Introduction to Web Design

This tutorial is suitable for beginners in the field of web design. It includes:

- 1. Introduction You are here.
- 2. <u>HTML</u> An introduction to the computer language which forms the heart of web pages. Although it's not absolutely necessary to know this stuff, you should still read this page to get an idea of how it works.
- 3. Editors Tools you can use to help create websites.
- 4. Hosting How to find a home (host server) for your website.
- 5. Publish! How to upload your site to the internet so that other people can visit it.

Important Note: Before taking this tutorial or attempting to build a website, you *must* have a basic understanding of the infrastructure which makes up the internet. You need to know what a server is, how websites exist and how people access them. If you don't understand these things *you should not begin constructing your site!* Instead you should take our short <u>WWW Primer</u> which explains it nice and simply. Then return here and carry on...

The Cost of Creating a Website

At this point, many people will be wondering one thing: What will this cost? The good news is that, apart from your normal internet connection fees, it is possible to build and operate a web site at absolutely no cost. The bad news is that it's difficult to work like this and there are severe limitations to what you can do without spending money. This tutorial will offer options for various budget levels as well as those without any budget at all.

Methodology

Before we get down to business we should point out that there are two very different ways to make a website.

- 1. The quickest and easiest way to make a site is to use an on-line "wizard" supplied by your internet service provider (ISP) or some other organization.
 - To use this method, visit the internet address given to you by the organization providing the service. There you will be guided through a series of simple steps which will result in a site being constructed for you. The advantage of this method is that you don't need any skills other than using your browser. The drawback is that you are very limited in what you can do with this kind of website.
- 2. The other approach is to construct a website on your own computer, then "upload" it to the internet so that other people can access it. This is the way most serious sites are made, and it's the method that this tutorial will cover.

Note: As the internet is such a complicated environment, these introductory tutorials tend to over-simplify explanations of how things work. You shouldn't take all our examples and illustrations too literally, but the information is conceptually sound. In time, you can choose to make the effort and build up a more technically accurate understanding.

Getting Started

It can all look very intimidating for the beginner, but if you know how to surf the internet and use a word processor then you should have no trouble making a website.

However, the single biggest mistake we see from beginners is trying to do too much too soon. Whatever your level of experience with computers and the internet, it's absolutely critical that you take things slowly and don't get ahead of yourself. Website construction is a minefield. If you have a map you'll be fine, but if you think it looks easy and go charging in you'll end up coming apart!

Many software applications will tell you that web design is easy. It's common to see claims such as "Make your own website in minutes -- no experience necessary!". In our opinion these claims are misleading -- you simply can't learn enough in a few minutes to have any chance of success. You can learn the basics in an hour or so, but you'll need a lot longer if you want to be any good.

People often ask us to recommend a computer program which will allow them to create fantastic websites. They sometimes show us a website they like and say "I want a program that will make sites like this." This scenario is somewhat like taking a photo of a house into a hardware shop and saying "I want a hammer which will make a house like this".

So here's the first reality check: There is no such thing as a program which makes good sites. Although some programs are more helpful than others, in the end it's up to you. Good websites aren't impressive because they were made with a good program, they are impressive because they were made by an experienced person. To make a great site you need to do a great deal of learning. There are no shortcuts.

If you're still keen, carry on to Step 2: HTML

Step 2: HTML

At the heart of web page design is a computer language called "HTML". Although many new languages and technologies are superseding HTML, it still forms the foundation of virtually all websites. For this tutorial we will simplify the situation and pretend that all web pages use only HTML.

This is where you're probably thinking "Oh no, they don't expect me to learn about this do they?". Well, yes and no. You don't actually need to know anything at all about HTML and if your ambitions aren't high then you can get away without it. However, if you're even slightly serious about making a good website then it will help you a *lot* if you understand a few basics. Don't be put off — it's not as intimidating as it sounds.

If you really can't be bothered, there are other options available (at a cost — more on that later).

HTML Documents

A web page is an "HTML Document". This is a file format which usually uses the extension ".html" or ".htm". For example, if you use Microsoft Word, you will usually save your files with the extension ".doc". However you can also save your files with many other extensions such as ".txt", ".wps" etc. Amongst the options is ".html".

HTML documents are actually just plain text, but contain snippets of code which carry vital information about how the page should be displayed. You can create such a document using any text editor - even a very simple one like Windows Notepad. In fact many web designers prefer to use simple text editors.

This is what a very simple HTML document looks like:

```
<html>
<head>
<title>A Simple Web Page</title>
</head>
<body>
This is about as simple as a web page can get.
</body>
</html>
```

To view an HTML document, you must use a browser (or similar software). The browser opens the HTML document in the background and "decodes" it before showing it to you. What you see is your browser's interpretation of how the web page should look (note: this is actually an important point - it's why you should test your site using a variety of browsers). To see what the above example document looks like, click here, then click your browser's back button to return and continue.

We won't go into any more detail at the moment, but at the end of this tutorial we'll show you how to learn more about HTML.

Move on to Step 3: Editors

Step 3: WYSIWYG Editors

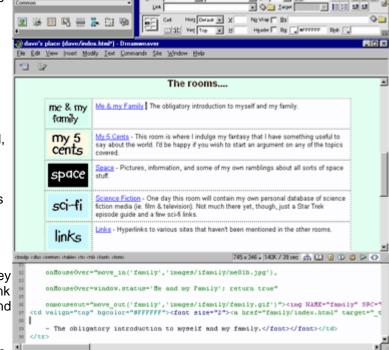
WYSIWYG means "What You See Is What You Get". WYSIWYG web-page editors are similar to word processors and they allow you to construct a web page without using HTML instructions. You simply type in your text, add pictures, etc, using familiar toolbars and menus. The editor makes the HTML code in the background.

Some well-known WYSIWYG web-page editors:

- Adobe Dreamweaver
- Microsoft FrontPage
- Microsoft Publisher

The screenshot on the right is from Dreamweaver. Using the tools provided, you can add text, images and other elements directly onto the page.

These editors have obvious advantages such as speed and ease of use. However, there is a trade-off: They are not 100% reliable. If you examine the HTML code, you are likely to find mistakes and unwanted extra code. They also tend to be deceptive - you may think you're producing a fantastic page but find that it looks very different once you publish it. Remember that these editors usually use an approximation of how the



page will look. To see your page as it really is you need to view it in a browser.

For these (and other) reasons, some professional web designers refuse to use WYSIWYG editors. Instead, they use simple text editors and compose all the HTML manually. However, it's becoming more common to use a mixture of both methods. A good WYSIWYG editor will give you the option to edit the HTML code manually. At the bottom of the Dreamweaver screenshot there is a panel which shows the HTML code for the page being worked on. As you edit the page in WYSIWYG mode, the HTML automatically updates. Likewise, you can edit the HTML code and the WYSIWYG view will be updated.

Recommendations

Finding the right software isn't easy. If possible you should try a number of different options - most good editors have free trial versions available. Here's what we think about a few leading contenders:

- Adobe Dreamweaver is our tool of choice. It is widely considered to be at least best equal in the field
 of professional web design. It's also perfectly suitable for the novice. It's not cheap!
- Adobe Contribute is a lower-cost sibling of Dreamweaver. It allows you to maintain and update your
 website as well as collaborate with other people who work with you.
- Microsoft Frontpage is a good program for beginners, but be warned: this program has a whole range of flaws and does not have a good reputation in professional circles. Although it is a specialist web development program and is much cheaper than many of it's competitors, there are free programs available which offer essentially the same functionality without the hassles.
 Ironically we use Frontpage quite a lot, because people often send us Frontpage files to work on (one of the drawbacks Frontpage websites often can't be edited with other programs). Believe it when we say Frontpage causes far more than it's fair share of grief.
- Microsoft Publisher was originally designed for print media but has evolved to include web design. It
 has the advantage of being relatively cheap, versatile and familiar. Many people use it simply because
 they already have it installed. However it is not a specialist HTML editor and doesn't perform well. We
 don't recommend it.
- Microsoft Word is similar to Publisher in that it was never originally designed for internet work.
 Although it can read and edit HTML documents, it does so very badly indeed. If at all possible, avoid it like the plague.
- There are numerous free HTML editors available. Search the internet, visit web design newsgroups and spend some time deciding.

Move on to Step 4: Hosting

Step 4: Hosting

Once you've created your web site and you can see that it works properly on your computer, you need to "publish" it to the internet so that other people can see it. Essentially you just need to copy the web pages from your computer to your host server.

Naturally, the first thing you'll need to do is to find a host server. There are many options available and finding the right solution isn't always easy. There are two main categories of hosting options: *Free* and *Paid*.

Free Host Servers

There are plenty of places on the internet which will host your site for free. Not surprisingly, there are catches. These may include:

- Advertising banners. Most free services make their money by inserting advertisements into your pages. The advertisements may also appear in pop-up windows which activate whenever someone visits your site.
- No domain hosting and ugly URLs. Free hosting doesn't usually allow you to use a domain name (eg www.myname.com). You will instead be assigned an address which could be very long and difficult to remember.
- No support. If anything goes wrong or if you need any help, don't hold your breath. Chances are noone cares.
- Limited features. You will find that certain features aren't allowed.
- **No guarantee of service.** From time to time free hosts simply shut down, either temporarily or permenantly. More often, certain features they offer are discontinued or they start charging for them.

Your best bet is to see what your ISP has to offer. Most ISP's have some sort of free web hosting option with their dial-up accounts.

Paid Host Servers

If the free services don't meet your needs then you'll be looking for a professional hosting service. Prices and features vary widly so shop around. Note that you don't have to use a host which is geographically near you - you can have your site hosted on the other side of the world.

Look for the following features:

- FTP Access. This is the most common method of publishing your files to the host server and is offered on almost all serious hosting options. Make sure you know exactly how to access your host.
- Technical Support. This is most important does your provider offer help installing and running your site? Does this cost extra?
- E-Mail. Exactly what e-mail facilities are included? Can you have multiple email addresses?
- Statistics. Most hosts provide free statistics to see how many people are visiting your site.

- CGI, PHP, etc. These are advanced features which allow you to add bells and whistles such as forms, dynamic content, discussion forums, etc. Not for the novice, but not so complicated that you can't learn. Many hosts have ready-made CGI features which you can add to your site with minimal fuss, or they may be able to add them for you.
- Frontpage Extensions. If you insist on using Microsoft Frontpage, then you'll need Frontpage extensions. This is a set of files and protocols which allow beginners to use advanced features similar to those offered by CGI. When used very carefully they can be a handy tool. However, Frontpage extensions have many limitations and are prone to inexplicable failure use them at your own risk!

Domain Name

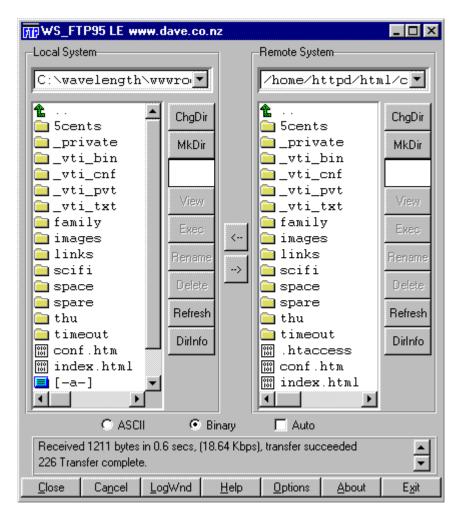
If you want your own domain name (eg www.myname.com) then you'll need to apply to the appropriate authority. This topic will be covered in a future tutorial.

Move on to Step 5: Publish!

Step 5: Publish (upload)

The final stage of construction is the upload. Using a file transfer program, you copy the entire website structure to the appropriate folder on the host server.

The window below is from the popular program WS_FTP LE, available from www.ipswitch.com.



If you're familiar with file management systems such as MS Windows Explorer, then you won't have any difficulty with this package. The left window displays the site on your local drive, the right window displays the site on your host server. You simply guide the program to the appropriate folders and use the left/right arrows to transfer selected files.

Some site authoring applications have the option to publish directly to the web. This may be largely automated, such as the "Publish" command in Frontpage or the "Synchronise" command in Dreamweaver. These commands can identify files which have been modified since you last published and tell you which ones need to be updated. If you have a large site, this can be a huge time-saver.

That's the end of this tutorial. We hope it's been useful. From here, the best thing you can do is <u>learn</u> more about <u>HTML</u>.

Why should I learn HTML?

This is a very common question amongst beginners. It's a valid question, especially as there are conflicting views on how necessary it is. Our position is this:

- If you want to create fast-and-dirty web pages and have no ambition to make them good quality or easy to access, then you can probably get by without understanding HTML. In such cases, a WSYWIG editor might be all you need. However you must understand that you are taking a chance your web pages may or may not work (even if they appear to have worked).
- If you have a friend or colleague who can check your HTML for you, then that will probably suffice.
- If you are even slightly serious about making web pages that people can access and use, a basic understanding of HTML is an absolute must. This doesn't mean you need to learn the whole language thoroughly just that you need to understand the structure of the language and have an idea of how it all fits together.

FAQ and Common Arguments

- I'm not good at learning computer languages
- I don't have time to learn HTML
- I've been told that I don't need to learn HTML
- Writing HTML is too slow
- I have a great WYSIWYG editor so I don't need HTML
- Isn't HTML obsolete?
- HTML is too limiting for my purposes

I've been told that I don't need to learn HTML

Don't believe everything you're told. People who say HTML knowledge is unnecessary usually either have another agenda (e.g. wanting to sell you software) or don't understand the reality of web design. Ask the opinions of experienced web designers — although some will say you can get by without it, the vast majority will recommend that you learn it.

I don't have time to learn HTML

It usually takes between 20 and 40 minutes to understand the basics. Within a couple of hours you can be making simple but complete websites. If you're willing to spend a little time learning each week for a few months you can gain a very good understanding of how websites work. This investment of time will pay off many times over. Think of it like this — every hour you spend learning this week will save you an hour per month forever. Although the payback starts slowly you end up taking a fraction of the time to get your work done.

Writing HTML is too slow

This is a common source of confusion but it is actually irrelevant. In most cases you don't need to *write* HTML code, you just need to *understand* it.

I have a great WYSIWYG editor so I don't need HTML

There's nothing wrong with good WYSIWYG software — it enables you to work more efficiently. As mentioned, the point is not that you should be manually typing HTML code, but that you should understand how HTML works.

An analogy: A nail gun will help you build a house much faster than a hammer, but if you don't know how to construct the framing and where to position the nails, your house is likely to fall down.

Learn how to construct HTML manually, then use WYSIWYG tools to work faster.

Side note: There will always be times when you need to tweak HTML manually. WYSIWYG editors will never be perfect.

I'm not good at learning computer languages

You don't have to be. HTML is not a programming language — it's much simpler than that*. On a scale of difficulty it's more like the "secret codes" that children play with. The thing that makes it harder is that there's so much of it to learn, but remember — you don't have to learn it all! Just learn as much as you feel comfortable with, at your own pace.

Do not confuse *time-consuming* with *difficult*. HTML is time-consuming to learn, but it is not difficult. Also, you don't need to learn the whole language — even spending a few hours learning the basic structure will help immensely.

Isn't HTML obsolete?

No. It is true that other languages are evolving and will probably replace HTML eventually, but HTML will continue to form the basis of virtually all websites for a very long time. In any case, HTML will give you a solid grounding before taking on new languages such as XML.

HTML is too limiting for my purposes

If your purpose is to create a web page, then sorry, but HTML is the standard. Love it or hate it, it's what the web is made of. If you really want to deliver in another format (e.g. PDF), that's fine. Just be aware that it's not a web page you're making so don't expect it to work like one.

^{*} Technically, HTML is known as a "mark up" language. Hence the name **H**yper**T**ext **M**arkup **L**anguage.