

Get Your Browser into Use...Quickly!

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Using Mozilla Firefox

<http://www.guidanceillustrations.com>

Preface

The Internet is a worldwide network of computers linked together. This physically based structure provides different kinds of *services* which can be used if you have a connection to the physical Internet and have the necessary software to use a particular service.

The services installed on the Internet make it possible to use the system for

- surfing the World Wide Web
- sending and receiving email
- shopping online
- participating in a chat room
- etc

This guide provides an introduction to the basics of the most popular of the services available on the Internet, namely the *World Wide Web*, commonly referred to as the *Web*.

Prerequisites:

In order to perform the tasks in this guide you'll need a connection between your computer and the Internet. The tasks themselves are performed using a *web browser* named **Mozilla Firefox**, commonly known as **Firefox**.

Have fun performing the exercises.

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1 Starting and closing Firefox

Mozilla Firefox, or **Firefox**, is a modern *web browser*. The generic term ‘web browser’ simply means a program that is made for a particular purpose, e.g. surfing the Web.

This chapter demonstrates the difference between opening and closing
a) the web browser named Firefox, and
b) a new web page in Firefox.

You’ll also become acquainted with the representation style of the chapters in this guide.

1 Start Firefox.

After a while the window in Figure 1-1 will appear:

Figure 1-1



As the program starts a so-called *default page* will normally open as well. Here the default page is the home page of Mozilla Corporation. Your computer may display a different page depending on its default page settings.

Figure 1-2



Now the *default page* shown when starting a web browser is a thing that can be changed. In doing so you can also choose the alternative in which only a *blank* page is shown. This is often advisable because if there's some problem with a page used as default, the web browser will not open a problematic page without success and waste your time in doing so.

Now let's look at how to change the default page.

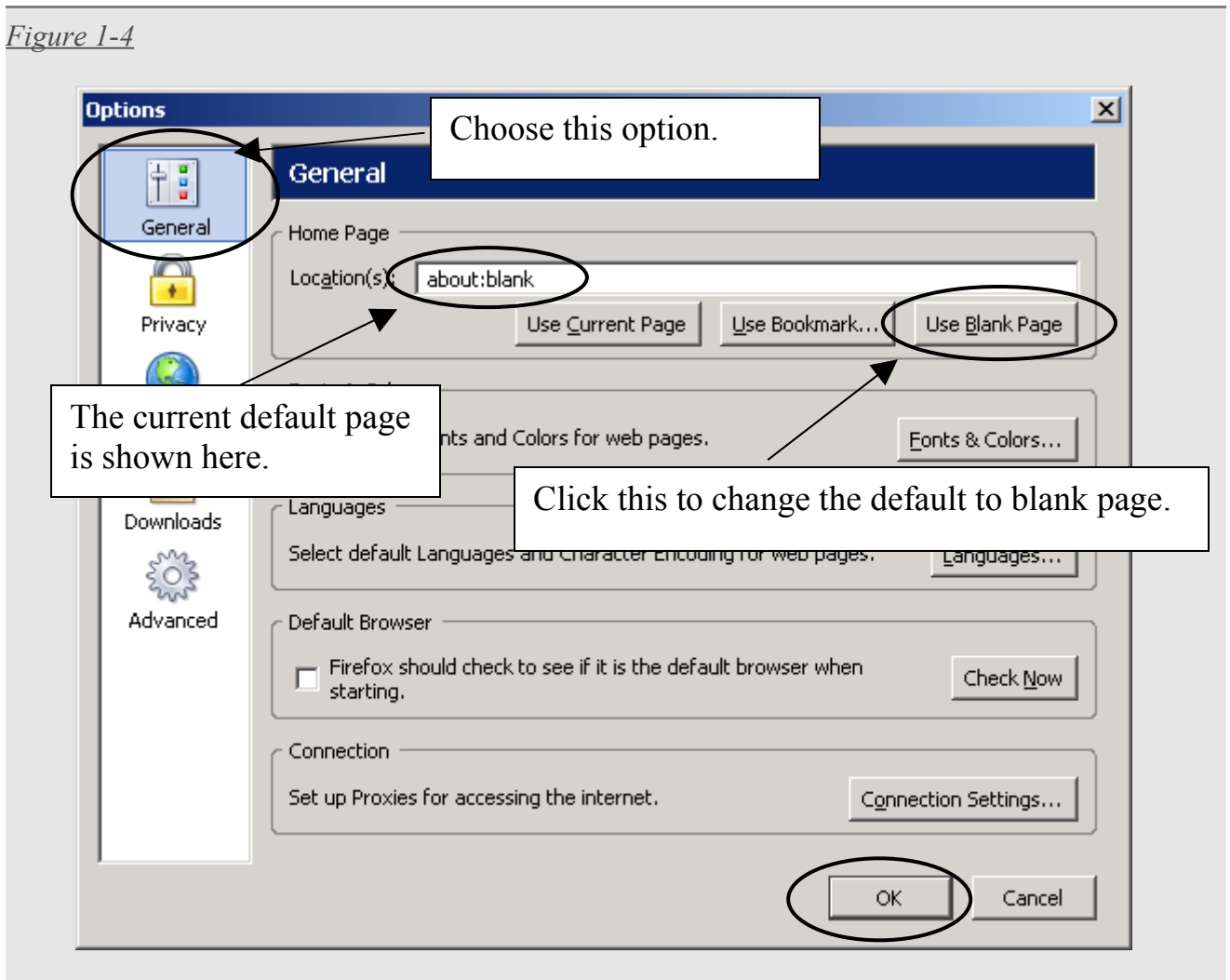
2 Choose **Tools > Options...** as shown in Figure 1-3 below:

Figure 1-3



The *Options* window appears.

Figure 1-4



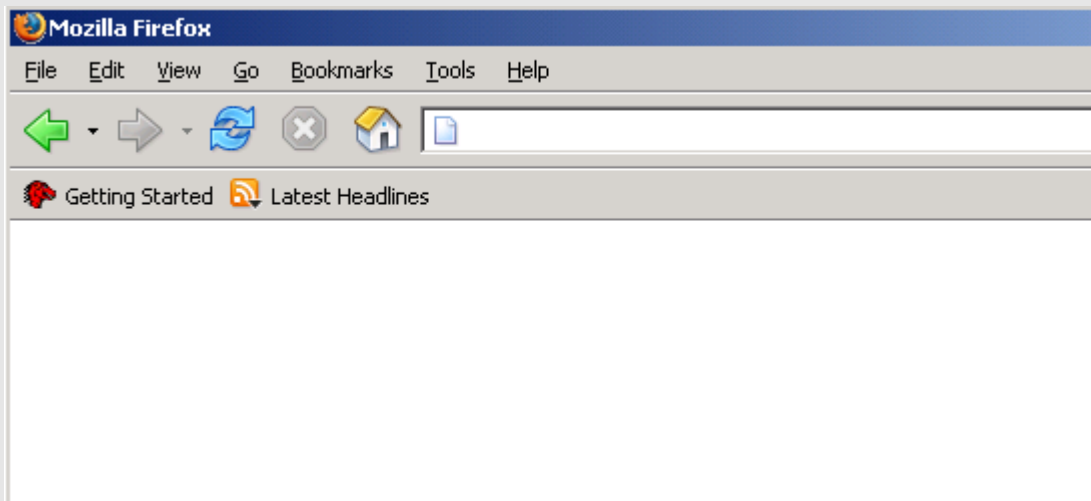
- 3 Choose the option **General** in the list on the left.
- 4 Click the button **Use Blank Page**.
- 5 Click **OK** button.

Figure 1-5



- 6 Click the **Home Page** button on the Navigation Bar as shown in Figure 1-5 above.

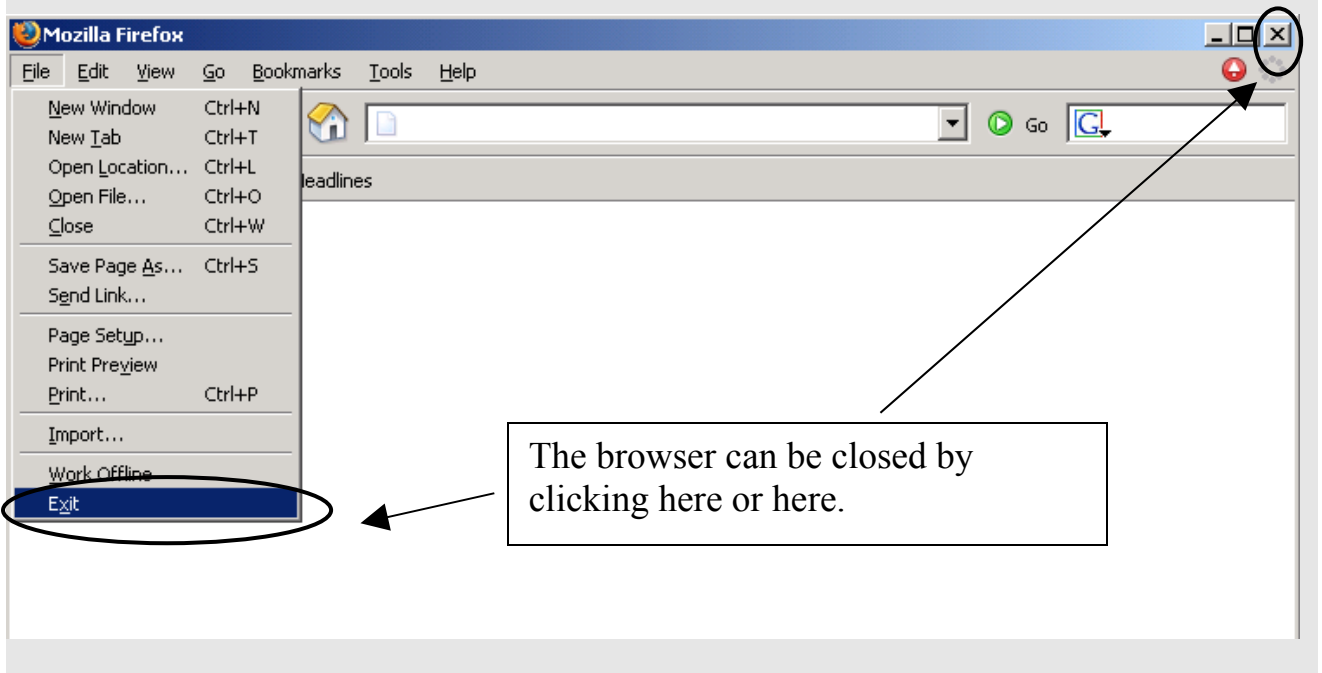
Figure 1-6



Now only a blank page is shown in the browser.

Next we want to close the browser. Figure 1-7 below shows two ways to close the browser.

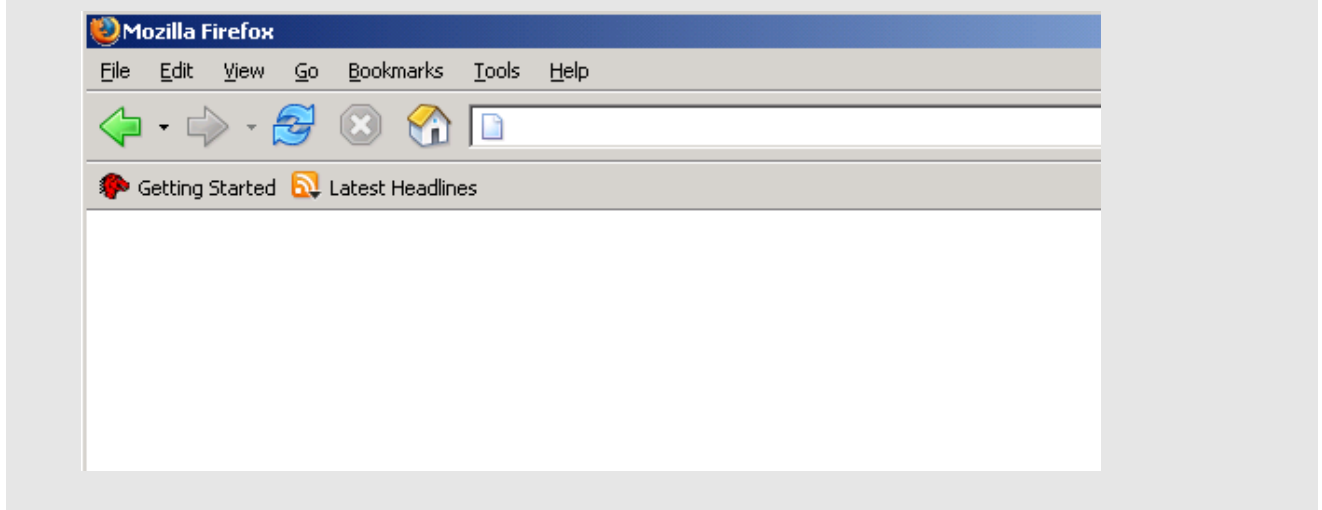
Figure 1-7



7 Close the browser.

8 Start Firefox again.

Figure 1-8



We can now see that a blank page is used as the default page.

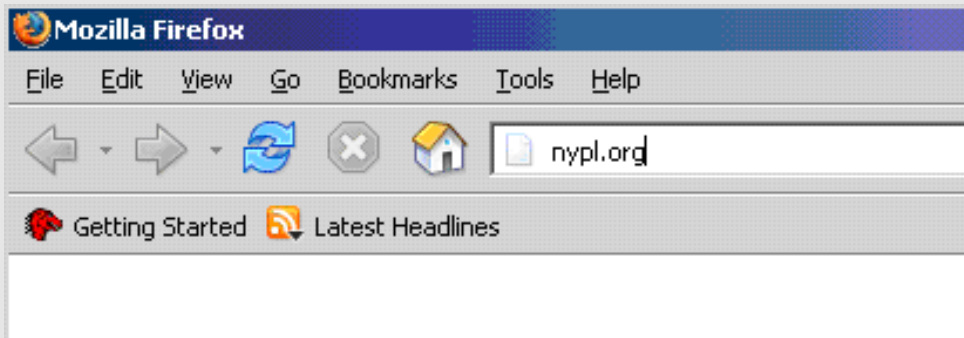
We'll now try to get another home page to be displayed in the browser. It's well known that the home page of the *New York Public Library* can be achieved using the following string:

nypl.org

(For example, it may be printed on a magazine or a brochure perhaps.)
So let's try that for an exercise.

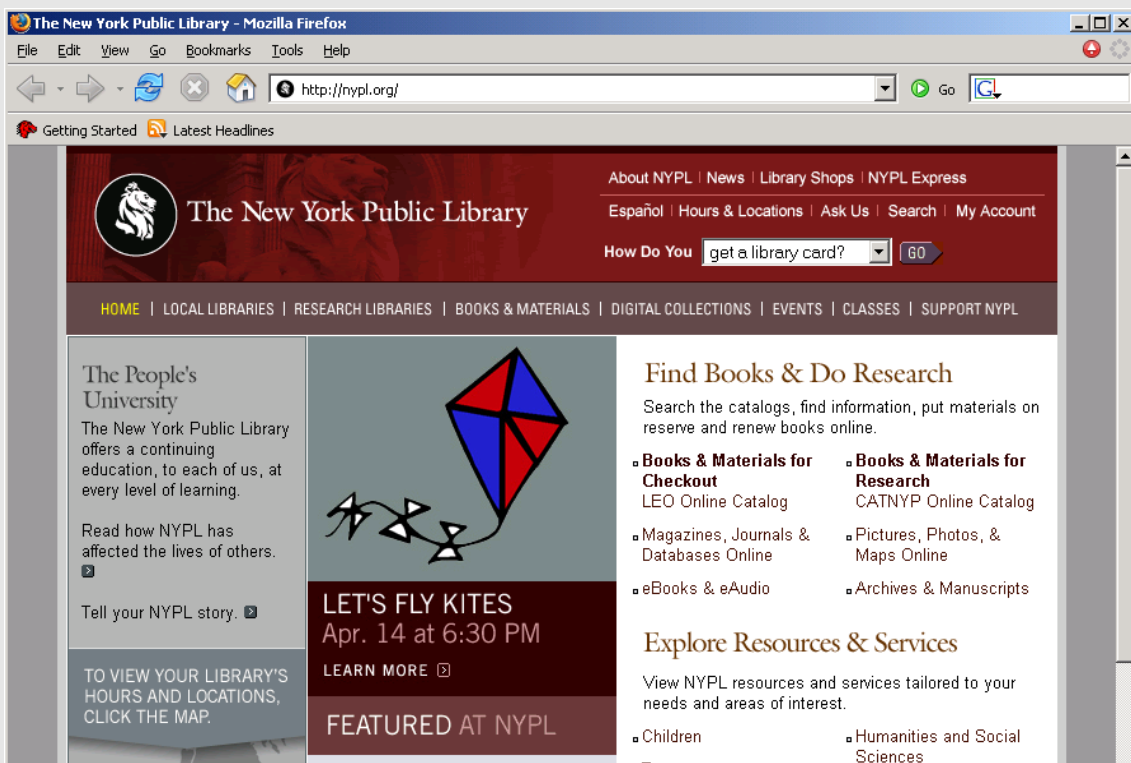
- 9 Type the string 'nypl.org' into the Location Box as shown in Figure 1-9 below and press *Enter*.

Figure 1-9



A new page is displayed in the browser window:

Figure 1-10



Here we see the **home page** of the New York Public Library (they change the content of the page now and then, so the page you see may be a little different from the one shown above).

When you pressed *Enter*, the browser sent a **request** to the **web server** of NYPL. This web server is a program running on a computer somewhere, maybe in the City of New York. Also stored on that computer is the home page of NYPL.

The web server constantly **listens** to the traffic on the Net, and when it receives your browser's request, it studies it and performs the service required. Here it fetched the home page and sent a **response** back to the web browser. That response partly included sending the home page. The browser took the home page out of the response and displayed it on your screen.

You may have noticed that the Location Box currently shows the string

http://nypl.org/

In other words the beginning '*http://*' and the slash '/' was added to the originally typed string. These additions are made by the browser because it knows what needs to be done and the additional parts are needed for a successful request.

The string '*http://nypl.org/*' is the **web address** of the home page of NYPL. It is also called the **URL**(**U**niform **R**esource **L**ocator) of the home page of NYPL.

Now every web page (i.e. every home page and other kinds of web pages) on the Net has its own and unique URL. The URL enables a web browser to obtain and a web server return the desired page.

So the web browser corrected the string typed originally to a proper URL, although it doesn't hurt to type the URL without the beginning '*http://*' and the slash '/' at the end. However, by adding the slash yourself you can get the response from the server a little quicker as

there is then less work involved for the browser and server in finding the requested page.

The slash at the end actually denotes the *root folder* of the web server. When no other web page is given in the request, the web server returns the home page stored in the root folder as default.

The part '*http://*' at the beginning of the URL indicates which protocol is to be used in the communication between the web browser and the web server. The two slashes are needed when trying to contact a server.

So with the help of a web browser you can view *web pages* which are available 'on the Net'. In order to get a page to your browser you can use the so-called **URLs**. We saw two such URLs, namely:

http://www.mozilla.com/ (Mozilla Corporation)
http://nypl.org/ (The New York Public Library)

It is often sufficient merely to type a piece of the actual URL as we did above when typing '*nypl.org*' instead of '*http://nypl.org/*'. The browser knows what is needed and adds the missing parts.

Sometimes the browser will show the '*www.*' immediately after the colon and two slashes, sometimes not. It depends on how the web server is configured. You can also type the string '*www.*' yourself, it makes no difference. Try for example the string '*www.nypl.org*'.

Note: Often it's needed to type the '*www.*' at the beginning for a successful request.

There's more about URLs in the chapter 'Some basic terms'. Here in this chapter we'll concentrate on getting a page into a browser.

- 10 Try other URLs if you like. There are many web addresses to be found in newspapers and magazines for example.

Summary

To open and close Firefox is fairly simple. You'll get more accustomed to it in the chapters to come.

Firefox is one of the programs generally called *web browsers*.

With a web browser you can view *web pages* stored on the Net.

This chapter gave you an illustration of the representation style in this guide. Things are explained by doing the exercises.

2 Viewing pages

Viewing different pages on the Net.

In the tasks to come a blank page is used as the default page. If you have a different page as default page it doesn't matter for now although some of the figures will look a little different.

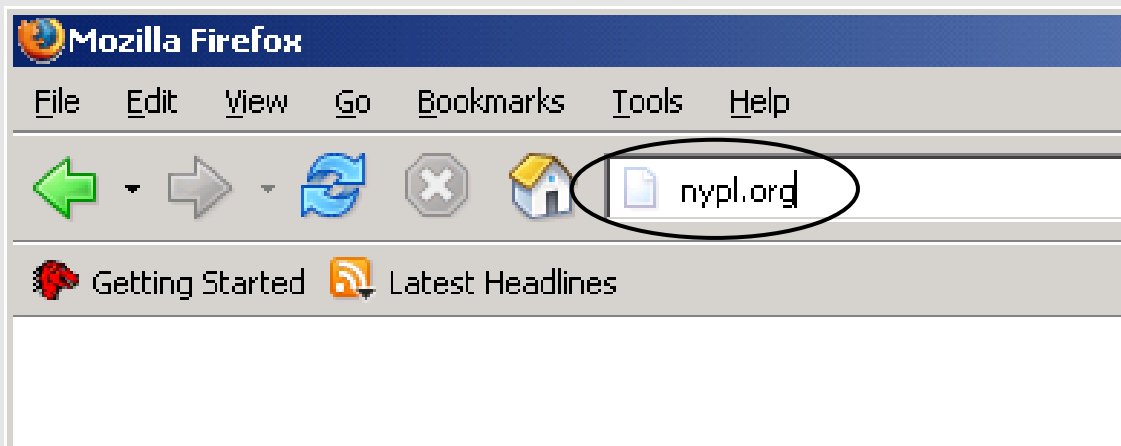
Let's suppose that we want to view the home page of the New York Public Library. We know already that this can be achieved by typing into the Location Box of a browser the string:

nypl.org.

Firstly, we must set the browser to work.

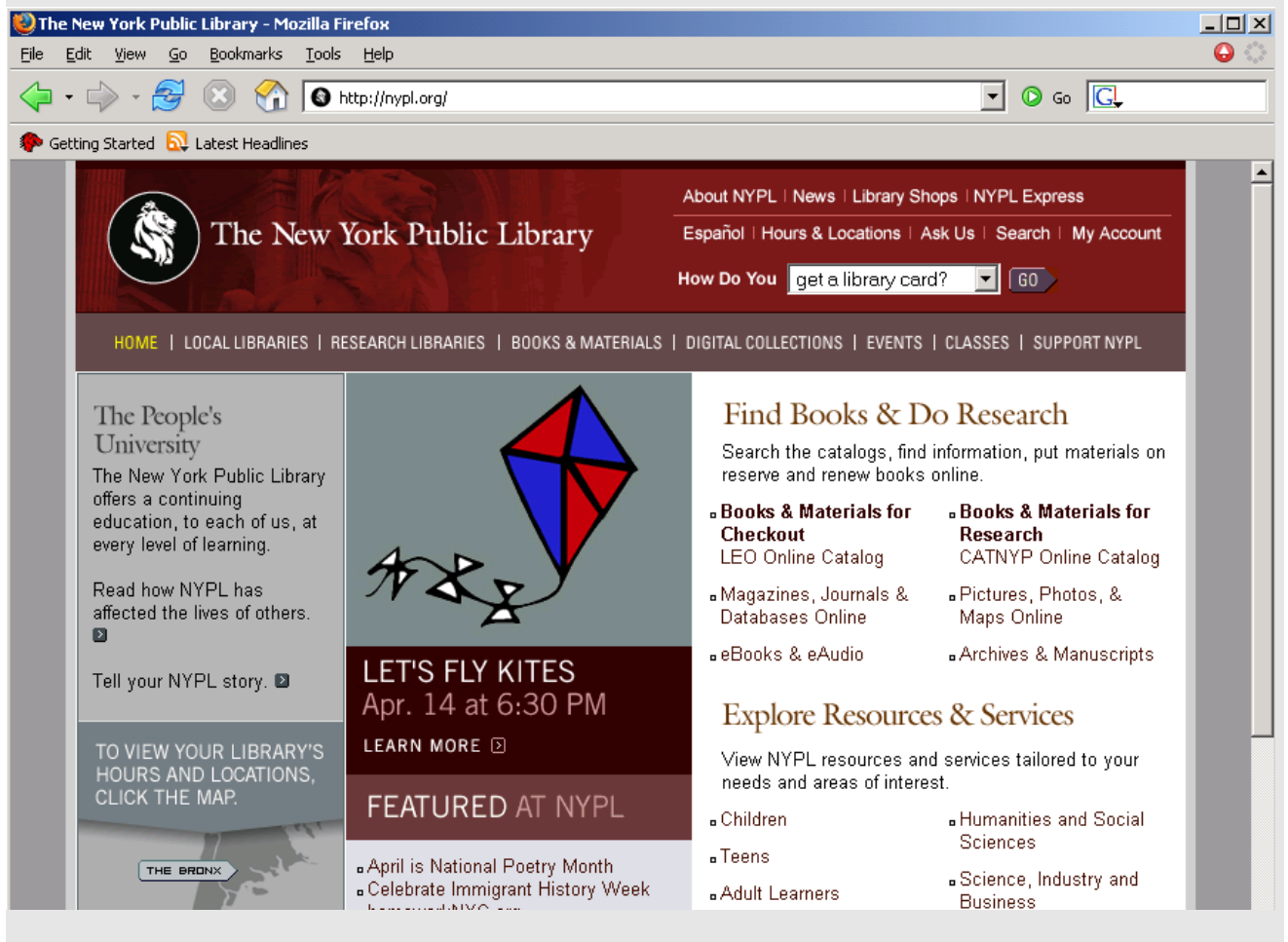
1 Start Firefox.

Figure 2-1



- 2 Type the URL into the Location Box of the browser as shown in Figure 2-1 above.
- 3 Press *Enter*.

Figure 2-2



Here we see the so-called *home page* of the New York Public Library. In the Location Box can be seen the URL of the page. Note that a slash ‘/’ is added after the URL you typed. That slash means a *root directory* of the web server. The home page is stored in the root directory.

Now let’s try this string:

bbcnews.com/

Figure 2-3



4 Enter 'bbcnews.com/' in the Location Box and press *Enter*.

Figure 2-4



Now in the Location Box you see that the URL is actually:

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

That is the current URL of the page but the page is also achieved using the string '*bbcnews.com*' because it is also **registered** for the page. So it doesn't matter which of them you type as the root folder of the web server hosting the web pages of BBC News is achieved using either of them.

In the examples we have encountered so far it's quite obvious where the web servers may physically or geographically exist. Perhaps the server machine for the New York Public Library is somewhere in the City of New York and the server machine of BBC somewhere in the UK. But what about this one:

dmoz.org

Where do you think the server for this might be situated? If you don't know, it's not a problem. We can still see if the home page is achievable.

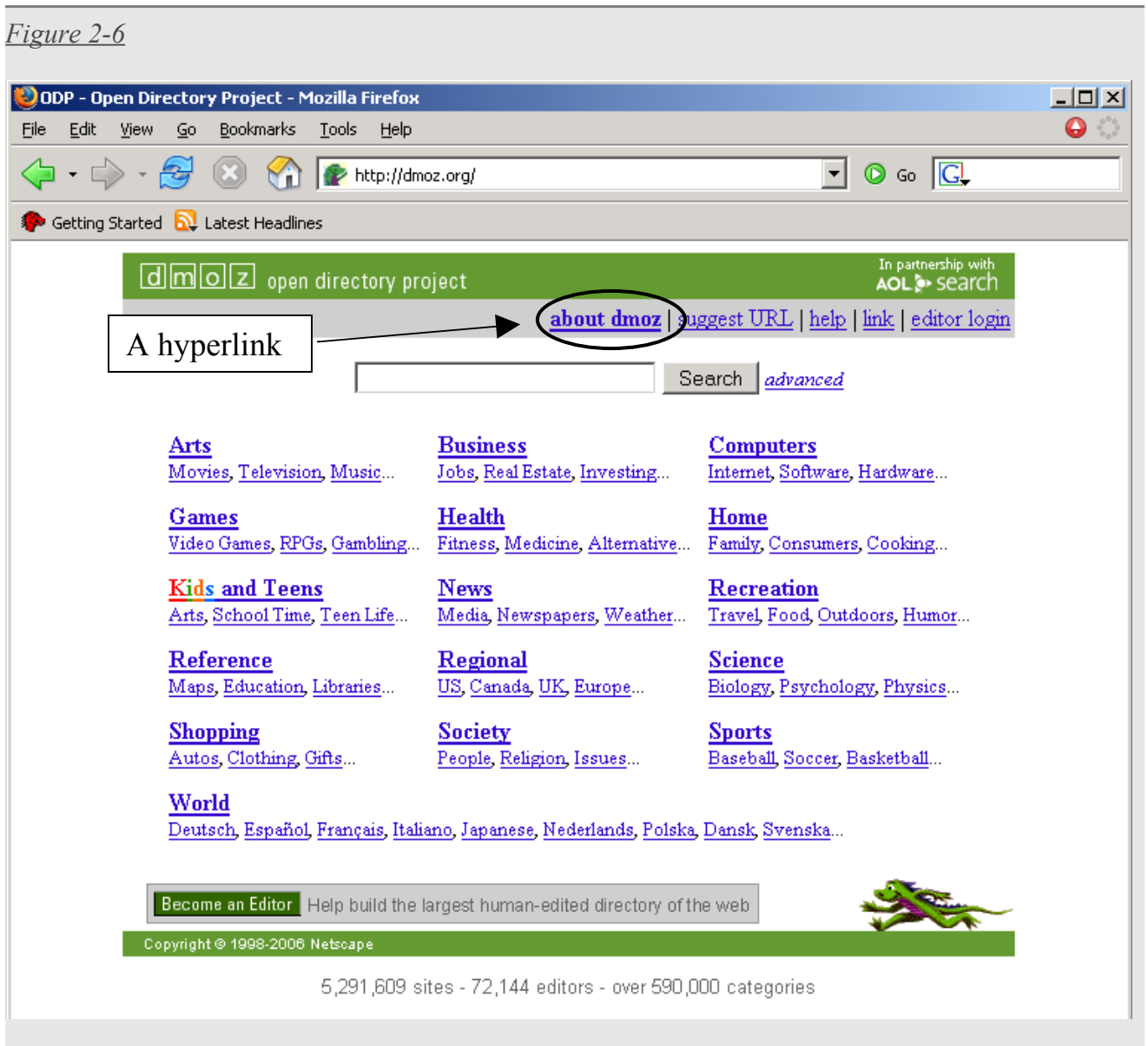
5 Enter 'dmoz.org/' in the Location Box:

Figure 2-5



6 Press *Enter*.

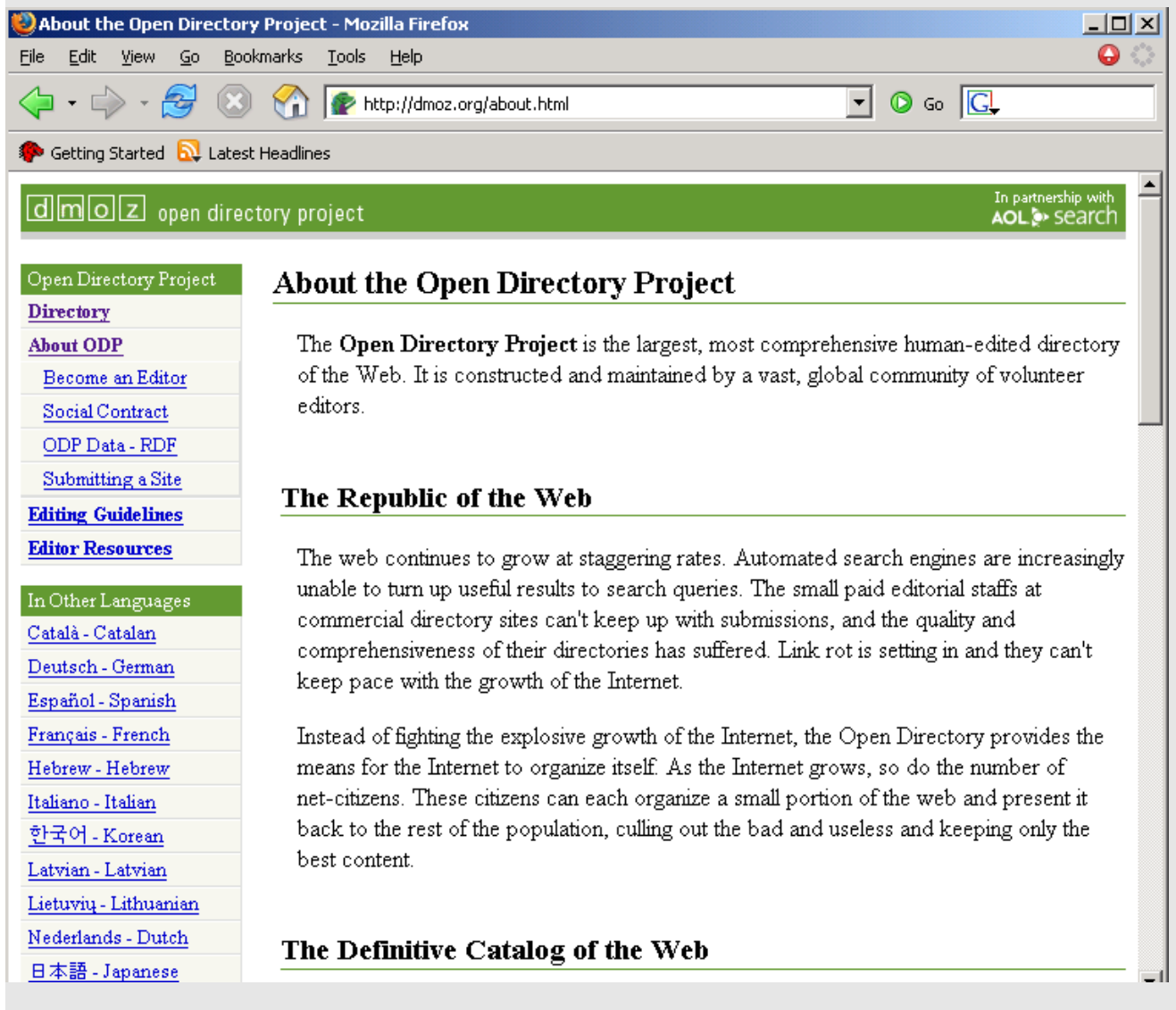
Figure 2-6



Here is the home page of **Open Directory Project**, a large human-edited directory of the Web.

You can find more information about **Open Directory Project** by following the *hyperlink* 'about dmoz' in the upper side of the page. When you move the mouse cursor over a hyperlink it changes to a hand. By clicking the *hyperlink* 'about dmoz' you'll see something as shown in Figure 2-7 below:

Figure 2-7



Now the URL of this page is

<http://dmoz.org/about.html>

A hyperlink hides the URL of a page. When the hyperlink was clicked, the URL behind it was passed to the browser. Then the browser sent the request to the web server and the web server returned the page to the browser to be displayed.

So, when you click a hyperlink, the URL behind it is sent to the web server by the browser. You'll just skip typing the URL yourself when you click a hyperlink.

That's fine so far but we still don't know *where* the machine of the web server hosting these pages is running. But is that important to know at all? In order to *use* the pages it doesn't matter in the slightest to know where the server is situated *geographically*. The web server hosting the pages simply exists 'somewhere on the Net'. And that's all it needs to know.

So in order to get a page to a browser it's enough to know

- that the page in question is available somewhere 'on the Net'
- the URL of the page / a hyperlink to click to get the page.

Now when we have visited several pages it is convenient for the browser to *remember* the URL of those pages in case we want to return to them. Let's look at that next.

7 Click the arrow in the Location Box as shown in Figure 2-8 below:



8 Choose the address '*http://nypl.org/*' as shown in Figure 2-8 above.

Figure 2-9



9 Do your own experiments with different URLs and hyperlinks if you wish. For example, you can study what kind of hyperlinks there are to be followed on the following home pages:

- unicef.org
- googlesightseeing.com

Summary

When a page is ‘on the Net’ it is available to view with a browser if you know the URL of it or has a hyperlink to follow.

3 Web page and website

The documents to be displayed in a browser are *web pages* and they belong to a unity called a *website*.

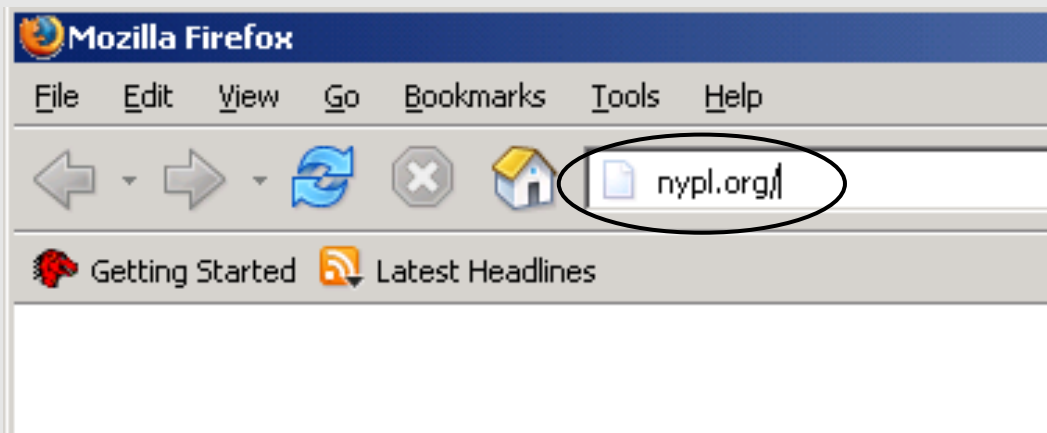
Let's study the *site* of the New York Public Library more closely. We already know that the home page of NYPL is achievable with the string

nypl.org

We can start with that.

1 Start Firefox.

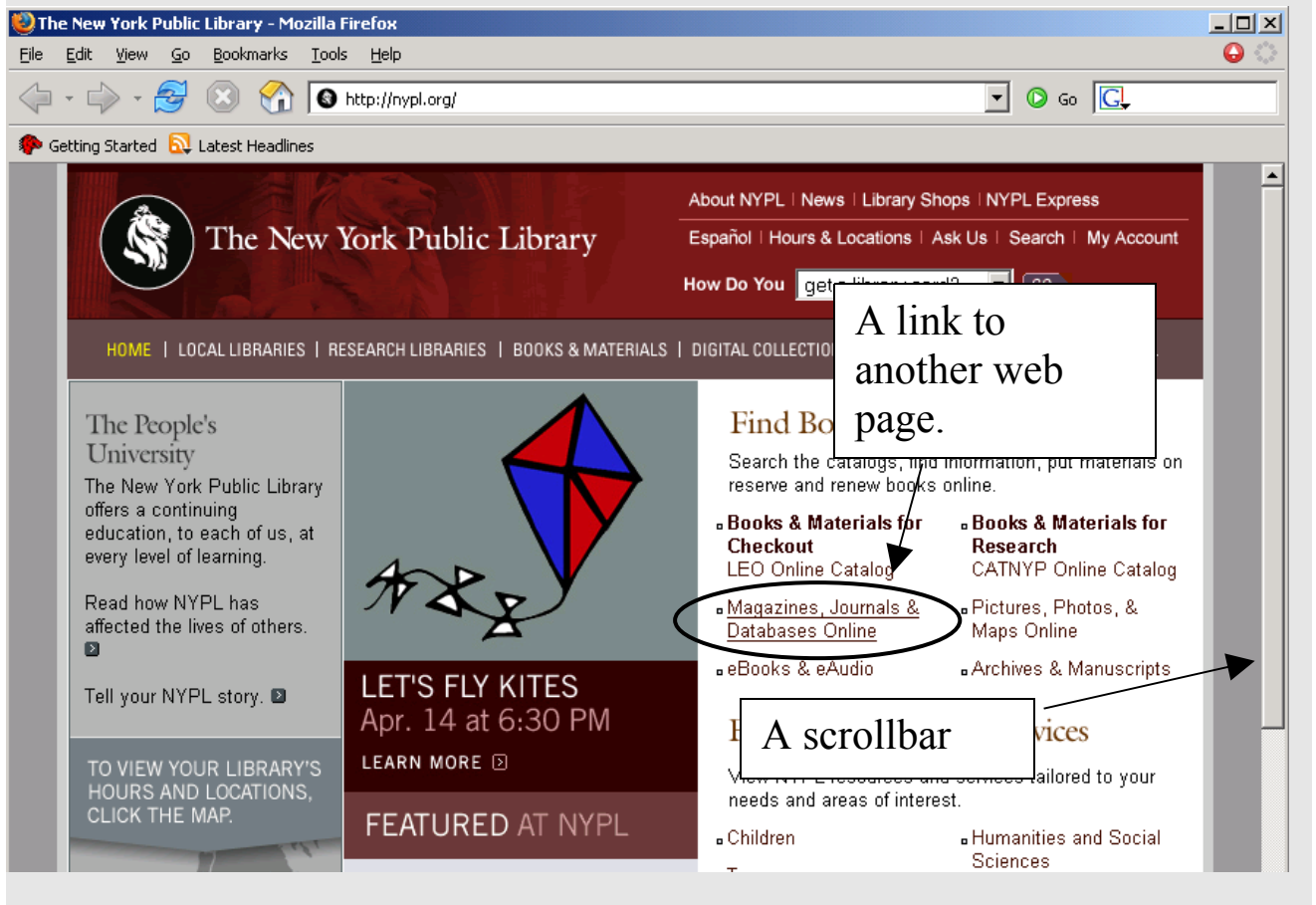
Figure 3-1



2 Type the string 'nypl.org/' on the Location Box and press *Enter*.

Note that because no particular page is specified the web server returns the home page of NYPL.

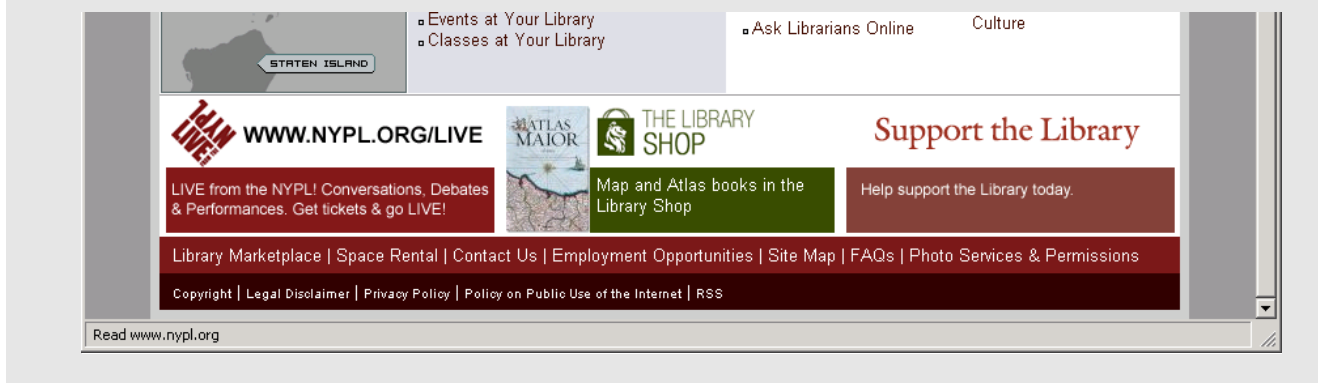
Figure 3-2



Here we see the so-called *home page* of the New York Public Library. On the page there are *hyperlinks* to other pages. When the mouse pointer is moved onto a hyperlink, a line appears under the text of the link and/or the mouse pointer changes to a hand figure.

3 Drag the scrollbar downwards so that you see the bottom of the page.

Figure 3-3



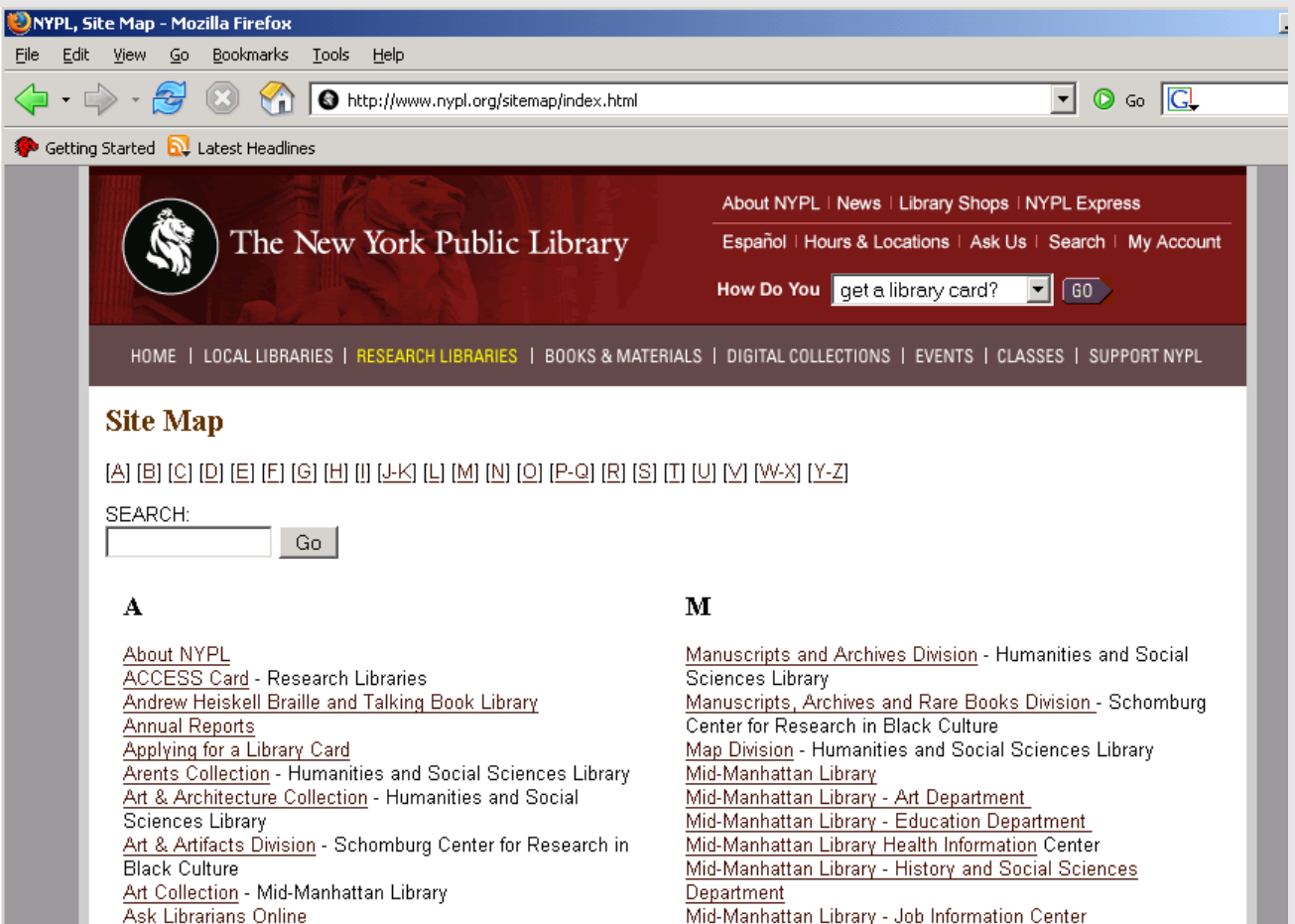
- 4 Move the mouse pointer over the text ‘Site Map’ so you see that it’s a link too as shown in Figure 3-4 below:

Figure 3-4



- 5 Click the hyperlink ‘Site Map’

Figure 3-5



This **sitemap** page consists of hyperlinks to pages related to the NYPL organization. All these pages together make up the **site** of NYPL.

On the Location bar you'll see that the URL of this page is

<http://www.nypl.org/sitemap/index.html>

The '*www.nypl.org*' denotes the web server that **hosts** the site.

The folder '*sitemap*' is in the root folder of the web server and it contains a file '*index.html*'.

- 6 By clicking a hyperlink on the page you'll get a document into your browser to be viewed.

Read through the following list and make sure that you understand the terms typed in bold and italic:

- A **web page** is a single electronic document to be displayed on your screen.
- Each page has a unique **URL** (Uniform Resource Locator), which identifies its location.
- Web pages can contain **hyperlinks** to other web pages.

- A **website** or shortly a **site** is a collection of web pages relating to a common theme.
- One of the pages of a site is called the **home page**.
- The home page is returned by the web server if you don't specify another page in the URL.

Summary

Today the Web is a global *publishing medium* where you can find a huge number of different *websites*.

A website is a unity containing web pages that relate to a common theme, such as

- a business
- an organization
- a subject, such as sports
- a single person
- etc.

The Web is also evolving increasingly into a medium for conducting *electronic commerce*.

4 About safety on the Net

Here are some basic things to remember about safety matters concerning the Internet.

As you probably know, in some big cities there are so-called ‘good areas’ and ‘bad areas’. When you are walking on the streets of the good areas, it’s quite safe and harmless. But in a big city there can also be areas that taxi drivers prefer to avoid and where the police make visits on a regular basis. On the Internet the situation is much the same: there are ‘good areas’ and ‘bad areas’. Most of the sites hosted on the Net and web servers listening to requests from web browsers are okay and are ‘good’; but there also are sites and servers whose main purpose is to carry out illegal activities and are therefore ‘bad’. The Internet is frequently abused by people for all sorts of purposes and there seems no immediate prospect of an improvement in this area. Naturally, these people, along with their sites and servers should be avoided as much as possible.

The first thing to do is to be sure that on your computer there are:

- The latest updates concerning the operating system and software installed
- Virus control software installed and updated
- Firewall software correctly installed and configured

This basic software helps to prevent a server making contact with your computer and using it for its own, often malicious, purposes.

Unfortunately, these basic measures are useful but don’t provide 100% security against unwelcome visitors to your computer as the situation is much more complex than might be imagined. When surfing the Net, you might find (on purpose or accidentally) a site that waits for an unwary person to visit so that it might then attempt to make use of that person’s activities. In this kind of situation the first important thing is not to surf with a user name which has all the rights concerning your own computer. If the ‘bad server’ that hosts a decoy site gets in contact with your computer, it

will also have all the rights to perform any kind of installation on your computer, something to be avoided at all costs. So learn to create a user name to be used only for surfing the Net and which ***has the minimum capacity to do harm to your own computer.***

Thirdly, don't give answers to personal questions, notably those concerning your credit card details. For example, an on-screen form might appear claiming to be performing "some security checking on your behalf" and asking for your credit card information. How can you make sure that you aren't swindled in this way? Simple: don't give them the information. Though everyone has the opportunity to ask you about such things, there's no law that says that you must give them a reply. You wouldn't answer such questions on the street, so don't answer them on the Net either.

One other thing to remember. It is becoming increasingly common to ask personal questions in an email message. It's obvious why this happens: if you've taken the security measures outlined above, the only other way to reach you is by email and other kinds of message tools. For example, it's quite possible that one day you'll get an email which appears to have come from your bank, asking for your account numbers and so on. The message may well carry the logo of your bank; there's also the right name of your own contact person and beneath it there's also the name of the director of your bank. So everything is above board, isn't it?

No, it isn't! Can you tell why an email message such as this should be treated as being fraudulent?

Firstly, the medium: no respectable bank would ever ask questions like that using email. If the bank wanted your personal information, how could they be sure that it's really you who opens and reads the email? How could they be sure that nobody would read the message you sent back to them?

Secondly, the personal contact: When you open a credit account in a bank, for example, you must do it yourself personally. The officer is making sure (although you're probably unaware of it) that you are the person you say you are, that you're not drunk, and that you seem to be generally responsible for your actions when you're opening accounts and signing contracts, etc. Also, when the user names and initial passwords are given to you, they are

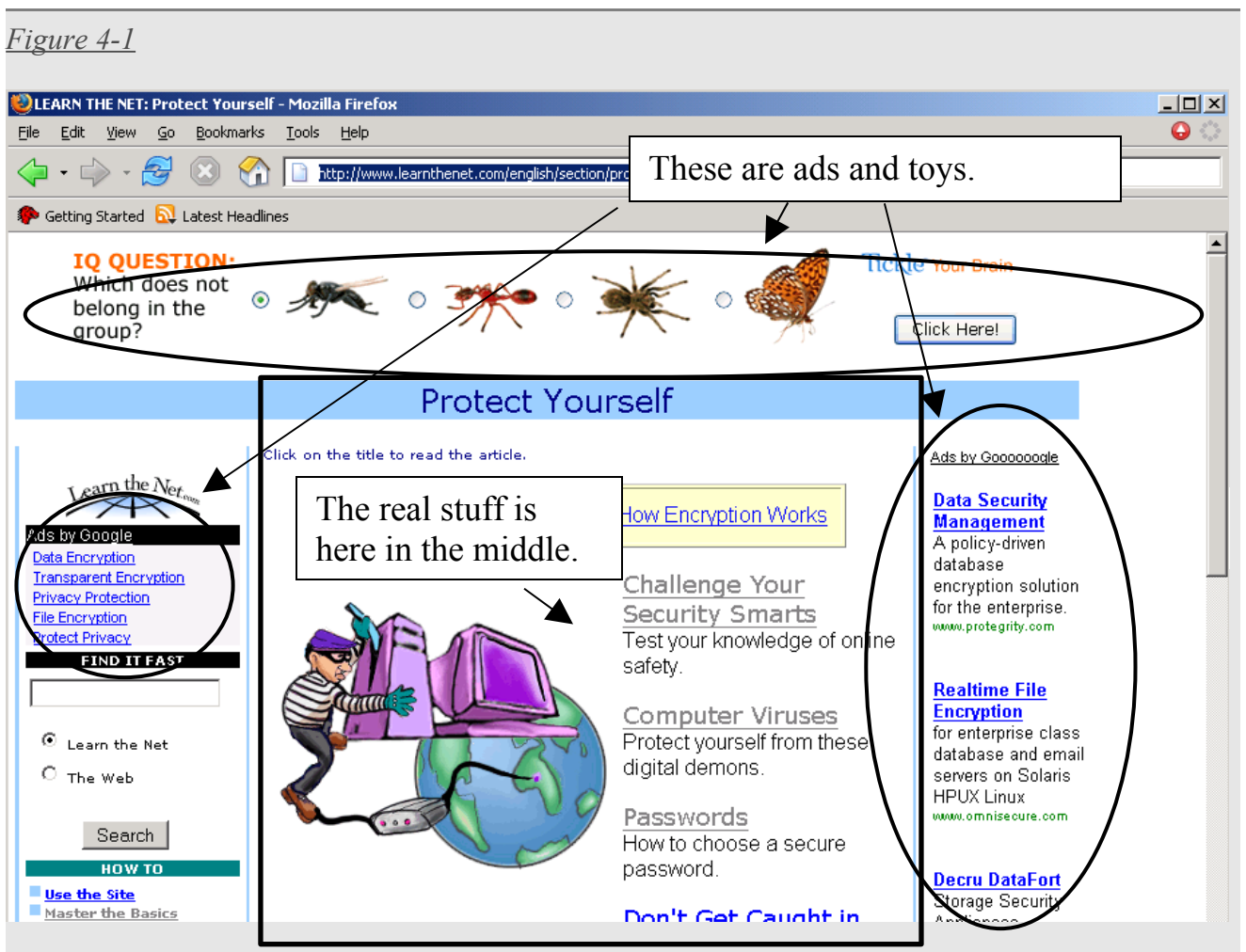
given directly to you personally. How could these kinds of things be accomplished in a secured way via an email message?

Quite simply, a respectable bank won't ask these things by the use of email messages.

If you want to read more about safety issues, there's a good site at the following URL:

www.learnthenet.com/english/section/protect.html

When you open the page you'll see something as shown in Figure 4-1 below:



There are lots of ads in the articles but don't be afraid of them. The text itself is of good quality and in clear language.

One further comment:

Having read all of that, you may now feel that the Internet is an awful place to be avoided at all costs. But that's not quite true. As mentioned earlier, most of the sites and servers on the Net are safe and harmless and many of them deliver valuable and useful information. It's just a question of how to avoid the extra work and wasted time that results if something untoward happens. Once you've become accustomed to putting in the little effort needed to protect yourself from its risks, you can then feel secure in seeing what the Internet and World Wide Web has to offer. Use that opportunity in the way you see fit.

Summary

Safety issues require a little effort on the part of the user but are well worth the trouble.

5 How the web actually works

In this day and age it's good to have a thorough understanding about what happens when you follow a link on a web page or send by hand a URL to a web server.

Let's suppose that you want to see what a certain *web page* on the Net has to show. In order to accomplish this you must follow a certain procedure:

- 1 Firstly you must start your *web browser* and have a connection to the Internet (Note that the connection can also be *wireless*).
- 2 Then you'll give a browser the *URL* of the document. You can also click a *hyperlink* which passes the URL behind the link to the browser.
- 3 The document you want to see is not on the disk of your own computer but somewhere else in the world. So, the browser can't read the document in the same way it reads files stored on the disk of your own computer. Instead, the browser sends a *request* to the computer where the web page is stored. That request specifies which document is wanted.
- 4 The computer that contains the web page you want to see constantly runs a program that is generally called a *web server*. That program's job is to *listen* to requests from browsers and then perform the service asked.
- 5 The web server receives the request, studies it and, if possible, retrieves the desired document.
- 6 When the document is retrieved or finished, the web server sends a *response* to the browser. That response also contains the document as one part of it.
- 7 The browser in your own machine receives the response from the server, takes the document part out of it and *displays* the document to you on your screen.

- 8 When you want to follow another link and click on it, the whole procedure starts again.

Note that there's never a direct *physical* connection between the computer on which the browser features and a server machine. A browser and a web server are only programs *sending messages* to each other.

It's usual to visualize things in the following way: the machine where a browser is used and the computer where a web server is running can be located, for instance, in one single company building. And the pages to be displayed in the browser don't need to have anything to do with the outside world. The web pages can belong to some application made just for that enterprise or organization.

In other words, the same *techniques* that are applied when dealing with the World Wide Web can be used for a single organization in applications customized just for that organization itself. Indeed this is becoming more and more common. So, the *net technology* itself is very widely used today and will be used even more in the future. That's one of the reasons why it's good to get acquainted with the programs called *browsers*.

Summary

When you understand the basics of communication between a browser and a web server, it is easier to get acquainted with many of the contemporary user interfaces, using the technology of the Internet.

6 Some basic terms

Here are the parts of a URL considered more closely.

Note: it's not essential to remember everything you'll find in this chapter. Just read it through so that you'll know where to find the information if it's needed.

In Chapter 3 '*Web page and website*' there appeared the following URL:

`http://www.nypl.org/sitemap/index.html`

Let's study more closely what the parts of this string indicate.

The parts of the URL:

http	Protocol used in the communication between the browser and the web server. 'Protocol' is a set of rules a browser and a web server use to communicate with and understand each other.
:	Colon simply separates the protocol from the other part of the web address.
//	Indicates that a <i>contact to a server</i> is to be achieved. (For example, when sending email the notation 'mailto:<email address>...', without slashes, could be used). Note that this doesn't mean a <i>connection</i> between a browser and server. When a browser has sent a request, there is no <i>connection</i> between the browser and the server.
www	Name of a server listening to messages using the http protocol. Note that this name is not always shown in the URL in the Location Box. And the name can be something other than 'www'.

nypl.org Name of the *domain* where the web server belongs. Domain is like an address by which you can get to some specific 'area' on the Net. For example, the domain name 'nypl.org' is *registered* to NYPL and there are probably several server programs in that domain each dedicated to different tasks.

www.nypl.org

This part of the URL is actually the *name of the web server* seen over the Internet. In other words, it's the server that hosts the web site of NYPL. By using it the request a browser sends can be directed to the right web server.

You may wonder how a request can be directed to the right server if the name is not shown in the URL. In fact, the sequence is such that a request is first directed to the domain and then in the domain the right server is found. In the domain an http request goes to the server that is listening to messages using the http protocol.

/ Indicates the *root folder* of the folder system hosted by the web server *www.nypl.org*.

sitemap/ Indicates *a folder* in the root folder.

index.html The name of the document file requested.

Note that though there is a URL seen on the Location Box, the browser doesn't have a direct *connection* to a folder and a document file there on the disk of the server machine. It is always the web server that *fetches* the document and *sends* it to the browser. So nothing can be 'disturbed' on a web server by using a browser.

In folders hosted by a web server there is usually a file which is returned in case only the name of the folder is given. (For example, you can try what happens when you type 'nypl.org/sitemap/' on the

Location Box and press *Enter*.) This specific default page can be named in several ways:

- index.htm
- Index.htm
- index.html
- Index.html
- default.html
- default.asp
- etc.

However, the name doesn't make a difference; a default page is shown if no other file is mentioned after the name of a folder.

You can study these things yourself by trying different URLs.

Summary

On some occasions this chapter may be helpful. For example, if you have to give somebody a URL for a certain file, it's good to know what a correct URL must contain.

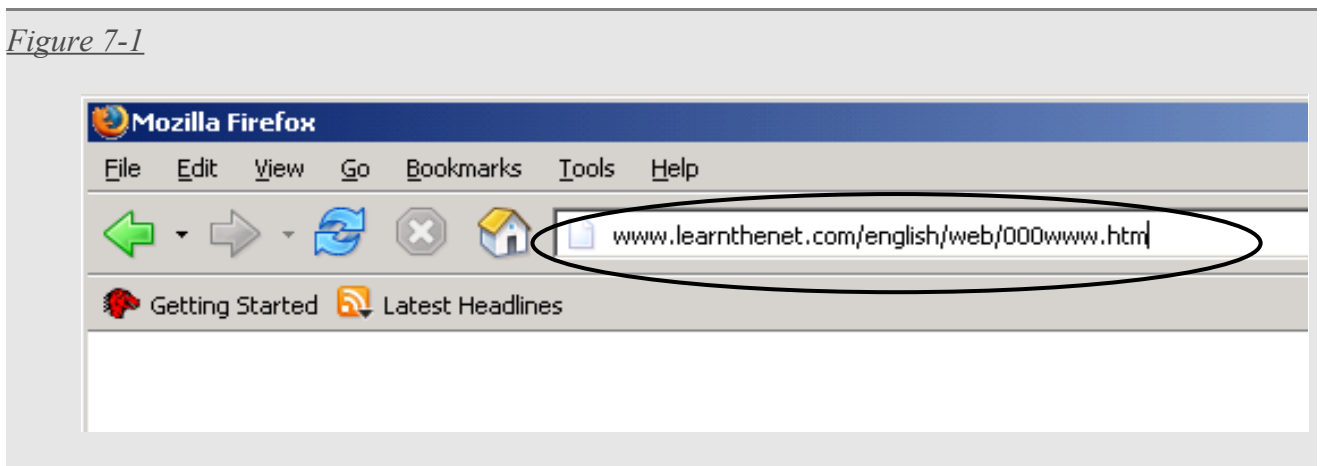
7 How to continue

Here we see where to find more information on browsers and surfing the Net. Also the ever important safety questions are again touched upon.

Now that you can surf a little on your own you can discover for yourself what's offered on the Net. This chapter will introduce an excellent site for studying the basics of the Internet and browsers. Let's look at where to find that information.

1 Start Firefox.

Figure 7-1

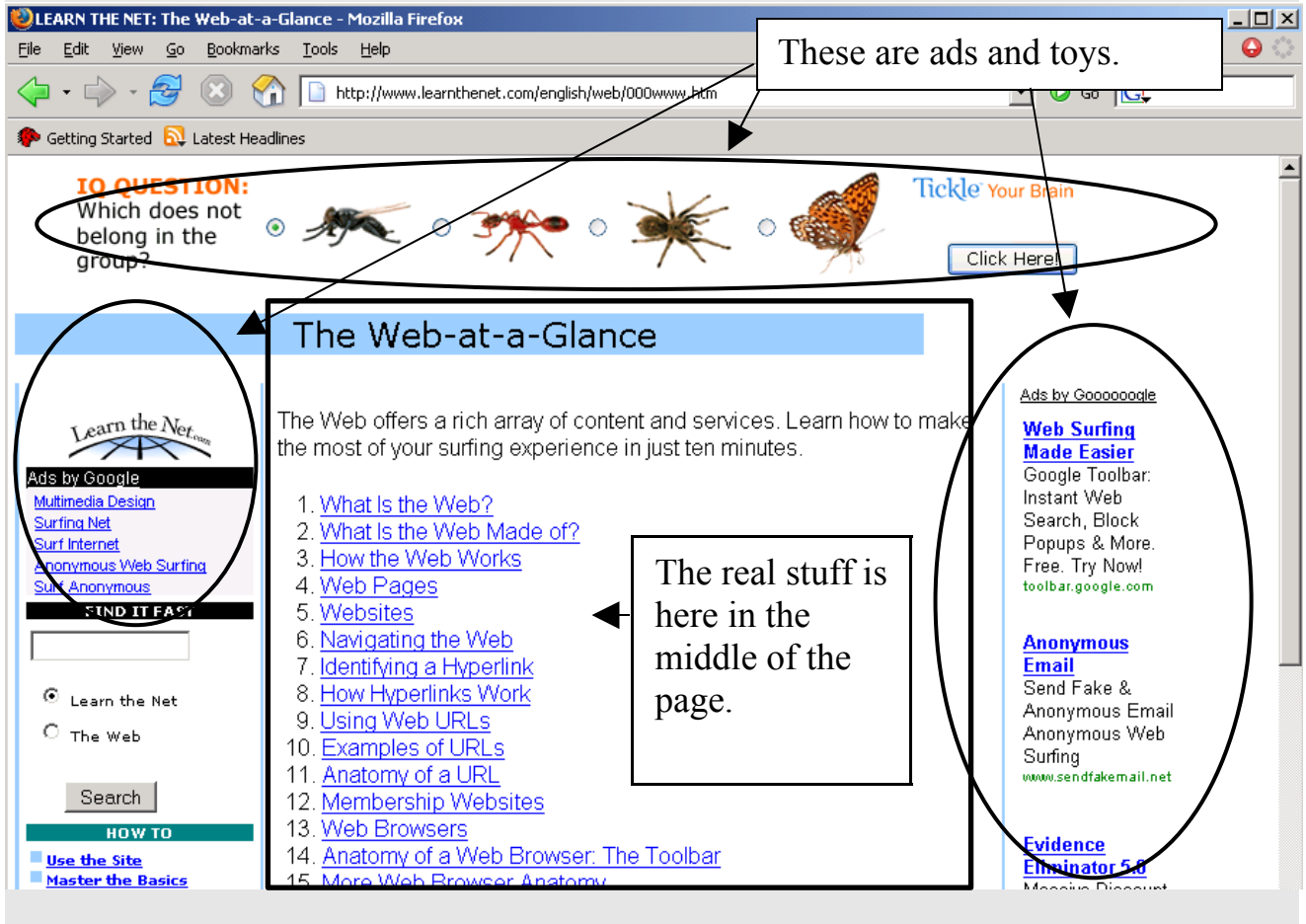


2 Type into the Location Box of a browser the following string:

`www.learnthenet.com/english/web/000www.htm`

3 Press *Enter*.

Figure7-2

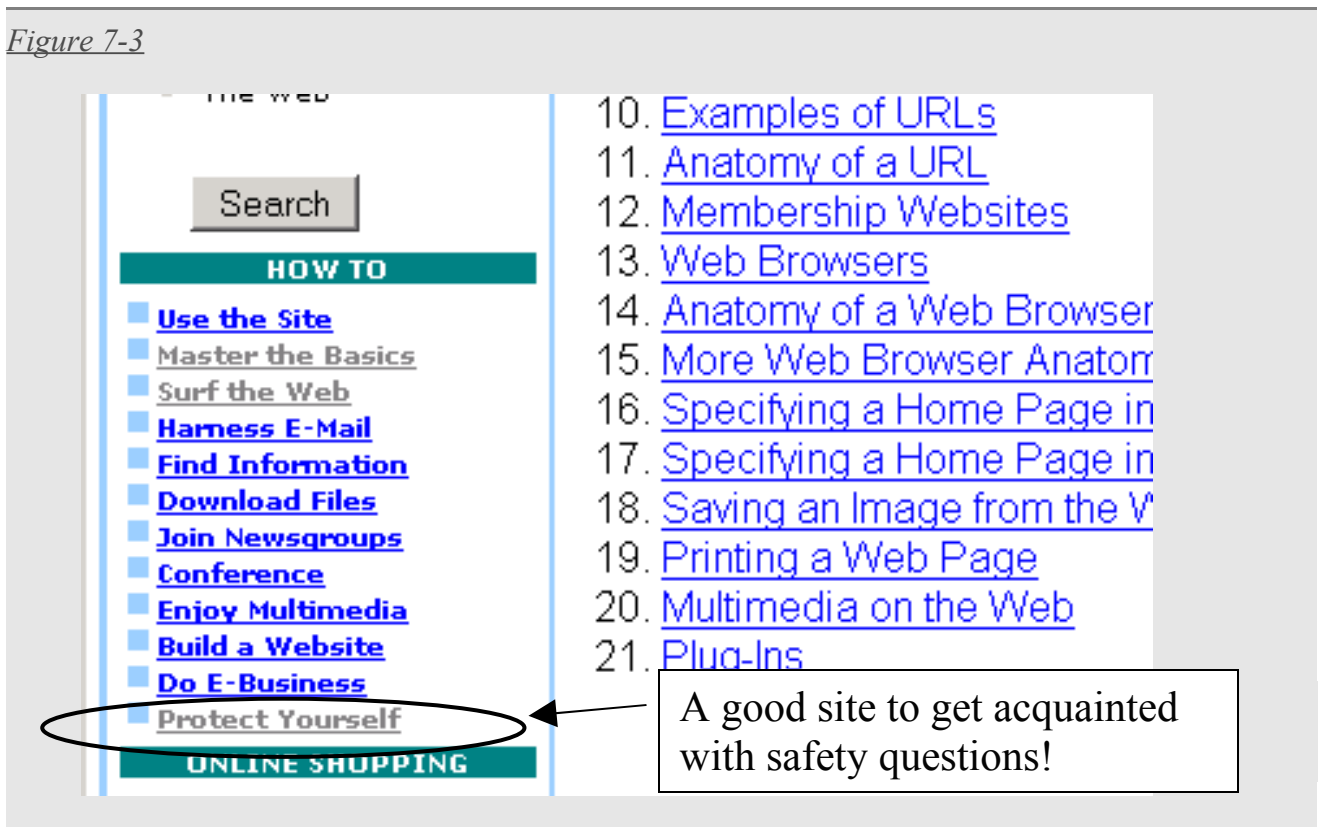


Here is a page where you can find links to different topics about the Web and browsers. Don't be afraid of the ads around the page but concentrate on the links in the middle of the page. They lead to pages where the topics are clarified in simple but clear language. (Of course, you can study the ads too if you like.)

And do remember this: when reading the chapters behind the links don't worry if you don't understand everything on the first read. If you do understand everything, that's fine but it's not necessary. Just read all the chapters through at your leisure. On the second read you'll understand much more.

On the left side of the page there's a navigating list as shown in Figure 7-3 below:

Figure 7-3



Here is the link '*Protect Yourself*', very recommendable if those kinds of things aren't yet familiar to you. There are a lot of ads on the pages but otherwise they're exactly what you need.

One of the first useful things to learn is how to **bookmark** an interesting web page to be revisited more easily on a later occasion. More about this can be read at

<http://www.learnthenet.com/english/html/17bookmark.htm>

4 Have fun when studying the Web and surfing on it!

Summary

There are many useful pages on the Net where you can find information about the Web and safety questions. The one introduced above is a good starting point.