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[USING THE INTERNET]

This document will show you how to get the best from the Internet. Using a step-by-step approach, it teaches some of the basic techniques for using the Internet. It assumes you are using Google Chrome as your web browser and Windows 7 as your operating system. If your setup is different, then the techniques explored here will be carried out in a slightly different way on your own computer.
Using the Internet

The Internet is a fantastic and largely free resource. Its origins lie in the Second World War when the American military wanted to develop a communication system which was very robust and which could continue to operate even if some parts of the system were destroyed. It has come an awfully long way since then!

This document will look at some of the main techniques you can use to track down and find the information you are looking for. But first, let’s just pause and investigate a little background.

What is the Internet?
The Internet is a network of networks. But this answer begs a further question: what is a network?

A network is a group of computers that are connected together so that they can easily pass information between themselves. The Internet simply takes this connectivity one stage further by connecting these networks together.

Most of the information that you see on the Internet is held on ‘servers’. A server is a computer (more accurately, a large group of computers or ‘server farm’) that has a full-time connection to the Internet and is on 24 hours a day, 7 days a week. This means that whenever you make a request to view a particular page on a server, it will always be available.

The information on that page is delivered to your screen by being routed through specialised computers called ‘routers’. You may well have a small, domestic router at home. Commercial routers are much bigger however, as they have to route vastly more data than your home network ever does!

How are all the computers on the Internet linked together?
They are linked together using many different technologies including satellites, phone wires, infra red data networks, wireless radio networks, cables etc.
What do I need in order to access the Internet at home?
To access the Internet at home you will need:

A computer! This can either be a ‘desktop’ (which is the sort of computer that sits on a desk) or a ‘laptop’ (a portable computer that you can easily transport).

A contract with an Internet Service Provider (ISP). An ISP will provide Internet access via your landline or via your cable service (Sky or Virgin Media). It is standard practice to sign up for a period of one year, though you can sign up for as short a period as one month in some cases.

What will it cost?
A computer will cost you around £400. You will get more computing power for your money if you buy a desktop as laptops cost more to produce since all the components have to be miniaturised, adding to the costs of production.

Internet access costs vary, but on average, you can expect to pay around £10-15 per month for unlimited access to the Internet.

How do I install this equipment?
When you sign up for ‘broadband’ (a fast Internet connection) the ISP will post out the necessary equipment. This will generally consist of a CD, various wires and a modem or router.

This equipment usually comes with a printed installation guide, though if you are not confident about setting up the equipment yourself, you may need some help from a more experienced friend or a commercial I.T. support service.
Getting started

Once your equipment is installed, you are ready to begin using the Internet.

First you will need to start your web browser (referred to simply as your browser in this document). All computers will have a browser installed. This is usually Internet Explorer, but this tutorial will use the ‘Google Chrome’ browser. If you would like to use Google Chrome, look at the appendix at the end of this document entitled ‘Downloading and installing Google Chrome’.

You can start Google Chrome either from the Start menu or by double clicking its desktop icon. It will open displaying its ‘home page’. A browser’s home page is simply the page that has been setup as the first one to be displayed when the browser is started. By default (i.e. if you don’t manually change the browser’s settings), Chrome will use the Google page as its home page:
In the picture above, the different parts of the browser controls (yellow boxes) and Google page features (orange boxes) have been labelled so that you can refer back to identify different features as they are discussed later.

**What can I do on the Internet?**
There are almost as many things you can do online (i.e. via the Internet) as there are users! However, there are three things that people do ahead of everything else that is possible:

1. Visit a website already known to them.
2. Search for information.
3. Use the Internet to send and receive emails.

We will go through this list so that we are familiar with the basic workings of the Internet.

**How to go directly to a known website**
It is now commonplace to be told about websites on the TV, radio and in magazines and books. We are forever being told that ‘for more information, go to www.bbc.co.uk/history’.

How do you go to such an address? Firstly, it doesn’t matter what page you are on at the moment. Rather like the road system, you can start from anywhere and get to anywhere else!

It takes just three steps to get to this (or any) web address (sometimes known as a ‘URL’ or ‘Uniform Resource Locator’):

1. Click the address to select it: http://www.google.co.uk
2. Type the address you wish to visit: www.bbc.co.uk/history
3. Press Enter on the keyboard.

The requested web page will be displayed:
We are going to explore this website to become more familiar with some of the features commonly featured on a wide variety of websites. Firstly, move the cursor around the page. As your cursor moves across the page, you will notice that it turns from an arrow (↑) into a hand (🔗). The hand symbol indicates that the cursor is hovering over a hyperlink (or link for short).

**Hyperlinks**

Hyperlinks are the bread and butter of the Internet. Without them, we would just have 20 billion separate documents. This would be virtually useless as it is the links (and the indexing of the links) that makes the Internet such a powerful tool.

Hyperlinks are a special species of text which allows connections to be made between two separate documents. Pictures can also be hyperlinks. Links can link documents that are on the same or different websites, residing on the same or different servers. Because of this feature, the geographical location of a server holding a document becomes irrelevant. In short, the Internet has become a searchable,
indexed, multiply connected repository of the world’s knowledge, all at the tips of your fingers!

**Searching within a website**

Let’s go back to the BBC history site. At the top of the page there is a search box. If you type a search into the box and then click the search button to its right, the results of your search will be displayed.

Let’s do a search of the BBC history site. We will search for ‘Magna Carta’. To do this:

- Click in the search box to place the insertion point there
- Type your search – Magna Carta
- Click the search button – your results will be displayed:

![Search results for Magna Carta on the BBC history site](image)

We will now click the link under the ‘Knowledge’ column –‘History – British History in depth: King John and the Magna Carta’. That page will be displayed:
If we want to go back to the front page of the BBC history site, we can click the ‘back’ button (←) twice to be returned there.

Back on the History front page, there are many other links we might follow. There are links to TV programs on the iplayer (the BBC’s TV ‘catch-up’ service):

There is a list of links to various history related pages:

There are links to British history and ancient history resources:

Links to pages about the two world wars:

In fact, there is almost too much information!

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Searching the Internet for information

Sometimes, we may not know where to start. We want to find something out but don't know which website to go to. This is where Google (and other similar services such as ‘Yahoo’ or ‘Bing’) come in handy.

If the Internet is like a big electronic encyclopaedia, then Google is the index. Google is a special type of website called a ‘search engine’. A search engine’s function is to index the Internet so that it can easily be searched. Let’s go back to the Google page and do some research!

Click the ‘home’ button (6). The Google page will be displayed.

Let's search for the Leeds Age Concern website. To do this, we simply type ‘age concern leeds’ into the search box below the Google logo:

As we begin to type, Google offers us a list of suggested searches underneath the search box. None of them match exactly what we want so we continue typing:
We have now typed ‘age concern l’ and underneath we can see on the list ‘age concern leeds’. We will click these words to see our page of results:

![Google Search Result](image)

The first result is the one we are looking for. How do we know? Well, let’s look at the result in a bit more detail:

![Age Concern Leeds](image)

Each result is shown in three different colours:

- The blue writing is the link to take you to the Age Concern Leeds website.
- The black writing shows a sample of the contents of that page.
- The green writing shows us the address of the website – www.ageconcernleeds.org.uk

Taken together, this tells us that this is the link for the website. Click the blue text to go there:

![Website Preview](image)

A unique feature of Google Chrome is that you can use the address bar as a search bar as well! In other words, if you don’t know on which website the information you are looking for is held on, you can type your search into the address bar without having to go back to the Google search page.
Let’s say we want to find a recipe for Irish stew. Click the address in the address bar to highlight it:

[http://news.bbc.co.uk/]

Type your search terms: ‘Irish Stew’:

Underneath your typing, a list of suggested searches is displayed. Click the item ‘Irish stew recipe’. Your search results will be displayed:

Let’s click the recipe from the BBC Good Food site (the second result):

The recipe will be displayed:
‘Navigation’ – or finding your way around a website

Website designs vary enormously but one thing nearly all of them have is ‘navigation’. The navigation links on a website are important as they help you find your way around.

On the Age Concern Leeds website (above) the navigation buttons are the pink buttons on the left hand side. These buttons appear in the same position on all the pages of the website allowing users to easily find their way around.

All well designed websites will have navigation links. Let’s look at a much bigger website – The BBC News website at news.bbc.co.uk

To get there we follow the steps outlined on page 5:

- Click the address to select it (turn the text white on a blue background):
  
  [http://www.ageconcernleeds.org.uk](http://www.ageconcernleeds.org.uk)

- Type the address you wish to go to: news.bbc.co.uk

  ![news.bbc.co.uk](news.bbc.co.uk)

- Press Enter on the keyboard. The BBC News website will be displayed:

  ![BBC News Website](news.bbc.co.uk)

The navigation for this website is on the left hand side. Each of the items (‘News Front Page’, ‘Election 2010’ etc) is a link to different parts of the website.
website. So if you want to read about health stories that are in the news, click ‘Health’:

![Image of the BBC News website]

The navigation links on the health page are the same as on the front page and on every other page too! This allows you to move around the website easily.

As well as the navigation links, there are links to further details on each of the featured stories. Clicking the words ‘Doctors urge UK ‘trans-fat ban’, ‘Training cuts anti-obese views’, ‘Brain splits to multi-task’ or any of the other links on the page will take you to the relevant story. You can also search the site using the search bar at the top of the page (see page 7 for more details).

### Searching within a page

Sometimes, there is a great deal of information on a page. When the contents of a web page will not fit on the screen all at once, you will find a ‘scroll bar’ on the right hand side of the window. To move down the page, click the down-pointing arrow. To move up the page, click the up-pointing arrow. Alternatively, you can click and hold on the ‘scroll box’ (The blue rectangular box between the two arrows) and ‘drag’ it up or down.
You may have gone to a page to find out about something in particular. When the page has a lot of content, it can be difficult to find what you are looking for. In this case you can search for a word or phrase within the page.

On the health page featured above, let's click on the story labelled ‘Training cuts anti-obese views’ to find out more about obesity:

If we want to search this page for mention of obesity, we can search the page:

- Click the button to control the current page: 
- A menu will be displayed:
  - Click ‘find in page’. A search box will be displayed:
  - Click in the box and type your search term: ‘obesity’:
• The box indicates there are 12 mentions of the word ‘obesity’. This word is now highlighted within the page:

You can move through the page finding all mentions of obesity by clicking the arrow buttons at the right hand end of the search box:

Click on these buttons to find all mentions of ‘obesity’.

**Bookmarks and favourites**
Sometimes, you may find a website that you know you will want to return to in the future. You can create a bookmark (sometimes called a favourite) so that you can easily return to that page.

To bookmark a page, click the star at the left hand side of the address of the page:

Click the star to bookmark the page

An on-screen confirmation that you have bookmarked the page will be displayed:
Click the ‘Close’ button to close the confirmation message.

Whenever you now wish to return to this page (In this case, the front page of the health section of the BBC news website), you can click the button that has appeared on the ‘bookmarks bar’:

If you want to remove this button, right-click it and then click ‘delete’ on the menu that is displayed:

If you can’t see the bookmarks bar, click the options button and then click ‘Always show bookmarks bar’ on the menu that is displayed:

**Using ‘tabs’**

Your web browser usually only has a single tab open – i.e. it is displaying just one page:
Notice that there is a plus sign to the right of the tab. If you click the plus sign, you will open a second tab:

The new tab will display some of the websites you have recently visited:

To return to any of these websites, click the appropriate link. Alternatively, click then type a new address into the address bar at the top of the page:

Another way of using tabs is to open a link in a new tab. In other words, instead of clicking a link as discussed previously, right click on a link and choose ‘open link in new tab’ from the menu that is displayed:

Why would you want to do this? Sometimes, it makes sense and saves you time!
Setting the browser’s ‘homepage’

Each time you start your browser, it will display its ‘homepage’. In this section we will look at how to set the homepage to a page of your choice.

First, go to the page that you want to set as your homepage (see page 5 for instructions to navigate to this or any other page). We will set the BBC News front page as our homepage – news.bbc.co.uk:

![BBC News Front Page](image)

Now click the browser control button:

A menu will be displayed:

![Browser Control Menu](image)

Click ‘options’ and a new window will be displayed:
In this window, ensure you are looking at the ‘basics’ tab (as in the illustration). Click in the small circle to the left of where it says ‘Open the following pages’ then click the ‘Use current’ button. Click the ‘Close’ button to close the options window.

Each time you start your browser in the future, it will open at the BBC News website front page.

**Interacting with features on a website**

One of the big differences between watching television or reading a magazine and using the web is that many websites have interactive features. Typically, this involves filling out an online form. As an example, let’s look at the jet2 website at www.jet2.com

Underneath where it says ‘Find your flights’ there is a form to fill in. There are three types of boxes on this form:

With this type of box, you click the down-pointing arrow and make a choice from the scrollable list of options, clicking (in this case) where you wish to fly from.

With this type of box, you click the little calendar icon (📅) to the right of the empty box and choose the appropriate date by clicking on it.
With this type of box, clicking in the box tells the website you want to choose this option.

Once you have filled out the form it should look similar to this.

Click the ‘Find cheap flights’ button. Your flight options will be displayed:
This is just an example, but many websites include similar interactive elements. We have not completed our flight booking, but the remainder of the process is similar.

Notes on online security
There is a lot of fear amongst inexperienced users of the web when it comes to using your credit card online to do things like buy flights or other goods. However, if you follow some basic rules and use common sense, it is very safe to use your credit or debit card online. This is because the transaction is encrypted to a very secure level and involves no human intervention, unlike when you give your credit card to a waiter in a restaurant, for example.

If you are buying things online, it is better to use a credit rather than a debit card. This is because, should your goods fail to arrive, the credit card company will bear the loss, whereas with a debit card you will bear the loss personally.

How can you minimise your online fraud risk?

Firstly, it is important that your computer is healthy and free of viruses, spyware, trojans, key loggers etc. This means you need some security software installed on your computer. You may already have some. To check, lick Start, then click control panel then click programs then click programs and features. This will bring up a window showing you a list of all the programs installed on your computer. Commonly available anti virus programs include:

- Norton
- McAfee
- AVG
- Sophos
- Avira
- Kaspersky

If you have one of these programs installed and it is up to date, then you are protected. Additionally, a lot of I.S.P’s now provide Internet security software as part of their package so in either case you are covered.
For a free and complete solution, this author would recommend Microsoft Security Essentials. You can download and install it from http://www.microsoft.com/security_essentials. Once installed run a full scan to ensure your computer is virus free.

You should only have one anti-virus program on your computer as having more than one may make your computer unstable.

The second line of defence is your own knowledge! Whenever you are making a purchase online bear the following points in mind:

- Don’t enter a credit card number onto an ‘insecure’ page. To determine whether a page is secure, look at its address. Most website addresses begin ‘http://’. Look at the address of the BBC News website:

  ![http://news.bbc.co.uk/]

  Now look at the address as I am about to buy a book on Amazon:

  ![https://www.amazon.co.uk/gp/cart/view.html?ref=ss_ac_advceed]

  The address begins ‘https://’ where the ‘s’ stands for ‘secure’. Always check this before entering a credit card number into a website.

- Only use your credit card on website’s that are well known and well trusted. Even if a website says it is secure (i.e. its address begins ‘https://’) don’t enter your credit card number if you are at all concerned about the legitimacy of the site.

  https://www.dodgytraders.co.uk is not a website I would recommend even if it is secure! This is NOT a real website by the way – just an illustration!

- Be wary of using your credit card on a publicly accessible computer, for example, in a cybercafé. It is not possible for you to determine its ‘health’ and so you are taking a risk using your card on such a computer.

Appendix – Downloading and Installing Google Chrome

Google Chrome is a ‘web browser’ which you can use instead of Internet Explorer. In the opinion of this author, it has a number of advantages
over Internet Explorer (referred to as ‘IE’ in this document) and is this author’s browser of choice.

This tutorial will show you how to download and install Google Chrome. The ‘screenshots’ (pictures of what you will see on screen as you go through this process) assume that you are using the ‘Windows 7’ operating system. If you are using Windows XP or Windows Vista, your screens will look slightly different to the ones featured in this document.

First, start IE. There are several ways of doing this:

- There may be an icon on the desktop for IE. If so, double click it.
- There may be an item on the Start menu to launch IE. If so, click Start then click the IE menu item.
- The third way to start IE is to click Start, point to ‘All Programs’ then click the item for IE on the menu of programs that appear.

IE will display its ‘home page’. The home page is simply the page that has been set to display each time the browser is launched (started):

It doesn’t matter which page is displayed!

Click within the address bar to highlight the address. It should now look similar to the picture on the left – the text is white on a blue background. If the address is not properly selected, move the cursor onto the page and click a blank area then have another attempt at selecting the address.

Type ‘chrome.google.com’ (without the quotation marks).

Press the Enter key on the keyboard.

IE will display the page where you can download Google Chrome:
Click the big blue button labelled ‘Download Google Chrome’. A new page will be displayed:

![Download Google Chrome](image)

Click the button labelled ‘Accept and Install’. A new window will be displayed:

![Accept and Install](image)

Click the ‘Run’ button. A new small window will be displayed:

![Run](image)

Wait! When the download is finished, another new window will be displayed:
Click the button labelled ‘Start Google Chrome’. Google Chrome will start:

Click the button labelled ‘Keep Google as the default search engine’.

Click the square in the top right hand corner of the window to maximise the window if necessary.

Google Chrome is now installed and ready to use. You can now close IE by right clicking its button on the taskbar at the bottom of your screen and then clicking ‘Close window’: