

Beginning Computing: Searching the Web

These instructions are for an IBM compatible Personal Computer running Windows XP or Vista, however earlier (and later) versions of Windows are similar in principle if different in appearance.

It is assumed that you can switch your computer on and launch an application.

Definitions

The terms Internet and World Wide Web (usually abbreviated to WWW or Web) are used almost interchangeably, although they are rather different things.

- The **Internet** is the network of cables, microwave and satellite links which span the globe providing a vast communications network. It was originally developed by the US military to provide a secure communications system, which could survive nuclear war but was rapidly taken up by academia and latterly by commercial interests.
- The **Web** is the information in the form of websites which can be access across the Internet. Tim Burner-Lee a British scientist working at CERN originally developed the web as a method of exchanging scientific data.

The Nature of the Web

Nobody owns or regulates the web, despite various attempts, which makes it a unique forum for free speech in all its various manifestations. At its origin there was a uniquely cooperative and altruistic community, which many commercial companies were unable to comprehend and this still exists to some degree, a good example being the Wikipedia, which is an online encyclopaedia, being built up by voluntary contributions. See <http://en.wikipedia.org> (The English language Wikipedia)

The freedom of the web also results in a form of anarchy as anyone can publish on the web so “Caveat emptor” let the surfer beware. We will look at the issue of the reliability of information on the web later.

Getting on the web

To get on the web you need (beside a computer) a telephone connection (dial-up OR broadband) and an ISP (Internet Service Provider). The ISP provides you with your link into the Internet (for a price) and may offer other services such as email addresses, web space and their own directory services.

You will also need a modem, which enables your computer to talk to the telephone system. Almost all computers come with a dial up modem as standard and if you take broadband your ISP will supply a special broadband modem.

Finally you need a web browser, which does all the software communication with the web. These are available freely and you will almost certainly have Microsoft’s Internet Explorer delivered with you computer although many people are now switching to Monzilla Firefox because of its perceived higher level of security. See <http://www.mozilla.com/firefox/>

Starting a Web Browser

Most web browsers have a very similar appearance and although Microsoft **Internet Explorer 7** will be discussed here most of the icons used have broadly the same function in other browsers and other versions of Internet Explorer.

To start your web browser; find its icon on your desktop and double click on it. Typical icons are:-



Internet Explorer



Firefox



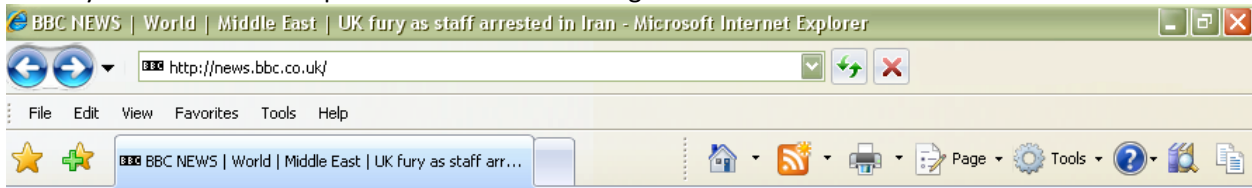
Google Chrome (NB this operates very different from Internet Explorer)

If you can't see the icon on your Desktop you may still have the applications lurking in your machine it's just that accessing will be a little more complex.

If not use the Start button or Windows button at the bottom left of the screen to access the list of applications on your machine (if you are not sure about this look at the Zero Point handout.)

Web Browser Basics

When your web Browser opens it will look something like this.



However its actual appearance will depend on how it has your particular machine has been configured and which version of Internet Explorer you are using. We will only discuss the most common features

Navigation



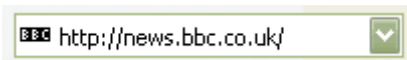
Go back to the page previously viewed



Go forward to the page you were looking at before you went back!

Clicking on the small black arrow will give you a list of the last few pages you viewed.

➤ Address Box



This contains the address or more correctly URL (Uniform Resource Locator) of the current web page or the web page, which is in the process of being loaded. One way of accessing a web page is to type the URL into the Address Bar and then press the return key. For example the BBC news website has a URL of <http://news.bbc.co.uk>

➤ Reload and Stop Icons

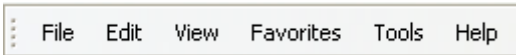


Reloads the current display (Use this if the page is corrupt or get stuck)



Stop loading the current page (Useful if a site is slow in loading and you get bored)

➤ The Menu bar

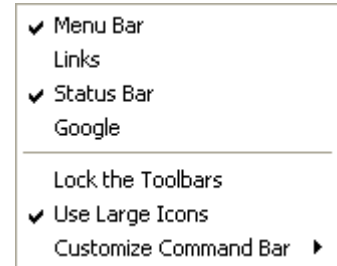


NB the menu Bar may not be switched on!

Each of the terms in the menu bar has its own drop down menu which enable you to use the Browsers full facilities, although all the common facilities are available via the various icons.

This may not be enabled on your machine. To switch it on:-

- ⊕ Right click in any blank area of the browser header
 - A drop down list appears ⇨
- ⊕ Left click on the Menu Bar option
- ⊕ A tick will appear beside it



Searching the Web

➤ Searching by Guessing

Try typing what you think might be the URL into the Address box. This can work although it's likely to be highly inefficient. If you were to guess at the address (URL) of British Airways or British Telecom you would probably be right but how about the AA?

➤ Searching Using a Search Engine

Search engines are pieces of software that will carry out a search for you. They use software assistants (or spiders) to continually crawl over the web creating and updating their own index.

There are many different search engines:-

- ⊕ Google UK <http://www.google.co.uk>
- ⊕ Yahoo UK <http://uk.yahoo.com>
- ⊕ MSN <http://uk.msn.com>
- ⊕ Clusty <http://clusty.com/>
- ⊕ Bing (new MS engine) <http://www.bing.com>

It is important to remember that when doing these searches you are actually searching a limited portion of the web, captured and indexed at an earlier date. You are NOT searching the entire web as it exists at this moment.

NB only Google and Bing are currently free from advertising

➤ Built in Search Box



This MAY appear on the same line as the Address Box in your Browser, if it has been implemented.

In this instance Google has been set up as the search engine but it can be changed.

➤ Using a Search Engine

Key a search engines URL into the Browser Address box and hit the Return button

Type a couple of words that are likely to appear on the website you are searching for into the search box, and press the search button (or spy glass icon)

You will be presented with a list of 'Hits' in order of possible usefulness

You can then view the websites listed by clicking on their hyperlink or refine your search further

A few basics about Google:-

- ⊕ Search is not case sensitive
- ⊕ With some exceptions, punctuation is ignored
- ⊕ If you use more than one word Google will search for webpages containing all of them
- ⊕ Google will offer corrections if you make spelling mistakes

➤ Efficient Searches

You can waste a lot of time scrolling through lists of hits if you are not specific enough with your search terms.

- ⊕ Be clear what you are looking for
- ⊕ Keep it simple, just a few key words is often enough
- ⊕ Use the keywords which you think the website is most likely to include
- ⊕ Start with a few keywords and if necessary add more to narrow your search
- ⊕ If either of the 2 key words is acceptable put OR between them
- ⊕ If you are searching for a phrase (like a line from a poem or song)
Enclose the phrase in “quotes” and Google will look for that phrase
- ⊕ Google allows you to simply restrict your search to UK only

If the terms you are using has been used in another sense (eg as a film title) you can eliminate the unwanted hits by using a minus sign (eg – film). This will reject all the websites fulfilling your original search parameters but have the word film somewhere on the website.

Browsers: Other Facilities

➤ Favorites (NB US Spelling!)

If you find a useful webpage you want to return to again you can store the URL using the favorites facility (in some browsers these are called bookmarks, but they are the same idea). Just click on the **Add to Favorites** icon ⇨ and select Add to favorites from the drop down list.



To find a favorite; click on the **Favorites** icon ⇨ and select from the list presented (you may have to click on the Favorites button if you are presented with a historical list).



At some stage you will build up a huge list of favorites and will need to order them into some form of filing system.

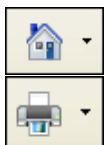
➤ History

Your browser also stores the history of your browsing activities and this can be useful if you want to find a webpage which you discovered previously but did not store on your Favorites.

- ⊕ Click on the Favorites icon
- ⊕ Click on the History button that appears
- ⊕ Select how you want you history arranged from the drop down box. ⇨



➤ More Icons



Home page (The webpage that appears when you start your browser)

You can change it using the small black arrow to the right if you wish

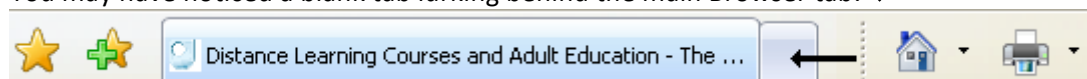


Prints the webpage currently displayed

The Black arrow gives Preview and Page set up options

➤ Tabs

You may have noticed a blank tab lurking behind the main Browser tab: ↓



This enables you to open a new Browser window without losing the website you are currently on.

Advanced Search Strategies

Most search engines give you an opportunity to use an advanced search facility. This allows you to put many more restrictions on the websites delivered to you although it will take you a little time to complete the forms required. The best way to learn about this is to try it out.

NB you can search for others thing apart from webpages, check out the advances options.

There are a number of other methods of searching beside search engines.

➤ **Directories**

Directories are lists, which have been (reputedly) compiled by human editors and are most useful if you want to look at a particular subject area without being too specific. Some directories are:-

- ⊕ Google directory <http://directory.google.com>
- ⊕ Yahoo <http://uk.dir.yahoo.com>
- ⊕ Dmoz <http://dmoz.org>
- ⊕ Looksmart <http://search.looksmart.com>

➤ **Virtual libraries**

A virtual library is a web directory that includes highly selective links, chosen mostly by librarians.

More general virtual libraries include:-

- ⊕ Librarians' Index to the Internet <http://lii.org/>
- ⊕ www Virtual Library <http://vlib.org/>
- ⊕ Infomine <http://infomine.ucr.edu/>

ROUTES is the Open University Library's selection of key websites targeted at particular courses. Students can access ROUTES from their course website.

➤ **Specialist Search Engines**

- ⊕ Google Scholar <http://scholar.google.co.uk/>
Google Scholar provides a simple way to broadly search for scholarly literature across many disciplines and sources.

➤ **Natural language engines**

Some search sites encourage you to ask questions in the same way you might as a person. The search engine then tries to understand your question by examining the key words and provides what it thinks are appropriate pages.

- ⊕ Ask is one example <http://uk.ask.com>

Anatomy of a URL

A URL has three main parts:

- The protocol - <http://www>. (ie the communications instructions)
- The domain name -**open.ac.uk** (the owner of the site – usually)
- The local file information -**index.html**

Thus the full URL is **http://www.open.ac.uk/index.htm**

You can sometimes omit some elements of the URL

http://www.open.ac.uk - will work in most browsers

and even **www.open.ac.uk** – will work in some

Website Evaluation

Anyone can publish anything on the web which represents one of its greatest strengths and simultaneously its greatest dangers. Searching the web produces masses of information how can you be sure what you have is relevant, true and useful. There are many web assessment techniques available and the Open University Library has a particular useful technique (PROMPT) in its free Safari information course. See <http://www.open.ac.uk/safari>

Before you start to search its as well to be clear what you are looking for; if you want a quick fact that can be easy, but if you are write an essay it a different matter. Do you want authoritative opinions, reasoned arguments, descriptions, and statistics? Be clear before you begin and it will help you chose the right search terms and make you more critical in your judgement of the websites you find. A simple approach is to use Kipling's servants, those simple questions.

➤ **WHAT is the site's purpose or OBJECTIVE?**

- ⊕ What do they say is the purpose of the site?
- ⊕ Can you identify the organisation behind the website (Check the URL or page logo)?
- ⊕ What type of organisation is it, commercial, voluntary, QUANGO, government?
- ⊕ Do you know the organisation's reputation (what do others say about them)?
- ⊕ Do you know the organisation's history?
- ⊕ How do they get their funds (revealing for many campaigning organisations)?
- ⊕ Are they selling anything and would this distort their view?
- ⊕ Is their use of language or images vague or emotive (a sign to beware)?
- ⊕ Would the purpose you have identified distort their **objectivity**?

➤ **WHO is RESPONSIBLE for the website?**

- ⊕ Can you identify the author and are they an expert in the field?
- ⊕ Do the authors state their position on the issue?
- ⊕ Can you find out more about them from their biography?
- ⊕ Have the views presented been formally reviewed in the same way as a scientific paper?
- ⊕ If a commercial organisation what is their field?
- ⊕ NB an individual in an organisation may not represent the organisations view!

➤ **WHEN was the site created or upDATED?**

- In some areas being bang up-to-date is vital ie news or medicine but in others(the Doomsday book)?
- ⊕ Is the date given for the main information or just a correction?
 - ⊕ Are all the pages the same date (ie today) maybe its automatic updating!
 - ⊕ Broken links may indicate an abandoned webpage or just poor organisation.

➤ **WHERE does the EVIDENCE for their views come from?**

- ⊕ Is it a primary source or a review of other sources?
- ⊕ Look out for opinion presented as if it were fact?
- ⊕ What evidence is actually presented?
- ⊕ Does it correlate with other opinions; if not the evidence needs to be stronger?
- ⊕ Are the methods used appropriate and rigorous?
- ⊕ Are the other source used for a review appropriate and trustworthy?

➤ **WHY should you use this particular website as a source?**

- ⊕ Does it fit your purpose?
- ⊕ Is it at the appropriate level?
- ⊕ Is more authoritative, or informative?
- ⊕ Is the evidence base stronger?
- ⊕ Is it free from bias and propaganda?

More Information

- ⊕ Learn more about Google <http://www.googleguide.com/>
- ⊕ Revisit the basics BBC Webwise site <http://www.bbc.co.uk/webwise/>

General Open University Resources

- On using your computer (need to sign in) <http://www.open.ac.uk/computingguide/start.html>
- PC4Study; covers Communicating, Writing and Searching <http://www.open.ac.uk/pc4study/index.php>
- Tips and advice for using the web effectively <http://www.open.ac.uk/webguide>
- Safari: the OU Library's information training course (free) <http://www.open.ac.uk/safari>
- Soft skills eg effective study, managing stress etc <http://www.open.ac.uk/skillsforstudy>

Useful Searches

Some key words/phases you could use with Google to finding other resources

- ⊕ **searching with google**
- ⊕ **efficient web search tutorial**
(The key word tutorial when searching for learning resources works pretty well)
- ⊕ **website evaluation** (but what sort of evaluation did you get?)
- ⊕ **netiquette**
- ⊕ **"The Register"** (why use quotes?)
- ⊕ **microsoft tutorials**

Useful Websites

- ⊕ BBC News <http://news.bbc.co.uk/>
- ⊕ Met Office (weather worldwide) <http://www.metoffice.gov.uk/weather/>
- ⊕ Wikipedia <http://en.wikipedia.org/>
- ⊕ Translate phrases <http://www.systran.co.uk/>
- ⊕ Anagram maker <http://www.wordsmith.org/anagram/advanced.html>
- ⊕ Free online books <http://www.gutenberg.org/catalog/>
- ⊕ Free downloadable audio books <http://librivox.org/>
- ⊕ NHS Direct <http://www.nhsdirect.nhs.uk/>
- ⊕ Maps & directions <http://maps.google.co.uk/maps>
- ⊕ BBC iPlayer <http://www.bbc.co.uk/iplayer/>
- ⊕ CIA World fact book <https://www.cia.gov/library/publications/the-world-factbook/>
- ⊕ OU Library <http://library.open.ac.uk/>
- ⊕ MI5 (jobs available!) <http://www.mi5.gov.uk/>