Chapter 2 Hunting impulse

So now anchors or bookmarks have been set up for this text part. The contents page could then be formed as follows – as a list – referring here to the anchors .

```
<br/>
<br/>

<a href="#chapter_1">Chapter 1 - The mongrel</a>
<a href="#chapter_2">Chapter 2 - Hunting impulse</a>
<...</ol>
```

The whole box of tricks looks like the following example:

Table of Contents

- 1. Chapter 1 The mongrel
- 2. Chapter 2 Hunting impulse
- 3. ...

Figure 27 A sensible contents page

The surfer clicks on the corresponding Hyperlink and leaps at once to the related document anchor. Is it hard? Not at all, just a little confusing at first! Don't worry, on page 44 I'll show you, how to define internal anchors with a word processing package.

The e-mail link

An e-mail-link is an absolute must for your web page. It's so practical- almost all home page owners use it to receive feedback. Those who want to write to you just have to click on it. This opens the mail program for that browser. Your address is transferred automatically. This enables the speedy despatch of comments to almost all people with a homepage. The source text for the so-called e-mail link looks like this:

..

Your e-mail address is within the quote marks, the tags enclose the click-able hyperlink . Of course instead of the dots write something meaningful like *e-mail me* or *feedback*.

As soon as a visitor clicks on this link, his e-mail program starts, and his address is also entered automatically. Very practical, isn't it?



Figure 28 The mail form opens!

But if the surfer happens not to have a mail programme, then the service won't work!

Links to a graphic

Are clumsy text hyperlinks getting on your nerves? Of course you can also turn graphics into links, something which is very simple in fact.

Instead of writing the text, type in a reference to the graphic.

Say you wanted to make an external link to the picture of Bill Bracket, leading to the Microsoft page.

Write:

```
<a href="http://www.microsoft.de">
<img src="bracket.gif"></a>
```

Perhaps you don't like the fact that the picture now has a blue frame? Then just add an extra attribute, border=0. Then the graphic tag looks like this:

```
<img src="bracket.gif" border=0>
```

Here's another tip: You can also use graphics as a navigation button. An arrow could always serve as a link upwards. References are made here just to an internal anchor, you placed right at the top of the document!

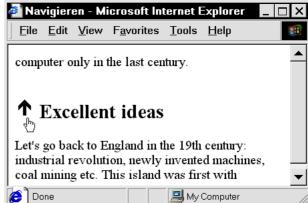


Figure 29 An arrow as a navigation button

An arrow to the left could point the way to the next page etc.. A small house (Home) signals the link to the Homepage (Start page) etc..

Image Maps

Have you already heard of image maps? No? Or of hot spots? No again? Let's set that right.

Hot spots are particular areas of a picture, which react to being clicked. For example they could be a specific region on a map, or several regions. But only this area becomes a hyperlink, not the whole graphic.

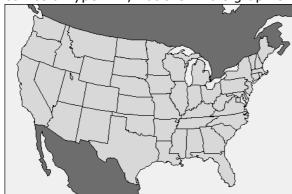


Figure 30 The ideal image map – a real map

Practical, isn't it? Yes, it's great! But, unfortunately it's difficult to produce image maps by hand. But there are specialist editors who make light work of it for you. On page 46 I'll show you how to turn a graphic into an image map.

Overview of the most important HTML commands for anchors

Here again in summary a short overview of the most important reference commands.

HTML-Tags	What does it mean?	Characteristics
 	Anchor hyper ref- erence - Hypertext to (external) an- chors, cross- reference to an- other WWW document	The WWW address (URL)goes in quotation marks as follows, http://www.etcde
 </a 	Anchor name – Name of the inter- nal anchors, marks the cross refer- ence target on the same page!	Put the name you chose in the quotation marks, e.g. content
 </a 	Cross reference to internal anchors, that is anchors on the same page!	The internal anchors go in the quotation marks – don't forget the # sign!
<pre><a "own="" _e-="" ad-="" dress"="" href="mail" mail="" to:="">Write to me!</pre>	e-mail link	Your email address goes in quotation marks.

Life gets colourful - colours for links and text

You want to use colours? Of course! How many would you like?

First the good news – you can use colours till you go blue in the face. The bad news – your great colours look a little different on each computer. For example if you have a choice of 16.7 million colours and the viewer has a prehistoric graphics card which can only display 16, then the result will look very different from the graphic you intended!

Even Apple Macintosh basically displays colours differently. In any case I really don't want to have to type the hexadecimal codes for 16,7 million colours , that would more than fill this booklet. And they wouldn't mean much to you anyway in black and white.

So here we'll just deal with the 16 base colours as the lowest common denominator. You can use either the permitted colour names or the hexadecimal code, with the # sign and the cryptic numbers.

There is also a so-called "secure Web-Range" with 216 colours. It includes colours which appear similar on the PC as well as the Mac.

Colour	Hexadecimal
Black	#000000
Silver	#C0C0C0
Gray	#808080
White	#FFFFFF
Maroon	#800000
Red	#FF0000
Purple	#800080
Fuchsia	#FF00FF
Green	#008000
Lime	#00FF00
Olive	#808000
Yellow	#FFFF00
Navy	#000080
Blue	#0000FF
Teal	#008080
Aqua	#00FFFF

Mixing hexadecimal colours

Not satisfied? You can also mix the colour you want from the three base colours red, green and blue (RGB-values). How? Well, the hexadecimal colour code has six digits and begins with (#). The first two digits define red, the next two green and then blue!

A hexadecimal number can always have 16 states as follows: 1, 2, 3, 4, 5, 6, 7, 8, 9, 0, A, B, C, D, E, F. In this code, 0 is nothing and F is full house. For each colour value (red, green, blue) you have two values. So for every colour value there are 256 states. And 256*256*256 make 16,7 million.

Black for example exists of a # sign and zeros, no colour therefore: #00000 A lush red is made like this: #FF0000, green #00FF00 and blue: #0000FF. You can easily mix yellow from red and green: #FFFF00.

The attributes in the body tag

You already know one attribute, the BACKGROUND, attribute, see Page 20. The BODY tag has more attributes , which you can use to define the colours of the text and hyperlinks.

Well, here's an overview:

Attribute	Comments	Example
Background	Background graphic	Background="jette .gif"
Bgcolor	Background colour	bgcolor="yellow"
Text	Text colour	text="#800080"
Link	Not yet visited link	link="green"
Vlink	Visited link	vlink="red"
	Active Link, colour during click on link	alink="white"

So your body tag could look like this. Upper and lower case and the order of the attributes do not matter.

<BODY BGCOLOR="silver" TEXT="black"
LINK="green" VLINK="red" ALINK="yellow">

In particular I really like the silver. You get a really lovely light grey from it. You'll find out next how to colour your font in the text. Additionally: A graphic takes priority over the background colour.

More font format possibilities

Source code	Depicted in the browser	Comments
<dfn></dfn>	HTML means Language for the display of hyper text.	Definition text, explanations, often bold.
<h2></h2>	This is a Heading 2	A total of 6 heading levels
	Highlighted	Emphatic, highlighted, often italic
 	Strong	strong, heavy highlighting, often bold
<code></code>	Write go home, well write it !	for Computer source code
<kbd></kbd>	First enter CD games, then to you!	Text, which is to be typed in
<cite></cite>	Also see Dave Raggett et al: HTML 4, Addison-Wesley 1998.	Bibliography or references for future reading, mainly italic
<samp></samp>	Look, then you'll see it!	The text will be shown the way it is entered
<q></q>	Hello, said the snail, I'm on my way	for short quotes in the text, may be used instead of quote mark.
<i></i>	This is italic.	italic,
<tt></tt>	Font type Courier	Tele text font
	Bold is also quite nice.	Bold
<big></big>	Once upon a time	Large font, for example to give emphasis to the first letter.
<small></small>	Small is beautiful.	for small font writing
	H ₂ O	Subscript
	10 ²	Superscript
<u></u>	Could be confused with a <u>link</u> .	Underscore, no longer to be used!
<strike></strike>	This is using strike through text.	Strike through, don't use!

Academics more than anyone else keep to the logical description when using tags. It's safe however to stick with the physical attributes, at least as far as display goes.

Further character formats with the FONT tag

Using the above named methods however you can't set the font type, colour or size, if you don't include $\verb|sig><|\verb|big>| and <|mall><|small>|.$ For this reason the FONT-Tag with various attributes was introduced into HTML in 1995. For example with

text colour can be defined. Even if HTML writers have rejected now, in the long run it probably will be impossible to get by without it. The so called and much better format models (see page 39) are not yet really supported by all browsers. The tag has the attributes color=... face=... (typeface) and size=...

(relative size for example: -2, -1, +1, +2). It is switched off by . Enough theory, now here's a couple of practical examples.

Sorry, the printer ran out of colours here, so I'll have to rely on your imagination!

I like Times, but Arial is also a nice font.

Do you like lower case?

Source code	Viewed in a browser
She's painting the sky blue.	She's painting the sky blue.
It's not just Times I like, but also Arial, a beautiful font.	I like not just Times, but also Arial, a beautiful font.
Do you prefer small letters?	Do you prefer small letters?
In fact, several attributes can excellently be combined.	In fact, several attributes can excellently be combined.

Figure 31 Important – the FONT tags

The PRE-Tag for fixed formatting

You can't rely on anything, because no matter how you set out the source text in the editor -- the browser will interpret it in its own way. It won't display more than one space. Line breaks made with the enter key are ignored by this program.

Source code Viewed in a browser The Lady of Riga The Lady of Riga There was a young lady of Riga There was a young lady of Riga who sat with a smile on a tiger. who sat with a smile on a tiger. They returned from the ride They returned from the ride with the lady inside with the lady inside and a smile on the face of the tiger. and a smile on the face of the tiger. pre>

Figure 32 Fixed formats leave nothing to chance

Is this always the case? Well, not every time! Because there is the PRE-Tag. Text between and will actually be shown exactly as it is set out in the editor. With all the spaces and , line breaks etc. It is converted into a font type with a fixed spacing (Courier).

More lists

That's right, there are ordered and unordered lists. You already know that goes before each point in the list.

But you don't yet know the different attributes. HTML 4.0 is capable of much more than boring numbers or bullets. Here we go. First of all we'll consider the unordered numbered list or bullet list.

Normally the bullet lists have (what else ?) unordered bullets. Well squares or points are possible too:

The corresponding attributes are for example

type=square, or. type=circle.

Source code	Viewed in a browser
<ul type="square">ChickenGeese	■ Chicken ■ Geese
<ul type="circle">>DucksSwans	o Ducks o Swans
<ul type="disc"> Dogs Cats 	DogsCats

Figure 33 Looks good, doesn't it?

Now back to the ordered list mentioned at the beginning. For numbered lists there are considerably more attributes, for example you can define whether the numbers are Arabian or Roman numerals, and whether the list is to begin with 1 or 5 or iii . < 01 > can be altered using the following attributes:

type=1 (Arabian Numerals), type=A (capital letters), type=a (small letters), type=I (large Roman numerals), type=i (small Roman numerals) start=5 (counts from 5, E) etc.
Just try using these lists:

Source code	Viewed in a browser
<pre><ol type="A"> Chicken Geese </pre>	A. Chicken B. Geese
<pre><ol start="5" type="1"> Ducks Swans </pre>	5. Ducks 6. Swans

Figure 34 More possibilities for ordering

A refinement is to pack a numbered list within a list. Clever, isn't it?

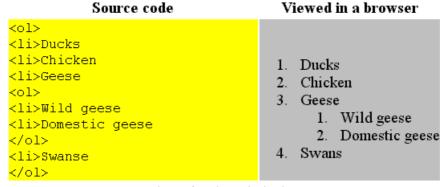


Figure 35 Lists within lists

Running text (MARQUEE)

Much to the disgust of those who developed HTML- Microsoft's Marquee was incorporated in the new standard HTML 4.0. Marquee means running text and lets your text scroll out in a neat way. Basically you use the tags

<MARQUEE></MARQUEE>

Just write your text in-between..

There are still further attributes which govern this effect. Some of them can be seen in the example graphic.

scrolldelay=8>This text moves quickly both ways</marquee>

This text moves quickly both ways

<marquee behavior=slide>This
text moves in and stops</marquee>

This text moves in and stops

<marquee scrolldelay=5 scrollamount=50>This i a Marquee-Expresstrain</marquee>

This i a Marquee

Figure 36 Just like my model railway...

Anyway – don't waste too much time and effort on this running text. This effect can only be seen by perhaps fewer than half of all surfers.

Why? Well, Netscape Navigator or Communicator does not understand MARQUEE! That's really true! If the surfer happens to be using such a browser, nothing moves, and the effect is lost!

This has something to do with the old rivalry between Netscape and Microsoft . Both firms developed tags, which can only be interpreted by their own browsers. And both sides are apparently refusing to accept the tags of the other!

Blink Text

A further example of such individualism is the <code>BLINK</code> tag. It comes from Netscape and is therefore not recognised by Microsoft Internet Explorer . These squabbles are enough to make you tear your hair out! Instead, here's how you can make your text flash:

<BLINK></BLINK>

Lines

As we were just talking about individualism, simple lines <HR> are no problem for either browser. But Netscape Communicator cannot cope with some line characteristics like colours. If in doubt always test your lines.

Here you can find selected attributes for the HR-tag. For example you'll find width=30% (Percentage setting) or width=400 (pixel setting) for the width. Using size=3 and color=blue you can determine colour and size for example.

align=left or noshade, are also possible to switch of the possible shading. Here is the source text for a complete line in colour for you to write down:

<hr width=45% size=5 color=blue align=left noshade>

Tables as important tools of page formation

Tables are a gold mine in HTML! The table tag is

.

Why are they such a gold mine, and why such an invisible one? Because they give the pages a polished finish. How else could graphics or text blocks be positioned exactly? Nothing works without tables. It doesn't matter if they have invisible or visible edges!

Simple tables

Creating tables is actually child's play. You only need a few tags! Surround the table with ...table content... . The tag (table row) defines a new row . The single cells are represented by (table data) . That's really all there is to it.

In any case, with the exception of the various table tags do not need any end tags. (But it does no harm to use them anyway.)

Let's get down to business. The source text is shaded grey, and you'll find the result straight below!

BlackWhite RedBlue

Black White Red Blue

Figure 37 A simple table

Tables are normally left justified. The cell size depends on the text! Now here's a somewhat more expansive example, using a table head. The Tag is simply replaced in the first line with (table head). The content of cells defined by is normally highlighted bold. If the cells are wide enough the content can be centred. Just try it. Below you can see the finished table, the source text is shaded grey.

fruit varietynumber apples2,200,000 pears180,000 plums250,000

fruit variety number

2,200,000 apples 180,000 pears 250,000 plums

Figure 38 Table with table head

Fading out the grid lines

Grid lines can be faded out easily. Just set the border attribute in the tag. Using makes the invisible grid lines visible. The exact way in which the grid lines are now displayed, depends on the browser. HTML tables in general look smarter than "normal" tables! Here's an example:

fruit varietynumber apples2,200,000 pears180,000 plums250,000

fruit variety	number
apples	2,200,000
pears	180,000
plums	250,000

Figure 39 Bordered table

The attribute border can be more exactly defined using numbers (Pixel) . A table, beginning with , has correspondingly thick borders.

Positioning tables

Normally the table is left aligned. And text, which is to go under the table for example, will begin under the table. But just take a look at this source text in the browser: In the graphic you can see the beginning of the source text (grey shading) as well as the example:

ftr>ftruit
varietynumber
apples2,200,000
pears180,000
pears250,000
pears100
pears100
the herest results of the season.

Please read the report on the harvest results of the season.

fruit variety	number
apples	2,200,000
pears	180,000
plums	250,000

Do you want to practice? Then put the table on the left. This time use align=left. In contrast to the preset without align this time we have a nice text flow again.

Figure 40 Tables can be positioned like graphics

Here the table was simply moved from above to the right. All the text which, in the source text was set under the table, now appears next to it!

Just try it, the table can also be centred or right aligned. How do you do this? Well just put the attribute align=center or align=right in the TABLE tag . Then it's finished!

The best thing about this: align=left or align=right creates a text flow around the table.

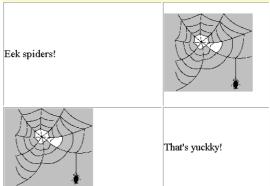
This works if you are using a really up-todate browser of course. (If not there will be nothing flowing round the table.)

Justifying table width and height

Normally tables just grow by themselves, to fit the width of their content. How can you define elements more exactly, or perhaps add a graphic? The answer is with the attribute width.

In the next example a graphic (spider) is contained two times within a table. The width and height are determined in the respective cells. The settings are absolute, and are in pixels therefore. The graphic (spidr.gif) is 170 pixels wide and 150 pixels high.

 Eek spiders!<td width=200> That's yuckky!



Cell positioning

Back to the table with the spiders. (Sorry, I really don't have a thing about spiders! But I just couldn't think of anything better.)Let's turn a visible table into an invisible table. How? By removing the attribute border.

Eek spiders!

<id>That's yuckky!

Eek spiders!





That's yuckky!

But that's not enough. The above table has a few more faults. Usually figures and text are positioned on the left of the cells . They are left aligned. And vertically they are centred. Yes they are – that's how standard table positioning works. Left aligned and centred. Something should be done to change this! By using attributes! The attribute align deals with horizontal alignment. Use it as you have learnt already align=left, align=center, align=right.

You can also alter the vertical positioning . For cells (<th><td>) or whole lines as well (<tr>). Do this using the attribute valign (vertical alignment), top , middle and

bottom are possible.

Just take a good look at the source text in the examples. The above table was only slightly modified. Continue in the same way!

Most often you'll come across invisible tables in web pages. These are used for columns, aligning graphics exactly and so on and so on. Of course tables can be placed within tables. Great, aren't they?

Borders

Until now, borders haven't been a problem. Just place border in the TABLE tag, and away you go! Well in theory, it still works like that today. But in HTML 4.0 the table borders have become an art of their

The table grids can be altered by up to five attributes, called border, frame, rules, cellpadding and cellspacing. Just for the attribute frame there are up to 10 settings, if you want to use them. That's a great deal to take in and use. So I'll keep the following overview to a small selection of them:

Attribute	Explanation	Example
Border	Borders, in pixels	border=3
Frame	Determines the outer frames	frame=box
	Determines how the inner grid lines between the cells/ cell groups appear	rules=all
cellpaddin g	Puts spacing between the cell edges and the cell content, in pixels	
g	Determines the spacing be- tween the individual fields (the wall width), in pixels	Cellspacing= 1

Here is once more the test table from above. The frames were made using the border attribute.

fruit varietynumber
apples2,200,000
pears180,000
pears250,000
plums250,000

fruit variety	number
apples	2,200,000
pears	180,000
plums	250,000

Figure 41 Creating frames with border

In the second example we create this frame using the new attributes of the HTML-Standards in Version 4!

fruit varietynumber
apples2,200,000
pears180,000
plums250,000

fruit variety	number
apples	2,200,000
pears	180,000
plums	250,000

Figure 42 Another path, same goal

Then you have to hope that the surfer is using the newest browser. If not, the effect could be wasted. Even Netscape Communicator 4.0 can't read this up-to-date syntax yet, which is very weak.

Inner- and outer borders

Modern browsers, and even older browsers, are usually able to interpret cellpadding and cellspacing. Thankfully!
Want to give it a try? Here's the first example, even if the Communicator does not display any grid lines here! But perhaps the most up to date Version 5, will be able to do this, which will possibly be available by the time this booklet is printed.

```
fruit varietynumber
apples2,200,000
pears180,000
plums250,000
```

fruit variety	number
apples	2,200,000
pears	180,000
plums	250,000

Figure 43 Padding as "filling" or "padding"

And cellspacing on the other hand looks like this: (Hardly a recognisable difference.) In this process the spacing between the individual cells is fixed, in pixels of course.

<table frame="box" rules="all</th"></table>
cellspacing=5>
fruit varietynumber
apples2,200,000
pears180,000
plums250,000

fruit variety	number
apples	2,200,000
pears	180,000
plums	250,000

Figure 44 Spacing is the "Wall width"

Splitting cells

Sometimes a cell has to be made to fit across several columns or rows. To do this you expand the corresponding tags (<th><td>) using colspan or rowspan. All that is now missing is to enter the number of rows or columns the cell is to cover . The following command stretches a cell across two columns for example: <th colspan=2>.

Just try it out. To see the effect, you'll need the frame lines, best of all by using border.

crop statistics		
apples	2,200,000	
pears	180,000	
plums	250,000	

Figure 45 A two column cell

To try out rowspan, insert another 2 lines in the table. The result should be the same for cherries and strawberries:

<to>>apples>apples>bples>bples>ctr>>ctr

crop statistics	
apples	2,200,000
pears	180,000
plums	250,000
cherries	259 000
strawberries	358,000

Figure 46 A two row cell

Table colours

Table colours are defined in a similar way to the background colour in the <body> tag, using the attribute bgcolor.

One of the permitted colour names can follow this or one of the hexadecimal names like #008080.

colours the
whole table grey.

```
crop statistics
apples2,200,000
pears180,000
pears250,000
plums250,000
ctr>ctr>ctr<//r>
```

crop statistics	
apples	2,200,000
pears	180,000
plums	250,000
cherries	358,000
strawberries	

Figure 47 The background colour turns grey

Now about the cells. Colouring individual cells is no problem. Just enter the colour setting in the corresponding line or cell tags! The effect is particularly noticeable when the grid lines are turned off, as in this example.

```
crop
statistics

bgcolor=white>apples2,200,000

pears180,000

plums250,000

cherries250,000

cherries358,000

strawberries
```

crop statistics	
apples	2,200,000
pears	180,000
plums	250,000
cherries	358,000
strawberries	336,000

Figure 48 This is how to give cells colours easily

Anyway - Microsoft Internet Explorer can also read the attribute back-ground="xyz.gif". Instead of xyz a corresponding graphic is formed. If this attribute is used in the tag, a background figure is placed behind the whole table. And it can also be tiled, continuously repeated that is . Indeed this is exactly the same as for the background figure in the <body>-Tag. However , this characteristic does not conform to the HTML standard. This is exactly the same as for the instruction to colour frame lines using bordercolor and

Forms 37

Creating response and evaluation forms

Forms are a fine thing. Surfers can use them to send you a reply, fill out a questionnaire or take part in a competition. It's best to show this with an example of a survey form with as many types of potential entries as possible. On the left you can see the source text, on the right how the page looks in the browser.

```
<HTML>
<HEAD>
        <TITLE>A form</TITLE>
</HEAD>
< BODY>
<h1>Welcome to our questionnaire!</h1>
<form action=mailto:"jch@snafu.de"
method="post">
Please enter your first name and surname
<input type="text" name="Name">
In which county do you live?<input type="radio" name="li
                        name="live"
value="Sussex">Sussex<sx>
<input type="radio" name="live"</pre>
value="Surrey">Surrey<sy>
<input type="radio" name="live"
value="Somerset">Somerset<st>
What is your favourite meal, you may se-
lect several!
<input type="checkbox" name="food"
value="Spaghetti">Spaghetti<br>
<input type="checkbox" name="food"</pre>
value="Pizza">Pizza<br>
<input type="checkbox" name="food"</pre>
value="stew">stew<br>
Choose a holiday destination:
<select name="Round trip" size="4">
<option>Spain
<option>Canary Isles
<option>Greece
<option>Germany
</select>
Click on at least two favourite flowers:
<select multiple name="Flowers" size="4">
<option>Roses
<option>Tulips
<option>Crocusses
<option>Primulas
</select>
<input type="submit" value="Send data">
<input type="reset" value="Empty form ">
</BODY>
</HTML>
```

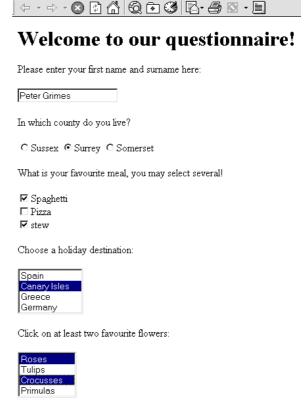


Figure 49 The form is being sent

Empty form

Send datą

The form is sent off using <form action... > This command shows that the person whose email address is shown will receive the content of the form. Companies keep their own data bases on the server, for example for online ordering. Data is transferred to the data bank by a so called CGI program . The content of the <form> tag then looks a little bit different.

The text input field

The next field <input type="text" ...> is a text input field. The text you type is here will be directly read .

There are various settings to "modify" this field, type="password" enables you to set a pass word, type="url" refers to the entry of a web address etc.. Using size="20" or maxlength="50" you can set the size and maximum number of characters .

38 Forms

Just a reminder: and
 are just there to set the individual lines under each other!

The Radio buttons

The *radio buttons* were copied from old transistor radios. If you press one button in another pops out.

```
<input type="radio" name="life"
value="Sussex">Sussex
```

If the surfer decided on Sussex , then you'll get back the value entered at <code>name</code> and <code>value</code> . You can determine both freely . Perhaps it would be better for the data bank if for <code>value</code> a 1 is used for example?

Check boxes

Check-boxes have the advantage, that you can have several options to click on. If the respondent chooses pizza and stew, then these will be entered in the respective lines as name and value:

```
<input type="checkbox" name="food"
value="Pizza">Pizza<br>
<input type="checkbox" name="food"
value="stew">stew<br>
```

Selection fields

For the travel destination and the favourite flowers two selection fields follow.

There is a difference!

In the first selection field only one choice can be made. In the lower option field multiple choice is possible.

Keep the *CTRL-Key* pressed , so you can select several points at once!

Sending back and submitting

The Submit button sends the data off. <input type="submit" value="Send data">
The text under value is shown on the menu option.. So you could also write "Press me" or "Leave me alone!" there. It doesn't matter, the surfer's e-mail program automatically creates an e-mail, which is immediately sent back to you Possibly the browser will also demand a confirmation..

And the Reset button? Just try it!



Figure 50 Warning before sending

Receiving files by e-mail

Of course you'll be interested in knowing how you can get this file at once. But not on a plate, you'll get it in a blank mail as an attachment.

Depending on the browser, a different text will appear. Internet Explorer sends you a form marked Form produced t by Microsoft Internet Explorer. Using Netscape you get a Form posted from Mozilla.



Figure 51 Blank email with attachment

The attachment using Internet Explorer has the file extension att, using Netscape on the other hand dat. Simply open the file with the editor!

For the example on the previous page, the attachment looks like this:

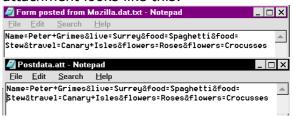


Figure 52 In any case it is the same content

High performance email programs also let you transfer attached files automatically into specific sub files. A suitable data bank program could then take over this data and evaluate it automatically. With a little programming experience everything is possible. But no time for that today, maybe tomorrow..

Style Sheets – the clever format models for HTML

Do you already have a little experience of one of the larger word processing programs? Advanced writers and layout experts don't just give words or headings a typeface style or size 10 or 12 points. Even so-called fixed character formats bold, italic etc. are out.

Why? Well just imagine than in a 400 page document you have to highlight all the important words. So you do this by clicking on the Bold option. But then instead of bold the publisher wants everything to be in italics! And he doesn't like the typeface used for the headings either. You'll have fun making all those changes. It could keep you busy for weeks! To stop this happening there are so called Format models, called styles! You just give the words to be highlighted the style "highlighted". In this style all the desired characteristics are "packaged": script, type-size, bold or italic etc. Any changes are made just once in the format pre-set, to the style. Then the changes are made automatically on all the affected words in the text at once. Do you think that's fan-

Format models for Web-Pages

tastic? It sure is!

Styles also exist for HTML documents. The style is defined in style sheet.

NB: Style Sheets can't be read by older browsers. Internet Explorer after Version 3.0 is the earliest version which can handle them, and with Netscape Communicator you'll need at least Version 4.0, but even that won't cope if JAVA is turned off! Nevertheless, the cleverer format models are becoming increasingly popular. Here is just an example, which belongs – typically for style sheets – in the HEAD, right between </title> and <body>!

```
<STYLE TYPE="TEXT/CSS">
<!--
body { background: yellow; margin-
left: 20px }
p { font-family: helvetica; font-
size: 12pt; color: blue }
H1, H2 { font-family: helvetica, ar-
ial }
//-->
</STYLE>
```

The first line introduces the style sheets! The second is a so-called commentary character, which is there to prevent older browsers from being thrown off track. The third line is where the action starts: body {background: yellow; margin-left: 50px}

just means that the document background is coloured yellow, the left page edge has 50 pixels.

```
p {font-family: helvetica, arial;
font-size: 12pt; color: blue}
```

means that all paragraphs which you start with <P> will have the font type Helvetica or Arial, font size 12 point and will be coloured blue! Then the commentary is switched off and the style sheet closed using </style>!

Your Style-Sheet could also contain the following commands, which define each heading level individually . padding-left is the "filling", the "spacing" from the left margin!

```
h1 { font-family: helvetica, arial;
font-size: 20pt }
h2 { font-family: helvetica, arial;
font-size: 16pt }
p { font-family: helvetica, arial;
font-size: 12pt; padding-left: 30px }
```

More attributes for style sheets

There are numerous attributes. Here's a small selection:

[
Attribute	Responsible for		
font-family: helvetica, arial	Font type		
font-size: 14 pt (1cm)	Font size		
color: red (green)	Colour		
Background: silver (blue)	Background colour		
font-weight: bold (bold, light, normal)	Font weight (e.g. bold)		
font-variant: small-caps	Font variation (small capitals)		
font-style: italic	Font style (e.g. italic)		
line-height: 12pt (2cm)	Line height (in pixels or cm)		
margin: 10px (2cm)	margin (in Pixel or cm)		
margin-right: 2cm	Right margin only		
margin-left: 15px	Left margin only		
margin-top: 10px	Upper margin only		
margin-bottom: 10px	Bottom margin only		
text-indent: 10%	Indent, with text for first line		

	only
text-decoration: line- through (box, blink)	Text effect (e.g. line-through)
list-style-type: square (circle)	Lists (e.g. bullet square, circle)

Paragraph and character formats

Do you want to format a particular paragraph individually, using styles? Then highlight this paragraph additionally with the attribute class:

Be seeing you!
Or like this:

Paragraph shaded
grey

In the style sheet you write these paragraphs like this for example :

```
p.quote { font-family: times; font-
size: 10pt; color: blue }
p.shade { font-family: arial; font-
size: 10pt; background: gray }
```

You can produce lists in a similar way. The >-for example is coded:

class=circle>

So in the style sheet write:

li.circle { list-style-type: circle }

Not only paragraphs, but characters too can be changed by styles. Perhaps you want the text between the Tags to be both italic as well as bold? Perhaps all text parts enclosed by <i></i>> are to be coloured blue as well? Then just write in the style sheet:

```
b { font-style: italic }
i { color: blue }
```

It's great but beware!



Figure 53 What looks like this in Internet Explorer ..

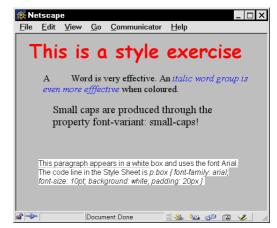


Figure 54 ...looks like this in Netscape!

You can't rely 100% on the result when using style sheets . Again it's all down to differences in the way different browsers display items!

When using style sheets: pay attention that the effect is shown the same on older browsers as well. Always test your site using several browsers, at least Netscape and Microsoft!

References to external style sheets

In spite of their problems, style sheets are becoming increasingly popular, the advantages are just too great.

You can even store style sheets separately , as an external text file to your web page. Your HTML-documents can then access them. The best thing about this is that a style sheet can be set up, then used by several documents.

Here's how you do it:

1. Create your style sheet as a simple text file with the extension css. Just the style sheet belongs here without any tags!

```
File Edit Search Help

h1 { font-family: Arial, Helvetica; font-size: 20pt; }
h2 { font-family: Arial, Helvetica; font-size: 16pt; }
h3 { font-family: Arial, Helvetica; font-size: 14pt; }
p { font-family: Arial, Helvetica; font-size: 12pt;
padding-left: 30px }
/★ This style sheet is valid for Tips and Tricks ★/
```

Figure 55 The last line is just a comment

2. Now reference your HTML-document to this style sheet. For example write in the HEAD:

```
<link rel=stylesheet type="text/css"
href="style.css">
```

Leave out <style></style> !

Frames 41

Frames, movable part windows in Web-Pages

Everyone has them, wants them or needs them. They are definitely "in". They are moveable part windows in web pages. For example, they're ideal for a menu which is to remain fixed to the left or upper margin, or for a company logo, which is to be repeated on each page of the web site. Frames make navigation easier and give the web-designer a valuable and handy design aid.

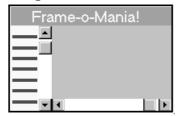


Figure 56 Frames, schematic view

The Netscape Navigator was the first browser, which could display frames . Now almost all browsers can recognise these "moveable" frames. So there is hardly a reason not to use them.

Just look at this graphic:



Figure 57 A Navigation bar in the frame

This is an ideal navigation solution. When the surfer makes a left click on a reference, the corresponding part of the document comes into view in a frame on the right. All this without the content page disappearing from view! This remains firmly in place in the left frame!

NB: This document is actually made up of three documents!

First we have the so-called *Frame set*, which defines the division of the window. Then the documents which are to be displayed in the individual frames must be created.

On the one hand these are the contents page (the links for navigation). On the other hand there are also of course the actually interesting documents themselves, in this case an introduction to HTML.

In the example the navigation document is *links.htm*, the other document *tag.htm*. The frame set itself is called *index.htm*! The frame set source text looks like this ,it is a whole standard HTML-Document in itself. You can call it *index.html* or *dream.htm* if you want.

The interesting stuff begins in line 100 <frameset cols=100, *>.

A frameset is always introduced with frameset. The command which follows, determines that the frameset is made up of columns. (The alternative would be rows.)

The first column is defined with a width of 100 pixels, followed by a comma. The second column is to be matched to the width of the surfer's monitor, that's why

there is a star. (Columns and lines can also be defined relatively, write e.g. cols=50%, *).

The attribute frameborder=no prevents the frames from being separated by an ugly border.

Now enter one after the other the sources for the files which are to go in each frame. This is done by frame src= reached. First comes the file *links.htm*, which goes right to the left .

On the right the file *tag.htm* should be displayed.

The inclusion of the file name (name=...) is very important especially for the file tag.htm. You can use any name you like for your documents.

Don't forget to close off the frameset using </frameset> ! You must also remember that: framesets don't have a BODY!

The attribute noframes is optional. Between this tag you can place a text alternative or even a whole document. This will then be seen by surfers who are using browsers which cannot cope with frames.

References in the framesets

Do you remember? Within Web-Pages references to internal Anchors (a name= etc..) are made. In the reference itself you also have to use a (#) sign.

Everything is much more difficult in the frameset, because we're dealing with separate documents! References are first made to the document. Then it is important to enter the anchor target as well. Up to now the reference looks like this. The target is in the example of the anchor above.

```
<a href="daydream.htm#above">Start</a>
```

Here you're referring first to the file and then after the # sign directly to the anchor name.

But that's not all ! You have to enter the frame name as well. This has to be entered with target, and for the sake of clarity is shown bold here. So for the first link the syntax looks like this:

```
<a href="tag.htm#above" tar-
get=main>Start</a>
```

In source text the whole document *links.htm* now looks like this for example:

Figure 58 Complicated – References in the frameset

References out of the frameset

Do you want to make an external link from the frameset? Here you must take care too.

Assuming you write in your framed document: "You can find many great books at KnowWare". KnowWare being a link. The usual link would look like this:

```
<a href="http://www.knowware.dk">
KnowWare </a>
```

Correct. This would bring you to the Know Ware Web-Page. But this would appear in your frame, which isn't so good. So you also have to put the target details into the hyperlink! Now it looks like this:

```
<a href="http://www.knowware.dk"
target=_top>KnowWare</a>
```

Don't forget the underscore (_) in front of top!

What looks simple and elegant in practice, can be tricky to create yourself! Don't forget that you make frames in the head of the document.

To make learning easier for you, I have placed further information and a multipart course with practice3 files on my web page. Just surf to www.lexi.de and access the course Frame-o-Mania an! You can download all the practice files and run the examples step by step on your PC!

Creating homepages with Word and StarWriter

Word processing programs can be used easily to make a home page. I've considered two programs which are in common use and are similar to operate: Microsoft Word and StarOffice.

You don't have Microsoft Word 97 or 2000? Then use StarOffice! StarOffice is a top quality Office package with astounding internet capabilities! The best thing about it is that it's free to home users! Yes that's right, the so called *personal edition* of version 5 has been available as a free download since autumn 1998 from www.stardivision.com.

You can by this packet with handbook for around Euro 40 - recommended!

Converting pre-existing documents

Want to convert a pre-existing document without too much bother? No problem. Make sure that the document doesn't have a complicated layout structure. Text flow or refined characters will be rejected mercilessly on conversion. I also advise you not to use head lines, foot lines, several columns or your own format models. Standard graphics, various font types, bold, italics and even tables are no problem! This has nothing to do with Word or StarOffice, but is down to the limitations of HTML.

How to convert text documents to HTML-format.

- 1. Select File/Save in.
- **2.** Now– and this is very important think carefully about your own file. In case you forgot, you get another chance: click in Word on *Create new file* or in StarOffice on the menu option *Create new directory*. Enter a name in the following dialogue window, then switch to this file with a double click!
- **3.** Create a new file name. Is it to be the start page of your site? Then type *index* or *home as* its name.
- **4.** From the list field next to file type select *HTML-Document* or *HTML* (StarWriter). The file is automatically given the extension htm, or in StarWriter html.

5. Click *OK* then the page will be converted with any graphics it may contain into a format suitable for the world wide web Any graphics in the document are separated, converted into GIF format and given their own file name. But you can find them in the same file afterwards! The export filter in StarOffice is very good. Not only this it can also deal with style sheets well, see page 37. If you want to save your document using style sheets then select *Extras/Options/Browser*. *Select* HTML from the menu with the setting *MS Internet Explorer 4.0*, and then click *OK*.

Version 2000 of Word can also save in the so-called XML format, a new standard for web pages, which may one day replace HTML.

Creating an HTML-File from the outset

It is recommended to create an HTML-File from the outset. There are standard formats available for this in Word and Star-Writer.



Figure 59 Word – creating a blank Web-Page

Select *File/New* in Word. Go to the Menu *Web-Pages*. Now double click on the option *Blank Web-Page*! Now you can start to create the web page.

And in StarWriter? Select *Start/More/HTML-document*. A blank HTML-Document will be downloaded.

Beware: Using the first save option we mentioned everything was easy. Graphics and other objects are automatically converted into GIF format and stored in the same directory as the new HTML file. But this is no longer the case using the option we have now selected! Graphics are no longer automatically converted and saved in the same directory .

This is why I advise you to think ahead! Think of the graphics! Design the graphics in advance and convert them to GIF, JPG or PNG. Put them first in the project directory for your home page. Then on inserting them, you know where to find them!

Now you can start to set up your page . In principle it works just like word processing, with an advantage. Characteristics which are not valid in HTML (column, head lines etc..), are just screened out of view.

Source text in Word and StarWriter

In both programs you can switch to man source text view . Select in Word 97 simple *View/HTML-source*, in StarWriter however *View/HTML-Source text*!

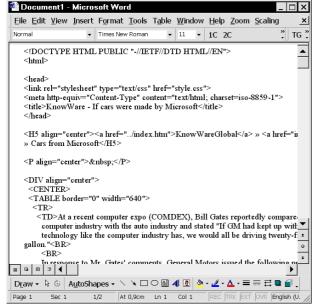


Figure 60 The Source text in Word

But beware – both programs have an allergic reaction to revisions of source text and will reject your pages mercilessly or will alter them to the point of frustration for you. Even if you've written everything to HTML standards and used the cleverest solutions!

Note also that pages you write yourself should not be entrusted to Word or Star-Writer, as afterwards you won't be able to recognise your source text. The only program I know of which makes practically no changes to the source text is Macromedia Dreamweaver. More on this on page **Error! Bookmark not defined.**

Creating external Hyperlinks

External Hyperlinks like www.knowware.dk are no problem for

your word processor. Just write the link text, and the word processor will automatically make a hyperlink. Perhaps you want to define a word or group of words as a link, for example KnowWare Publishing house?

1. Highlight this word group, then select *Insert/Hyperlink*.



Figure 61 Inserting a Hyperlink in Word

- **2.** Type the link in the relevant field .
- **3.** Click *OK*. The underscored link now appears in the text.

In a similar way you can create links to other files, for example to link together all HTML documents in your web site. Instead of http://something.uk type the filename of the corresponding HTML document, for example hobby.htm!

Is your project spread around several files? Then create references to the files in the sub file! In the dialogue window to define the Hyperlinks just select *Search* or *Select*, if using StarWriter. Now search for your file. The program automatically adds so called relative links An example of exactly how to do this is shown on page 22.

Anchors and references inside the page

It's easy to make links down page and back up page again. Just follow the description on page 23.

But it's a little different using word processing.

- **1.** First you have to set anchors. Highlight the places you want to reference, for example sub headings.
- **2.** Select *Insert/Textmarks*. A so-called text markers will be placed, which is really an anchor.
- **3.** Enter a meaningful anchor name, for example *Use*. Click on *insert*, or if using StarWriter *OK*.

4. Highlight the place which is to be the link, in the example *Use*. Again use *Insert/Hyperlink*.



Figure 62 StarOffice – a reference to the anchors

5. First enter in the upper field a # sign, then immediately without a space the name of the text markers, i.e. "#Use". The # sign shows that this is an internal and not an external link. Click OK.

Tip: In Word you don't need to enter the #, if you make the entry in the lower field (name of a place in the file). If you click *Using search*, you'll be shown all the text markers (anchors).

6. Don't forget to mark the beginning of the page with a text markers, for example with the name "top". Then keep referencing from lower down back up to the start of the page.

Want to know which text markers you have already set up in StarWriter? Switch to the Navigator using the appropriate menu option or function key *F5*. Here you can find the anchors or text markers neatly sorted.

Background colours and designs

You already know how to set background colours and patterns using the BODY tag, see also page 20.

In Word you can do this simply by using Format/Background, just pick a colour!

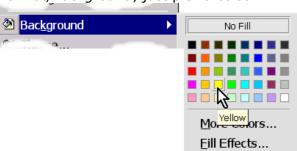


Figure 63 Word - selecting background colour

A padding effect (tiled graphic) can be selected using *Padding effects*.

Want to make one of your own graphics into a background? It's a little complicated, but can be done.

- **1.** Select *Format/Background*. Click on *Padding effect* too.
- **2.** Click on the option *More structures*.
- **3.** Search for the graphic in the corresponding file.



Figure 64 Word offers many textures

In StarWriter you can find background colours using *Format/Page*, Menu *Background*.

How do you find a background graphic in StarWriter? It's not so simple.



Figure 65 StarWriter – Setting a graphic

- **1.** In the *Background* menu pick instead of *As colour*, *As Graphic*. There is a field list for this.
- **2.** Now click on the option *Select*, you can now search for the graphic.
- **3.** Is your graphic relatively small? It won't be tiled automatically, you have to pick the option *Tiling* first!

Tip: In StarOffice you can find many ready prepared backgrounds, just look in the file *Backgrounds* or *www-back*!

Inserting graphics

Want to insert a standard graphic? It works like this:

- **1.** Select Insert/*Graphic* (*from File*)
- 2. Search for the graphic you want.
- **3.** Graphic positioning is more complicated in StarWriter, and is made more difficult with the addition of a dummy preview. Right click on the command *Anchoring* and *Positioning* will move the graphic to the right spot. *At symbol left* is left aligned with text flow, *At symbol right* is therefore right aligned with text flow! In both programs you can insert simple or graphic lines too. Select *Insert/horizontal Line*.

Exact layout using tables

Do you already know how to insert tables in word processing?

- In Word:
- **1.** Select Menu *Table, Insert, Table*. In StarOffice:
- **1.** Click *Insert*, keeping the left mouse tab held down!
- **2.** A so-called fly out menu with more options opens. Release the mouse tab!
- **3.** Now point, but don't click on the *Table* option. Drag the mouse down and right.



Figure 66 StarWriter – is a little more complicated

4. Using the number of checked boxes you can determine how big the table is to be.

Just use these tables for your HTML documents. The advantage is clear. Hidden tables can be used to position text and graphics exactly!

Background colours and more

Do you want to give individual lines or the whole table a background colour? In Word you do this as follows:

- **1.** Highlight the respective points.
- **2.** Select the command *cell characteristics* in the Context menu
- **3.** Set the desired colour in the list field . Here you can also alter the position of the text in the cell.

In StarWriter select *Table* from the context menu (right click). The menu option *Background* is of interest here.

Image maps in StarOffice

Image maps are refined tools. You can use them to define just specific parts of a graphic as a link. For example from a map of a country, just one region!
StarOffice offers this function, with a

small, but high quality Image-Map-Editor:

- **1.** Click right on a graphic, select *Image Map*. The Image-Map-Editor appears.
- **2.** I recommend you use the *square*. Draw a square around the area which you would like to define as "movement sensitive".
- **3.** Now type the corresponding web address in the address field , for example *london.html*.
- **4.** Click on the small green cross in the left corner.

OUR OFFER

Just click the area you want



Figure 67 Image Maps – a great idea!

Effects, spice and dynamics for your homepage

You can spice up your homepage with animation, and with touch-sensitive links, buttons, menus, visitor counters and a visitors book . Give it a try. This section has a small selection of the many possibilities available.

Taking the last first:

Visitors book and counters

These are so-called CGI programmes, which send information to the server. Many service providers now give you the opportunity to include these tools as a pre-prepared script on your page. AOL has offered for some time now a counter and visitors book. Find out more about at: http://members.aol.com/techprol/
If you can't get a counter from your service provider, in the web you can find a

ice provider, in the web you can find a dozen offers of free counters or visitor books. But they are not – speaking from experience – always very reliable. You can access current links anytime from my Homepage!

Links changing colour

Have you ever wished that on some pages the text links would change cover as the mouse clicks on them? Now you can create this effect yourself, and it's really simple. Just define a style sheet (see page 39) and enter the following.

A:hover { text-decoration: underline; color: #C00000 }

That was all there is to it! But note that this effect can only be read by Internet Explorer, and not (in the version I have) by Netscape Communicator.

Do you know about buttons, which change their colour or appear to be pressed in when you click on them? These are mostly graphic links, which is a harder effect to create. You can only do this using so-called scripts, for example Java-Scripts. Here are just some tips, nothing more. Script languages are simple programming languages, which you can use to bring dynamics to your page. Scripts are normally written into the HEAD of HTML documents. Scripts are carried out directly when you view the page with a browser. If the browser can't read the script or is not upto-date enough, it shows an error mes-

sage. The best known script language is Java-Script from Netscape. For our example you need graphic buttons, in pairs.



Figure 68 Buttons always come in pairs

How good are you at editing graphics? An important point here is that both buttons have to have exactly the same pixel size. There's a long way to go before it can look like this:

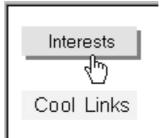


Figure 69 On Mouse Over – Graphic 2 is downloaded

Now you need a suitable Pre-figuration script, or a program, which creates your script . The Macromedia Dreamweaver (see Page Error! Bookmark not defined.) can do this for example . And at www.freeware.de/java/script.htm

I found a free example script.
www.freeware.de/java/javascript/javascript.shtml



Figure 70 Just download the script

Well here you can also download a lot more free scripts and package them in your home page. I recommend you use a search engine and search for the key word *javascript*.

Script for a Ticker

Here is the short script for a ticker. A ticker is just a field in which new text keeps appearing! Write down the source text for the whole HTML document when you've got time, or just copy it from my web page.

```
<html>
<head>
<script>
var max=0;
function textlist()
max=textlist.arguments.length;
for (i=0; i<max; i++)
this[i]=textlist.arguments[i];
tl = new textlist
"Just out: Get going with Homepages!"
var x=0; pos=0;
var l=tl[0].length;
function textticker()
document.tickform.ticker.value=tl[x].substrin
g(0,pos)+" ";
if (pos++==1) { pos=0; setTime-
out("textticker()",1000); x++;
if (x==max) x=0; l=tl[x].length; else
setTimeout("textticker()",100);
// -->
</script>
</head>
<body onload="textticker()">
<h1>A Ticker</h1>
<form name="tickform">
<input type="text" name="ticker"
size="50">
</form>
</body>
```

The text in bold in the example is that which appears in the ticker field. You could enter more lines here, which will then be shown by the ticker one after the other

Don't forget to separate them with a comma and to put the text in quotation marks!

A Ticker

Just out: Get going with Homepa_

Figure 71 A Ticker ticks...

A Pull-Down-Menu

Here is a complete short script, which is no effort at all to use. It's for a Pull-Down-Menu. Just put it at the desired point on your homepage.

When you select one of the options, the relevant page is called up. You can also enter a whole web address between the Quotation marks (in bold) using http://...!

The best thing about this script is the fact that you don't have the write

<script></script> tags in the HEAD,.
It'll work.

```
<form>
<select onChange="self.location =</pre>
this.options[this.selectedIndex].value"
name="select">
<option value="&amp;{self.location.href};"</pre>
selected>Please select a topic! </option>
<option value="webpage.htm">Short Homepage
basic course</option>
<option value="daydream.htm">Tags for day-
dreams-daydreamers</option>
<option value="tables.htm">Tables, the gold
mine</option>
<option value="frame.htm">Frame-o-
Mania</option>
</select>
</form>
                                •
Please select a topic!
Please select a topic!
```

Figure 72 And it looks like this

Tables, the gold mine

Frame-o-Mania

Short Homepage basic course

Building in background sounds

Background sounds don't need a script. Just add them with the Tag:

<bgsound src="ku-clas.mid">

Put this in the HEAD. The file you need to reference, is highlighted bold. This can be a WAV- or MIDI-file. Using the function loop you can determine how often the piece is played, e.g. loop=2 or loop=infinite.

Unfortunately, the Netscape-Browser cannot cope with the tag bgsound!

Banners and animations as GIF

Of course you can also program banners and animations in Java-Script. But there is a much simpler way .

The file format GIF can be exploited in such a way that several pictures can be stored in it and shown in a sequence. The best known program for creating such animations is the free ULEAD GIF animator. Download a copy for yourself from www.webutilities.com

The Microsoft GIF animator is also free and can be recommended. Just go to www.microsoft.com

You can even make an animation using StarOffice . The way to do it is not so simple, but in my new PC guide StarOffice 5 there is a comprehensive step by step instruction.

On the following page I'll show you how to create an animated GIF file with Paint Shop Pro 5. Paint Shop also has a GIF animator, called *Animation Shop*. I liked using this utility best of all. Just a reminder, you can download a trial version of Paint Shop at www.jasc.com!

Workshop: Text banners using Paint Shop



- **1.** First start Paint Shop Pro, by clicking on the menu option bar *New*.
- **2.** Now a selection box appears, in which you must configure the graphic dimensions. For example select 300x50 pixels, which is a decent size.

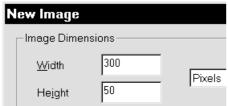


Figure 73 OK don't forget!

- **3.** Click now on the text tool (The symbol looks like the letter A).
- **4.** Select in the next dialogue window the desired font characteristics, then type your text in the lower field. Click on *OK*.

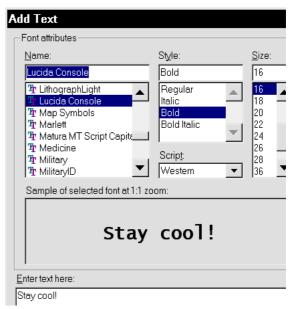


Figure 74 Not too large and not too small!

5. With the left mouse tab you can now drag your text to the correct position. Right click when the position is ok.

Stay cool!

Figure 75 The star figure for the banner!

Tip: The option *Return* (curved blue arrow pointing left) helps you if you get lost searching!

- **6.** Now call up *Animation Shop* via *File/Run Animation Shop*. In Animation Shop click the button *New Animation* in the toolbar!
- **7.** Set exactly the same measurements, that is 300x50 pixel. I recommend using *transparent* for the screen colour.
- **8.** Return to Paint Shop, click on the graphic and press *Ctrl+C*, this copies the graphic onto the clip board. Click on the first graphic in Animation Shop and key *Ctrl+V* to insert it.
- **9.** In Animation Shop select *Effects/Image transition*. Select a transition effect. A great effect can be created with *Dissolve* for example! Don't forget to click *OK*!

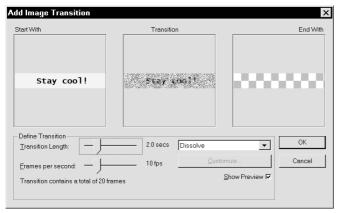


Figure 76 You can select great effects!

10. Several individual graphics have now been created, each of which will, be displayed for about 1/10 of a second . Want to alter this timing, so that the text remains on screen for a while longer? Right click on the graphic, select *Properties*. Here you can set the desired time!



Figure 77 Here is a two second setting

11. Using the option *Replay* you start the animation, which you can save with *File/Save*!



Figure 78 It works in preview

More graphic tips and tricks

How good are your graphic skills? Improve them by playing around with the program! Here are a few tips:

The clip board trick

You have a great collection of Cliparts for Corel Draw or a similar graphic program. But you're not sure how to get these Cliparts into your graphic program. If you don't have an export filter, just try using the clipboard.

- **1.** Highlight the graphic in your source program, press *Ctrl*+ *C*, this copies it into clip board.
- **2.** Switch to the graphic program, key *Ctrl*+ *V*. This will usually insert the graphic, which you can save in the desired format (GIF; JPEG, PNG).

Tip: You can also "snapshot" the screen content and whole or tlw. as a graphic for your web page. Using the print key on the keyboard will transfer the content of the screen to the clip board as a bitmap. Now switch to the graphic program and type Ctrl+V!

Setting the graphic background to transparent

Have you encountered this problem? You've put some great graphics on your home page, with a decent background colour or a pretty background design. However your graphic breaks up the nice structure of the background.

Just avoid it! Set up your graphic so you can see the background through it! Good programs can set the background colour to "transparent". In Paint Shop Pro 5 you can do this as follows:

1. Select *Colors/Set Palette transparency*.



Figure 79 The background becomes transparent!

2. Click as shown and *OK*. Alternatively you could also select colour transparency for another colour.

Using StarOffice? This also allows you to set the colour to transparent.

- **1.** Click on the graphic, until it is highlighted . In the context menu select the command *Edit*.
- **2.** As a back up you are asked if you want to end the connection, click on *yes*.
- **3.** Now you've reached StarImage. First click on the option "Pipette" on the left hand side.
- **4.** Now click on the *Pipette* option again in the *Pipette* dialogue window.
- **5.** Then click in the white area of the graphic, or in the part you want to be transparent. Now click on *Replace*, that's it!

In any case: in Paint Shop and many similar graphic programs you can find transparency being used on a "chess board pattern".



The graphic forms slowly

Have you ever asked yourself how on a lot of web pages the graphics form in layers? At first they appear blurred, then in sharp focus.

The secret is so called interlacing, the graphic being downloaded and displayed phase by phase. On saving GIF graphics pay attention to an option, called *interlaced*. Save the graphic using this setting. For JPEG graphics the same effect can be created using a so called "progressive" characteristic. The ideal scenario is that the browser shows a preview graphic, when just 10% of the graphic file has been down loaded.

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