

Nigel Gordijk : Common Sense Design



A Plain English Guide to the Internet

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1 Document Copyright

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1.1 Change Control

First draft..... 30 January 2005

2 Introduction

This document is a plain English beginner's guide to the Internet and, in particular, describes some of what we do here at Common Sense Design. By avoiding technical jargon, hopefully it will prove to be a useful reference.

Part One of the guide, as its title "Frequently Asked Questions" suggests, contains answers to questions that inexperienced Net users may ask.

Part Two, the Glossary, catalogues Internet terms and expressions that appear in many IAB documents.

Part Three features a short list of recommended reading that will offer more in-depth information.

3 Part One: Frequently Asked Questions

3.1 What is the Internet?

The word "Internet" is an abbreviation of inter-networking whereby different networks have the ability to share information with each other. It is often further abbreviated to just "the Net". Put simply, the Net is an amalgamation of international networks and the computers located thereon and the means by which they communicate.

The core of the network consists of computers that are permanently joined through high-speed connections. People access the Net by connecting to the networked computers via an Internet Service Provider (ISP), such as AOL or BT Yahoo. Once online (connected) a computer can exchange information with any other computer that is also online, even if it is on the other side of the world.

In recent years, the Net has become a fundamental business communication tool for everyday correspondence, marketing products, financial transactions, customer support, publishing and much more. Many home users also go online to shop, send messages, play games, chat or read the news. Electronic data is passed through either a domestic telephone line, ISDN line, ADSL, cable connection, or dedicated link.

The Net's two most popular applications are the World Wide Web (also known as "the Web") and electronic mail (email).

The Web consists of graphics and text documents that are interconnected by clickable links. A Web page is a single document, whereas a Web site is a collection of related documents.

Email is a document that is delivered via the Net, taking as little as a few seconds to be transferred from one machine to another.

People often complain that the Web isn't fast enough. There are several reasons why it can seem to slow down. First, because a site's information is passed through a telephone line, a poor connection, such as noise on the line, can impede the data transfer.

Second, the computer that hosts the site (stores the files that form it) may not be up to the task as it isn't powerful enough, or that its link to the Internet is not of adequate capacity (bandwidth) to cope with the demands made of it.

Third, if a site attracts a large amount of traffic, the sheer volume of users can make the site take longer than normal to display onscreen.

And fourth, the site may be poorly designed. Graphics on a Web page download slower than text – too many and the site will grind to a halt.

3.2 Who is in charge of the Internet?

In theory, no one, although a small number of companies – such as Microsoft, Netscape and AOL – are responsible for extending the Net's structure so that it is accessible to virtually anyone. Organisations like the World Wide Web Consortium (W3C) seek to maintain certain standards to ensure compatibility of the various technologies used.

Most countries have their own laws to govern the use of the Internet, although these laws tend to apply to other media as well. Contentious material in print is just as contentious in a digital medium.

3.3 Internet, Intranet, Extranet – What's the difference?

The main difference is who has access to it. The Internet is public and everyone may use it. The same technology may be used to build a private network – for example, within a company – which is only available to the computers connected to it. This is called an Intranet. An Extranet is also private, but people outside the network are allowed access if they have a username and password.

3.4 What is a domain name?

A domain name is used to identify and locate an individual, organisation or service on the Internet. A well-chosen name is memorable, making it easy for people to find the owner. For example, Microsoft's domain name is microsoft.com. The domain name of my site is www.nigelgordijk.co.uk. A domain name can be a company's name or a name that is representative of their business. Typing books.com into a Web browser takes you to the site for Barnes and Noble, a US bookseller.

A domain name forms part of both an email address and a Web address (also called a "URL" – Uniform Resource Locator).

3.5 PCs and Macs – What's the difference?

The main difference is that they use different operating systems – software that makes a computer work. PCs typically use a Windows operating system such as Windows XP, Windows 2000 or Windows NT, whereas Macs (Apple Macintosh computers) use Mac OS, the name usually being followed by a version number. These different operating systems in conjunction with their hardware are better known as "platforms".

3.6 How do people access the Net?

Most use a computer (PC or Mac) with a modem installed. A modem is a device that allows computers to communicate with one another over a standard telephone line. Users need an account with an Internet Service Provider (ISP) – a company that provides access to the Net. Popular ISPs in the UK include BT Yahoo and AOL.

The two most popular activities on the Net involve email and Web browsing (viewing Web pages), requiring two types of software – one to send and read email (for example, Microsoft Outlook Express) and one to view sites (Internet Explorer). The visually impaired may also use optical recognition software that reads text on a computer screen out loud.

Handheld devices allow limited mobile Internet access. Personal digital assistants (PDAs) can connect to the Net using an external modem and “cut-down” versions of email and Web browsing software. Users of mobile Internet services often complain of its slowness.

3.7 How do I read a Web site address?

Example: http://www.companyname.com/about_us/index.html

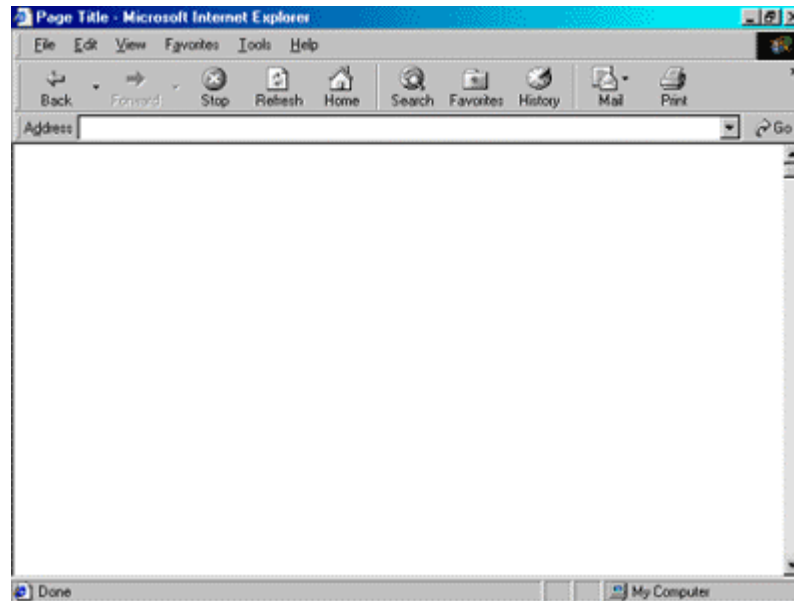
Every Web page has a unique Web address, formally known as a URL (Uniform Resource Locator). Using the example above, “http://” indicates that the document is a hypertext file located on the World Wide Web; “companyname.com” is the domain name; “www” is the name of the host within that domain; the file path “about_us/index.html” shows that the file “index.html” is located in the directory (folder) called “about_us”.

It is no longer necessary to type “http://” as Web browsers add it if it is omitted.

3.8 How about an email address?

All email addresses take the form someone@somewhere. In the example nigel@nigelgordijk.co.uk, the “@” symbol means “at”, so the address reads “Nigel at Nigel Gordijk dot com.”

3.9 What is a browser?



A browser is program, such as Microsoft Internet Explorer (above), that displays Web pages. These can be downloaded free from the developers' Web sites or installed using computer magazines' cover discs.

The name of the browser includes a version number – the most current Internet Explorer for PC is version 6. Often reference is made to version 5.x of particular browser, which means all version 4 browsers. Thus, version 5.x of Internet Explorer also includes 5.5. As a rule, it is often best to use the most current release as it may have more functionality than earlier ones.

3.10 What is a plug-in?

A plug-in is a piece of software that works alongside a browser to provide additional multimedia functionality such as sound and movies. Popular plug-ins include QuickTime, Shockwave Flash and Acrobat. The plug-in can be installed separately or at the same time as the browser. As with browsers, it is usually best to use the most current version.

3.11 What is a cookie?

A cookie is a small file placed on a computer by a Web site to store user specific information. If the user – or more accurately the Web browser – has visited previously, the site can use the cookie to log his/her return. For example, if you have bought a book from Amazon's Web site, a cookie can be used in order to remember who you are, so that the next time you visit the site, it can personalise the page, displaying other items that Amazon thinks may interest you.

3.12 What is an attachment?

Many different types of file can be "attached" to an email. For example, it is possible to add a Microsoft Word document or Adobe Acrobat PDF as an attachment to a message.

3.13 What are search engines and search directories?

There are hundreds of millions of sites on the Web. Search facilities make finding Web pages about a particular subject easier by displaying links to the ones it thinks are relevant. Search engines are hosted by various different Web sites and can be accessed by going to the URL using a browser, e.g. www.google.com , www.altavista.com.

For example, if you were looking for information on the Web about vegetarian food, typing the keywords "vegetarian recipes" into a search engine would produce a list of relevant sites. This way, anyone looking for a site without knowing the Web address could use an engine to aid his or her search.

Search directories are more useful if you wish to browse within a particular subject area. Using keywords in a directory would produce links to other sections within it that are related in some way.

3.14 What does a Web page consist of?

Most Web pages are displayed on screen as text and graphics (photographs, logos, illustrations, etc.). It may even have Flash animation or QuickTime movies embedded. Graphics are mainly created in one of three formats – JPGs (pronounced "jay-peg"), PNGs ("pings") and GIFs – as these are commonly recognised by browser software. The text and visual elements are held together on a page using programming code, the main language being HTML – Hypertext Markup Language. Other languages are also used to add functionality.

3.15 Email and e-mail – Why are there different spellings of the same word?

Reading industry magazines and the national press, it is clear that an agreed protocol for writing about the Web doesn't exist, perhaps because the medium has developed so rapidly from many disparate sources. "Email" and "e-mail" are different spellings for the same thing; likewise, "Web site" and "website" are the same, as different writers use different spellings.

In my documents, I have settled on fixed ways of referring to Web-related terms. The spellings may differ from how others write them, but there is a consistency within all my texts.

4 Part Two: Glossary

4.1 A

Access

Database software produced by Microsoft.

Access Provider

A company that sells Internet connections. Also known as an Internet Service Provider (ISP).

ADSL

Abbreviation of Asynchronous Digital Subscriber Line, it provides a high-speed Internet connection.

AltaVista

A popular search engine.

Anti-virus software

Software that scans a computer's hard drives for viruses. If any are present, and the software is up-to-date, a warning appears on screen and the virus is removed, thus protecting your data. See also: Virus.

@

Pronounced as "at", it forms part of an email address – for example, nigel@nigelgordijk.co.uk.

Attachment

A file or document included with an email.

4.2 B

B2b

Shorthand for a business that offers Business-to-Business services.

B2c

Abbreviation of Business-to-Consumer.

Bookmark

Used by browsers to memorise the addresses of users' favourite Web sites. See also: Favourites.

Bounced email

An email that has been returned to its sender, usually because of an error such as an incorrectly typed destination email address.

Broadband

High-speed Internet access.

Browser

Software, such as Microsoft Internet Explorer or Netscape Navigator, that displays Web pages.

4.3 C

Cache

Temporary storage space used by a browser to store recently visited Web pages in its memory for quicker retrieval.

Chat

A real time conversation held over the Internet where the participants correspond by typing comments into their computers. Any number of users can take part from different locations.

Clicks and Mortar

This refers to businesses that trade both on the Internet and by more traditional means.

Crash

When a program or operating system fails to respond or causes other programs to malfunction.

Cyberspace

An expression created by science fiction writer William Gibson that refers to the virtual world of computers, telecommunications and digital media.

4.4 D

Directory structure

An organisational system of folders and files on a computer.

DNS

Abbreviation of Domain Name System, the system that identifies and locates a server based on its hostname.

Dotcom

Refers to a business or organisation that solely exists on the Web. For example, Amazon is a dotcom because it only sells its goods from its Web sites, whereas Microsoft isn't because its products are also available from shops.

Down

Refers to a server or service that is unavailable. See also: Down time.

Download

The act of retrieving a file from a host computer on the Net. The opposite is "upload", which means sending the file to the host.

Down time

The length of time that a server or service is unavailable. See also: Down.

4.5 E

E-commerce

The trading of goods and services on the Web.

Email

Electronic mail sent and received on the Net.

Email address

Taking the form of someone@somewhere, this is the unique private address used to send and receive email.

4.6 F

FAQs

An abbreviation of "Frequently Asked Questions", this is a document that provides answers to the most commonly asked questions about a particular subject.

Favourites

Used by Microsoft Internet Explorer to memorise the addresses of users' favourite Web sites. See also: Bookmark.

File

Any item stored on a computer such as software, image or document.

Firewall

A security system used on a network to restrict unauthorised access.

FTP

Abbreviation of File Transfer Protocol, the standard method of moving files across the Internet.

4.7 G

G2c

Abbreviation of Government-to-Citizen, whereby the Web is used by the government to provide services and communicate.

GIF

An acronym derived from Graphic Image File, this is a compressed graphics format commonly used on Web sites. See also: JPG.

GUI

Often pronounced as "gooey", this is an acronym for Graphical User Interface. It refers to the visual and graphic devices employed – such as icons, buttons, menus and windows – to make software and Web sites easier to use.

4.8 H

Hacker

Someone who gains unauthorised access to a computer or network, bypassing its security in the process.

Home page

The first page of a Web site.

Host

A computer that stores files which can be accessed across a network. In the context of the Internet, the host would store the files that make up a Web site. See also Server.

HTML

Abbreviation of Hypertext Mark-up Language, the main programming language used to create Web pages.

Hypertext link

A clickable link that connects one Web page to another. Also referred to as a "hyperlink".

4.9 I

Image map

A Web image containing clickable areas that can be linked to other pages.

Internet

A global collection of computer networks.

Internet Explorer

A Web browser produced by Microsoft.

IP address

“IP” stands for Internet Protocol, which defines how data is transferred across networks. Every computer connected to the Net has an IP address that corresponds to its host name (if it has one) – Domain Name Servers convert one to the other. They take the format of four numbers separated by full stops.

ISDN

Abbreviated from Integrated Services Digital Network, this is an international standard for digital communications over telephone lines.

ISP

Internet Service Provider – a company that sells access to the Net. See also: Access Provider.

4.10 J

Java

A programming language commonly used in the Internet context, invented by Sun Microsystems.

JavaScript

A Web programming language that allows interactivity on a page. Despite its name, it is not closely related to Java, though there is a tenuous link between them.

JPG/JPEG (Joint Photographic Expert Group)

Pronounced “jay-peg”, this is a graphic file format that allows high compression of photographic images, thus reducing download time.

4.11 L

Link

A reference to another document, which can be displayed, downloaded or played once clicked on.
Abbreviation of "hyperlink".

Linux

A freely distributed operating system, initially developed by Linus Torvalds. It is often used by servers but rarely by clients and is a version of UNIX. See also: Solaris and UNIX.

Logon/Login

The act of connecting to a computer network.

Lycos

A popular search engine.

4.12 M

Mirror

A mirror Web site is a duplicate site set up to share traffic.

Mobile Internet

The use of portable computers (laptops, PDAs, etc.) together with a modem to connect to the Net.
Also includes WAP 'phones.

Modem

Truncation of MOdulator/DEModulator, this is a device that allows computers to communicate with each other over a standard telephone line.

MP3

A compressed sound format, typically used for storing music.

MPEG/MPG (Motion Pictures Expert Group)

Compressed video file format.

4.13 N

The Net

Common abbreviation of the Internet.

Netscape Communicator

A commonly used suite of programs including Netscape Navigator Web browser and email software.

New Media

Refers to the Web, CD-Roms, kiosks and other interactive technology. The opposite of "old" media – print, television and radio.

Newsgroups

Message forums and discussion groups organized by subject.

4.14 P

Platform

A computer operating system and hardware, such as Windows and Intel (Wintel), Mac OS and Mac or Linux and Intel.

Plug-in

Software that works through a browser to give added functionality to a Web site. For example, QuickTime allows movies to be played on a page.

Portal

A Web site that specializes in leading you to others. A good example is <http://www.yahoo.com>.

4.15 R

RealAudio

A compressed format for delivering sound over the Net.

RealVideo

A compressed format for delivering moving images (video) over the Net.

4.16 S

Search engine

A database of references to Web pages. Typing a keyword into a search engine displays the relevant matches.

Server

A computer that makes services available across a network. See also: Host.

Signature file

A personalised sign-off that can be added automatically to an email.

Spam

Sending the same message, usually advertising, to multiple email addresses that have not requested it.

Streaming

Multimedia content delivered in real time across the Net, instead of waiting for the whole file to arrive. RealAudio uses streaming technology.

Surf

To move from page to page around the Web by following links.

4.17 U

URL

Uniform Resource Locator – the formal name for a Web site address.

4.18 V

Virus

Malignant software that can cause irreparable damage to a computer's hard disk. These may be accidentally distributed as email attachments or from a floppy disk. It is important to routinely check files and disks with anti-virus software. See also: Anti-virus.

4.19 W

WAP

Wireless Application Protocol – used on mobile `phones to provide a form of mobile Internet.

The Web

A short version of World Wide Web, text and graphic documents published on the Internet. These are connected by clickable links. A Web page is a single document, whereas a Web site is a collection of related documents.

Web authoring

The design and publication of pages on the Web using HTML.

WinZip

PC software that compresses a document or several documents into a single file thus using less storage space. Files that have been compressed in this way are said to have been “zipped”.

4.20 Y

Yahoo!

The world's second most popular search directory that differs from search engines by allowing the user to choose categories and sub-categories that he thinks his required site may be in. Using the Yellow Pages would be a good analogy.

5 Part Three: Recommended Reading

5.1 Books and Magazines

As the Internet is changing so rapidly, magazines are a better source of the latest information, rather than books.

Rough Guide to the Internet

Angus J. Kennedy.

Don't Make Me Think

Steve Krug.

Internet for Dummies

John R. Levine.

The Complete Idiots Guide to the Internet

Peter Kent.

InternetWorks magazine

Published monthly.

Internet Adviser magazine

Published monthly.

International Internet Law Review magazine

Published monthly.

.Net magazine

Published monthly