USING INTERNET

UNIT OUTCOME

Students will be able to:

- understand the history and advantages of the Internet;
- recognize the use of browsers and search engines;
- know downloading and uploading files;
- understand how to design a simple webpage.

5.1 OVERVIEW OF THE INTERNET

The **Internet** is the network of networks around the world (see Fig. 5.1). It is made up of thousands of smaller, national, regional, governmental, academic and commercial networks. It is a global network.

Fig. 5.1: The Internet

You have studied the basic concepts of using Internet in Grade 9. Let us extend our knowledge about the Internet further.

Development of the Internet

The first step towards the construction of Internet was taken by U.S. Department of Defense in 1969, when they approved a project named **ARPANET** (acronym for Advanced Research Projects Agency NETwork). This project was started to connect computers of different universities and US Defense in such a manner that the network could even survive after a nuclear attack. This was possible by having multiple communication

paths between any two computers in the network. In case one or two paths got damaged, communication could proceed through the other paths. The users of this network were able to share data and communicate by using short text messages. Soon developments started in this project and several rules of communication were developed and adopted by all users of ARPANET.

To use ARPANET, a university was required to have a research contract with the Department of Defense. Due to this problem, in 1970's the NSF (U.S. National Science Foundation) created a common network called **CSNET** which allowed dial-up connections to ARPANET. The idea of CSNET was simple but it was a grand success. By 1980's around 200 computers were connected to this network.

Research and development in the field of network resulted into the formation of a new, high-capacity and more speedy network called **NSFNET**. This network got an instantaneous success and forced NSF to think for a better and fast version of it. The research led to the creation of a new network called **ANSNET** (Advanced Network Services) in 1992. In 1995, a more advanced version of the network called VBNS (Very high speed Backbone Network System) was developed and it replaced ANSNET from the market. In 1995, a new name was given to the collection of these networks and is now called **THE INTERNET**. The number of computers being connected to the Internet doubles in less than a year.

● Advantages and Disadvantages

In the history of mankind, the Internet is the greatest development in the field of ICT. Like other inventions, the Internet has a number of advantages and disadvantages. The advantages of the Internet are so huge in number that they outperform the disadvantages quite easily.

Advantages of the Internet

The Internet provides many facilities to the people. Some advantages of the Internet are given below:

1. **Sharing and collecting information:** You can share and collect information on every topic of the world on the Internet 24 hours a day. The students, writers, engineers, scientists and many other people can interact with one another to get guidance and to share knowledge, etc. Sharing and collecting information through Internet is a very easy, cheap (in some cases free of cost) and fast method.

2. **E-commerce:** E-commerce means conducting business activities online. It is not only widening consumers, choice of products and services but is also creating new businesses and compelling established businesses to develop Internet strategies. E-commerce has become a fantastic option through which you can shop anything.

3. **News:** People get latest news of the world on the Internet. Most of the newspapers of the world are also available on the Internet via their websites. These websites are periodically or immediately updated with latest news when any event happens around the world.

4. **Advertisement**: Today, most of the commercial and non-commercial organizations advertise through Internet. It is a very cheap and efficient way of advertising. The organizations present their products with attractive and beautiful ways to the people all over the world.

5. **Communication:** Using Internet you can communicate with others all over the world. You can talk by watching to one another; just as you are talking with your friends at your home. Different services provided on the Internet for this purpose are:

   (*i*) E-mail   (*ii*) Chatting

   (*iii*) Video conferencing   (*iv*) Internet telephony, etc.

6. **Formation of communities:** Internet helps in formation of communities or forums. Here, a number of people can participate in different types of debates and discussions to express their views and gather valuable knowledge.

7. **Entertainment:** Internet also provides different types of entertainments to the people. You can play games with other people in any part of the world. Similarly, you can see movies, listen music, etc. You can also make new friends on the Internet for enjoyment.

8. **Online learning:** Internet provides the facility for online learning. Many websites have lectures and tutorials on different subjects or topics for learning. You can download these lectures or tutorials and go through these repeatedly to get a lot of knowledge. It is a very cheap and easy way to get education.

9. **Services:** A variety of services are offered via Internet, for example job searching, online banking, online results, buying movie tickets, airlines and railways schedules, hotel reservations and consultation services (*e.g.*, medical help), etc. When you avail these services offline, they become more expensive.

Disadvantages of the Internet

Although Internet has many advantages but it also has some disadvantages. The main disadvantages of Internet are given below:

1. **Virus threat:** Virus is a program that interrupts the usual operation of the PCs. Computers linked to the Internet have high probability of virus attacks and as a result of this their hard disks can crash, giving the users a lot of trouble.

2. **Spamming:** Spamming denotes distribution of unsolicited e-mails in large numbers. They are meaningless and they unnecessarily block the whole system. These activities are treated as illegal.

3. **Security problems:** The valuable websites can be damaged by hackers and your valuable data may be deleted. Similarly, confidential data (like name, address and credit card number) may be accessed by unauthorized persons.

4. **Pornography:** Pornography is definitely harmful for the children. There are numerous pornographic sites available over the Internet and watching any of those can have very bad influence on the mental health of the children. These websites damage the character of new generation.

5. **Filtration of information:** When a keyword is given to a search engine for searching information of a specific topic, a large number of related links are displayed. In this case, it becomes difficult for the users to filter out the required information.

6. **Accuracy of information:** A lot of information about a particular topic is stored on the websites. Some information may be incorrect or not authentic. So, it becomes difficult for the Internet users to select the correct information. Sometimes they may be confused.

7. **Wastage of time:** A lot of time is wasted by Internet users to collect the information on the Internet. Some people waste a lot of time in chatting or to play games. At home, school and offices, most of the users use Internet without any positive purpose.

8. **English language problems:** Most of the information on the Internet is available in English language. So, those people who do not know English may find it difficult to avail the facility of Internet.

● Keywords and Connectors

First of all, let us define keyword and connectors:

Keyword: The subject word or words of the topic you wish to find in a web search.

Connectors: These are symbols and words you can use in conjunction with your keywords to qualify their relationships and meaning. For example AND, OR, NOT.

Searching Information

Portals are the websites that provide search engines, plus content and services such as e-mail, shopping etc. For example, Google, Lycos, AltaVista, Yahoo! etc. Figure 5.2 shows the Yahoo! portal.

Fig. 5.2: Yahoo! Portal

Useful Tip

Find Who is Running Website

Be careful about the information found on the web. To find out who is running a site, go to **wwwi nternicc om** and use the **Registry Wh ois** link to search the database of the registered domain names. Always remember that the information posted on the web does not mean that it is true.

When searching information, it is important to know about different types of searches. You can use keywords and connectors in a search on the Internet. Let us discuss about using keywords and Boolean operators or connectors in a search for information:

Keyword Search: At the top of each portal's home page is a blank space into which you can type a keyword to locate the websites that offer the information you need. For example, if you want to search information about "**famous Ethiopian Restaurants**", then **Ethiopian Restaurants** is the keyword. This way you do not have to plow through menu after menu of subject categories. The results of your keyword search will be displayed in a short summary of documents containing the keyword you typed (see Fig. 5.3).
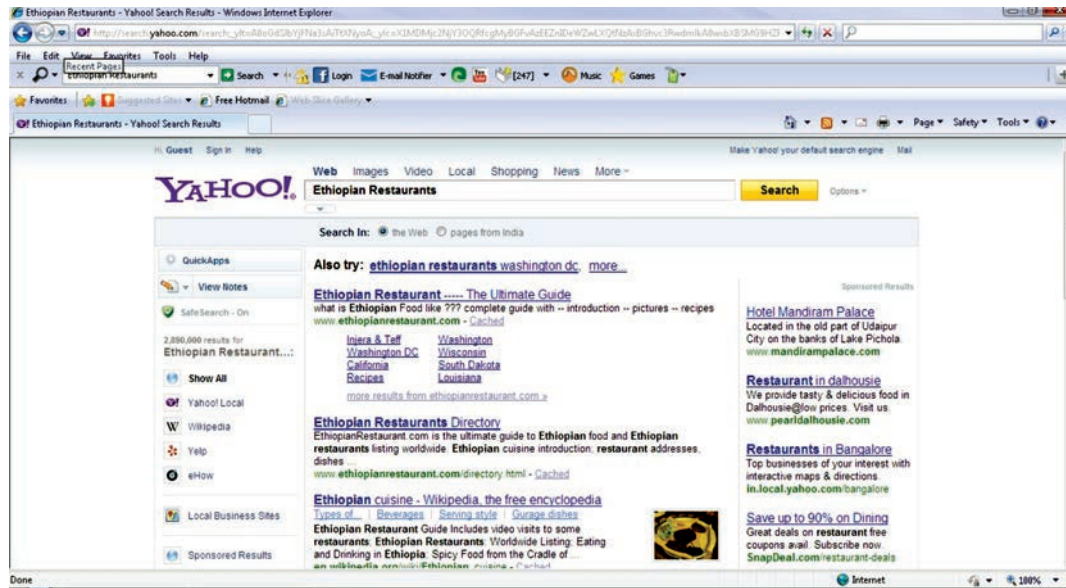
Fig. 5.3: Using keywords for searching information

Searching Using Connectors: Most search sites use symbols called Boolean operators or connector words (AND, OR, NOT) between search terms to make information searching more precise than is possible with just keyword searching.

AND is a connector that connects two or more search words and means that all of them must appear in the search results. Use AND to narrow your search. For example,

Ethiopian culture AND History

Both 'Ethiopian culture' and 'History' will be present in the search (see Fig. 5.4)
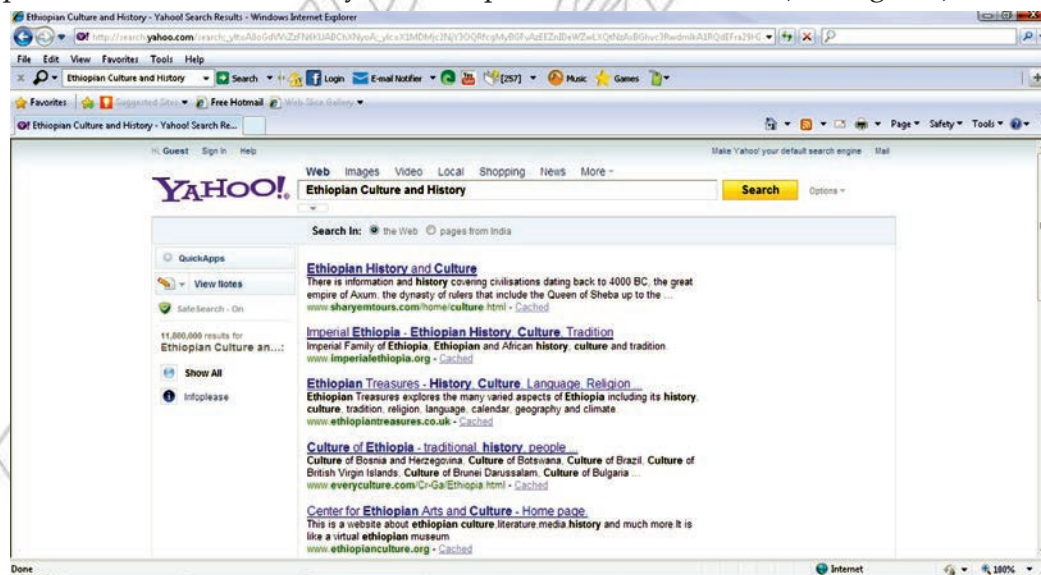

Fig. 5.4: Using connector AND for searching information

OR is a connector that connects two or more search words and indicates that any of the two may appear in the results. Use OR to expand your search. For example,

Ethiopian culture OR History

Any one of 'Ethiopian culture' or 'History' will be present in the information.

NOT is a Boolean connector. When inserted before a word, it excludes that word from the results. For example,

<div align="center">Ethiopian culture NOT History</div>

Search will contain 'Ethiopian culture' but not 'History'.

> Before you begin searching for information on the Internet, you should identify keywords related to your topic. Keywords differ from topic to topic in a search. Searching the Internet is a skill that comes with experience.

• Downloading and Uploading Files

Downloading Files

Downloading is transmitting data from a remote computer to a local computer. Downloading enables users to save files on their own computers for later use, which reduces the time spent online and the corresponding charges. Some downloading sites are:

(*i*) www.moviesanddownloads.com   (*ii*) www.brothersoft.com

(*iii*) www.filehippo.com   (*iv*) download.cnet.com

The Internet has a lot of information. You can download information (*e.g.*, pictures, video clips, sounds and software) from the Internet and install it on your computer. Some are copyrighted but many are free.

Let us download and install **TypingMaster Pro** a typing tutor from the following address:

<div align="center">http://www.TypingMaster.com/gettmProas p</div>

We are using *Internet Explorer* and *Windows XP.* If you are using a different browser such as Mozilla Firefox or a different version of Windows, your screens may look a little different, but the same basic steps should work.

1. Open Internet Explorer and go to the site **www.TypingMaster.com** to download a typing tutor.
2. Select *Products* and click *Start Download* button on this page. A download dialog box appears. Click *Start Download* option on this dialog box (see Fig. 5.5).
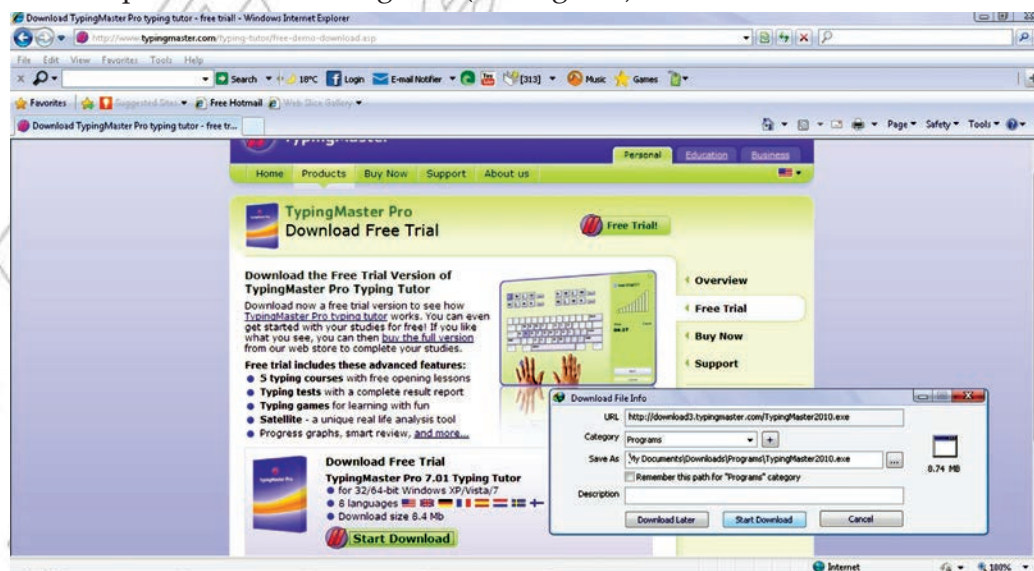

<div align="center">Fig. 5.5: Clicking Start Download option</div>

3. The downloading process starts and after some time the *Download complete* dialog box is displayed (see Fig. 5.6).
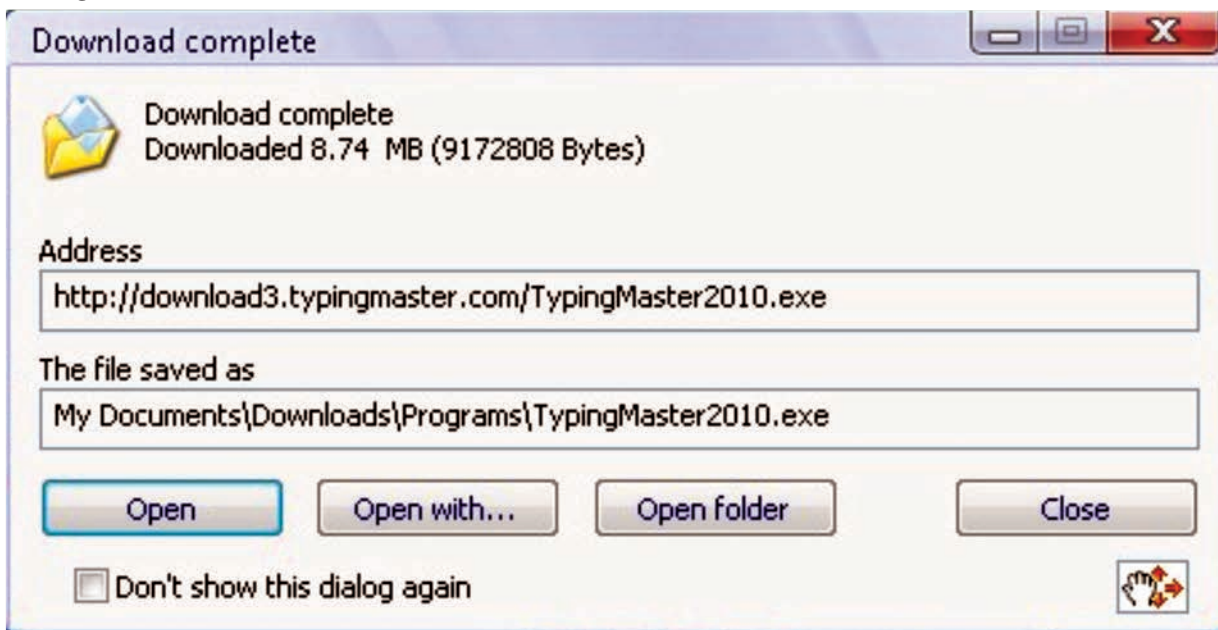

Fig. 5.6: Download complete dialog box

4. Click the *Open* button. Some other dialog boxes will appear during the installation process. Figure 5.7 shows the Setup Wizard.

Fig. 5.7: Setup Wizard

5. Click *Next* button and then follow the steps given in Setup Wizard. Now click *Install* button for installation. Click *Finish* button to exit setup.

notes

1. For using a downloaded graphic file, you can open the file in a graphics package, or paste it in a word document. The picture files on web pages are usually stored in either **jpg** or **gif** format since these are compressed, giving small files which are quick to load.

2. If the downloaded file is a ZIP file (extension **zip** to make quick download), you will need an unzipping program to read these ZIP files. Common unzipping programs are **WinZip** and **PKZIP** etc.

Uploading Files

Uploading is the transmission of data from a local computer to a remote computer, as from your PC to a website you are constructing. It allows users to easily exchange files over networks.

Internet offers you to access data from anywhere. You can save your files in some central location on the Internet that will allow you to access the files from anywhere.

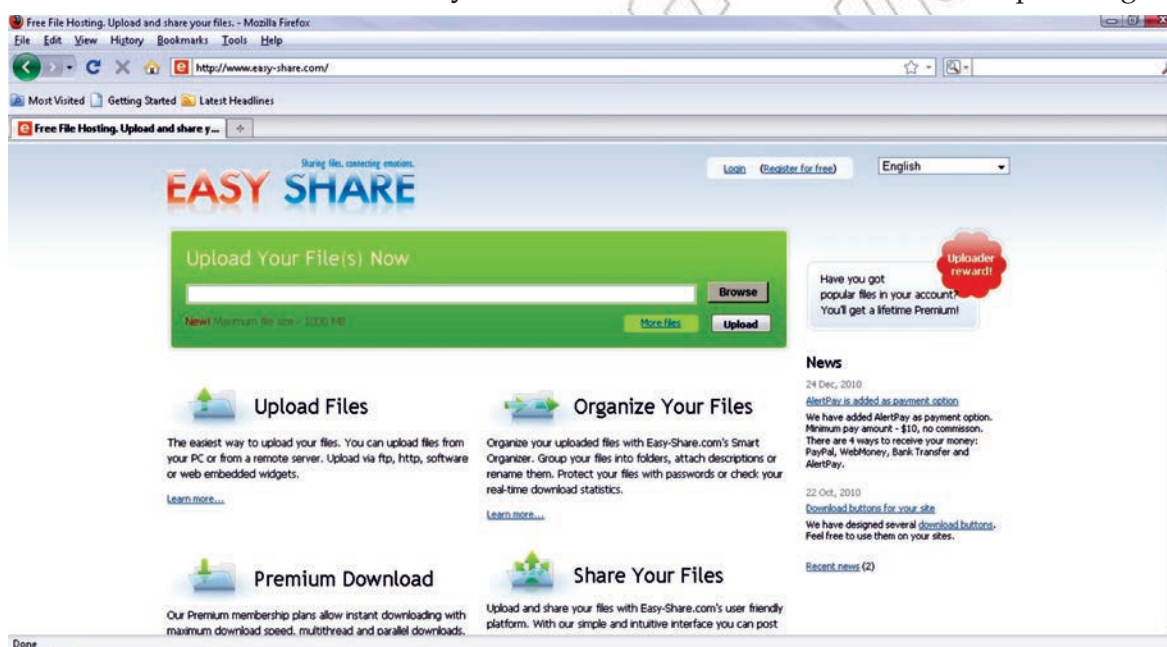Figure 5.8 shows the website **www.easy-share.com** which can be used for file uploading.

Fig. 5.8: Website www.easy-share.com for uploading files

There are many other websites available on the Internet for uploading files. You can use these websites to upload files from your computer. Some of these are:

(*i*) www.mirrorcreator.com   (*ii*) www.megaupload.com   (*iii*) www.uploading.com
(*iv*) www.dotnetnuke.com   (*v*) www.filefactory.com   (*vi*) www.mediafire.com

5.2 DEFINITION OF WWW

The **World Wide Web (WWW)** or **the Web** is an interconnected system of Internet computers (called servers) that support specifically formatted documents in multimedia form—sounds, photos, and video as well as text.

A broader definition of WWW comes from the organization that Web inventor Tim Berners-Lee helped found, the **World Wide Web Consortium (W3C)**:

"The World Wide Web is the universe of network-accessible information, an embodiment of human knowledge."

● Webpage

A **webpage** is a document on the **World Wide Web** that can include text, pictures, sound and video. Figure 5.9 shows a webpage.

Fig. 5.9: A Webpage

● Website

A computer with a domain name is called a website (site). The website of your school is probably on the campus. Figure 5.10 shows the website **wwwet hiopianairlinesc om**.

Fig. 5.10: Website www.ethiopianairlines.com

The first page you see at a website is like the title page of a book. This is the home page, or welcome page, which identifies the website and contains links to other pages at the site. Large websites have a large number of pages.

Types of Websites

Websites are of two types: *Static* and *dynamic* website.

Static Website

A static website is one that has web pages stored on the server in the format that is sent to a client web browser. It is primarily coded in Hypertext Markup Language (HTML).

Visitors are not able to control what information they receive via a static website, and must instead settle for whatever content the website owner has decided to offer at that time.

Dynamic Website

A dynamic website is one that changes or customizes itself frequently and automatically, based on certain criteria. Dynamic websites can have two types of dynamic activity: Code and Content. Dynamic code is invisible or behind the scenes and dynamic content is visible or fully displayed.

The main purpose of a dynamic website is automation. A dynamic website can operate more effectively, be built more efficiently and is easier to maintain, update and expand. It is much simpler to build a template and a database than to build hundreds or thousands of individual, static HTML web pages.

Differences between Webpage and Website

The main differences between a webpage and a website are given in Table 5.1.

Table 5.1: Differences between Webpage and Website

Webpage	*Website*
1. It is a document on the World Wide Web that can include text, pictures, sound and video.	1. It is a computer with a domain name.
2. It is a single page.	2. It is composed of a single/multiple pages.

Uses of the WWW

The Web is the most widely known part of the Internet. Some uses of the WWW are given below:

1. Web has the social value for all people. In other words, it enables human communication, commerce, and opportunities to share knowledge irrespective of their hardware, software, network infrastructure, native language, culture, geographical location, or physical or mental ability.

2. It can be accessed by a number of different kinds of devices, for example, mobile phones, smart phones, PDAs (Personal Digital Assistants), interactive television systems, voice response systems, kiosks and even certain domestic appliances.

3. It is used as a communications tool and allows anyone from anywhere to share information, for example, blogs, wikis and social networking.

4. It is a giant repository of linked data as well as a giant set of services that exchange messages, which one to use often depends on the application.

5. It has transformed the way we communicate with each other. In doing so, it has also modified the nature of our social relationships. People now "meet on the Web" and carry out commercial and personal relationships, in some cases without ever meeting in person.

• Web Server

Web server is a particular computer on the Internet that hosts websites, serving pages to viewers upon request. This service is referred to as web hosting. Every web server has a unique address so that other computers connected to the Internet know where to find it on the vast network.

Web hosts rent out space on their web servers to people or businesses to set-up their own websites. The web server allocates a unique website address to each website it hosts.

• Web Technology

Web technology is the technology related to World Wide Web. The format used on the web is called Hypertext Markup Language (HTML). It is not, however, a programming language.

Let us discuss some of the web technologies that relate to the interface between web servers and their clients.

HTML (Hypertext Markup Language)

It is a set of special instructions (called "tags" or "markups") that are used to specify document structure, formatting, and links to other multimedia documents.

In HTML, every command is surrounded by < and > And in most commands, you need to tell the web browser when to end this command. You do this by putting a slash (/) in front of the ending command. Since HTML is not case sensitive, <title> is the same as <TITLE> which is same as <TITLe> Next you want to decide what you want to put up on your page. Text, links, graphics, and text fields are just a few ideas.

HTTP (Hypertext Transfer Protocol)

It is the network protocol used to deliver virtually all files and other data (collectively called resources) on the World Wide Web, whether they are HTML files, image files, query results, or anything else. Usually, HTTP takes place through TCP/IP sockets.

A browser is an HTTP client because it sends requests to an HTTP server (Web server), which then sends responses back to the client.

URL

A URL (Uniform Resource Locator) is the unique address for a file that is accessible on the Internet. A common way to get to a Website is to enter the URL of its home page file in your Web browser's address line. The URL contains the name of the *protocol* to be used to access the file resource, a *domain name* that identifies a specific computer on the Internet, and a *pathname*, a hierarchical description that specifies the location of a file in that computer. For example, consider the following URL of a website about Gambella National Park in Ethiopia.

Protocol	Domain name (Web server name)	Directory name or path	File (document) name and extension

http://realethiopiac om/nature/national-parks/gambella-national-parkh tml

Here, **http//** is Hypertext Transfer Protocol

realethiopiac om/ is the domain name

nature/national-parks/ is the path

gambella-national-parkh tml is the particular page or document

Locating Information Contents

You can locate information contents on a Web page by interacting with hyperlinks, radio buttons (little circles located in front of various options), and fill-in text boxes. Some Web pages have Search boxes which can be useful as well (see Fig. 5.11).

Fig. 5.11: Hyperlinks on a Webpage

Hyperlinks enable you to navigate the Web by clicking words, icons, pictures or other graphics on a Web page. When a hyperlink is pointed, the mouse pointer changes to a pointing hand. At the same time, the Web browser status bar shows you the URL associated with the hyperlink to which you are pointing.

Text hyperlinks are often underlined or displayed in a different color than the rest of the text on a Web page. Graphics-based hyperlinks can be icons, logos, buttons, and photographs etc.

note Clicking a hyperlink is just one way to access a specific URL. If the URL of a page to be visited is already known, you can type it into the Address bar and press the Enter key.

5.3 PLANNING AND DEVELOPING WEB PAGES

Planning is most important for creating a Website, whether your site will have one page or many. Collect the information you want to include on your web pages, such as text, images etc. Divide the information you gathered into sections. Each section should be a separate web page.

If you want to start a business online or just have your own personal website, you will need to design a web page, determine any hyperlinks, and hire the space on a web server or buy one of your own. Professional web page designers can produce a website for you, or you can do it yourself using a menu-driven program included with your web browser or a web-design software package such as:

 (i) **M crosoft FrontPage**   (**wwwm icrosoftc om/frontpage**)

 (ii) **M romedia Dreamweaver**   (**wwwm acromediac om**)

 (iii) **M romedia Flash**   (**wwwb rothersoftc om**)

After you have designed your web page, you can put it on your ISP's server. Figure 5.12 shows a web designing website.

Fig. 5.12: Web designing website (www.wysiwygwebbuilder.com)

● Web Design Guides (e.g., color, text, image etc.)

Web pages generally contain text, images, videos and music etc. For displaying a page correctly, the web browser needs to know about the structure of the webpage, *e.g.,* which part is a heading, which part is a list, which part is an image etc. To give the browser this information, we have to write the web pages in a language, called Hypertext Markup Language (HTML), the browser will understand. The browser translates the HTML into a readable document which is displayed on the web.

HTML tells the browser what data to display on the webpage, but it does not tell it what that data should look like, *e.g.,* what color the text and background should be, what font to use, how big the text should be etc. If we keep the HTML file as it is, the browser simply uses its default styles. But we can specify how the webpage should look using another language called Cascading Style Sheets (CSS).

One must take time to educate himself/herself before he/she begins web design. Otherwise it may result into wastage of time. If the website can engage the users through an interesting and compelling design, half the work is done. Be careful when selecting the colors, text and images.

Color

Select your colors very carefully, as colors affect people's mood. Bright colors, such as yellow and orange, cause you to become more cheerful or happy. Colors such as blue and purple have a calming effect. Dark colors, such as brown and black, have a depressing effect.

A good rule of thumb is to use colors based on the type of effect you are trying to achieve. However, it is always best for your text areas to have a white background with black text.

Text

Text is one of the most important parts of a web page. The way in which you display the text on your web page will have a great impact on its success. It can make your page look very professional or very unprofessional.

When placing text within your web page, always be consistent with your fonts *i.e.,* do not use different fonts throughout your pages. The standard fonts used on the **Internet** are **Arial** and **Verdana** as they are

the easiest to read on a computer screen. The standard text size is 2. Headlines, which require a larger *font size*, are a bit different. A popular headline font used is **Georgia**, as it displays nicely in a slightly larger font size.

Busy backgrounds make the text difficult to read and draw the attention away from the text. In addition, always be consistent with your background theme on each page of your site.

Image

An image might be the focal point of a web page. Your eye is drawn to an image because it is an image, not because of the position it has in the layout. So, look at the other elements on the page to make small changes (*e.g.,* position and spacing etc.) to the elements and margins around the image to create an interesting design. Also the captions should go with each image separately.

Align your images. Balance the graphics and text on a page. When you are considering your layout, remember that images are a major part of the design, not just afterthoughts.

• Purpose of a Website

A website can be designed for business, sharing information or personal interest. The designer should consider a number of things before actually building a website. The first step should be to decide about the purpose of the website. *i.e.,* **"Why am I building this website?"** Clearly defining the purpose of a website before its creation will ensure that the website is optimized to achieve the required purpose.

The purpose of a website influences its style, the website technologies required, the hosting costs and the budget required for it. So, the purpose of a website must be clearly identified. Some of the purposes of designing websites are:

1. **Making money:** A website built to make money will require things like a customer's payment for the purchased items and security features to protect his/her information. For a good impression of business the website must give a professional appearance.

2. **Sharing information:** A website may not require as many features for sharing information as is meant for business. The designer has to consider if he/she is going to allow visitors to add comments or additional resources to the website. This would require additional features from his/her website hosting.

3. **For family and friends:** Websites for family and friends would have a less formal feel. For this type of website the designer has to consider if his/her family and friends will be permitted to automatically add to its contents. Again, this would require additional features from his/her website hosting.

note   Whether the purpose is to reach local customers or the entire world, a properly designed website will serve any organization well. By determining the purpose, the content and layout of the website can be properly developed.

• Designing a Web Architecture

A well designed website will be surely helpful to the website visitors. Suppose you have got a lot of stuff that you want to put on the web, and you wish people to look at it. Best option is that you arrange it on a single webpage. But if there is a lot of information, it will take too long to load and the website users would not be able to find what they want easily. All the information may not be relevant to the users and it will require a lot of searching to filter it out.

For designing web architecture we need to:

(*i*) split the stuff up, and

(*ii*) provide ways for users to find their way through it to get what they want.

Some basic patterns (or models) to design web architecture are:

1. **All-in-One:** This is the simplest possible model (see Fig. 5.13). All the information is placed on a single Home page.

Fig. 5.13: All-in-one model

2. **Flat:** In a flat pattern (or *monocline grouping*) all the web pages are arranged as peers and everyone is accessible from every other one (see Fig. 5.14). This is very common for simple websites, where there are a few standard topics, such as: Home, About Us, Products, Services, Contact Us.
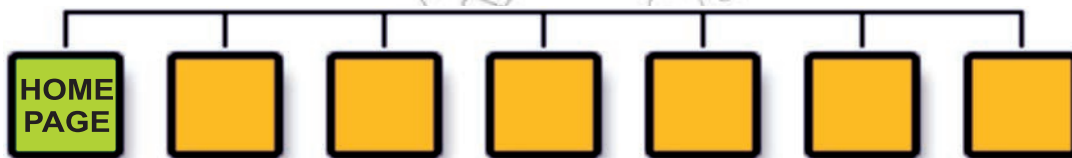
Fig. 5.14: Flat pattern

3. **Index** An index structure is like the flat pattern, with an additional list of contents (see Fig. 5.15).
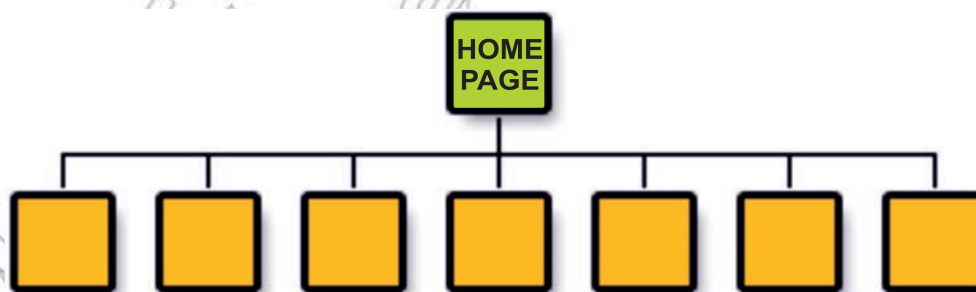

Fig. 5.15: Index structure

An index is often organized in some way, to make stuff easier to find. For example, a list of files in a web directory (the index page), or could be an index of student's names ordered by last name.

Indexes work well when there is a medium amount of data, and also when that data can be ordered in a way that makes it easier to scan to what you want.

4. **Strict Hierarchy:** A strict hierarchy describes a system where the user can only access a lower-level webpage via its parent (see Fig. 5.16).
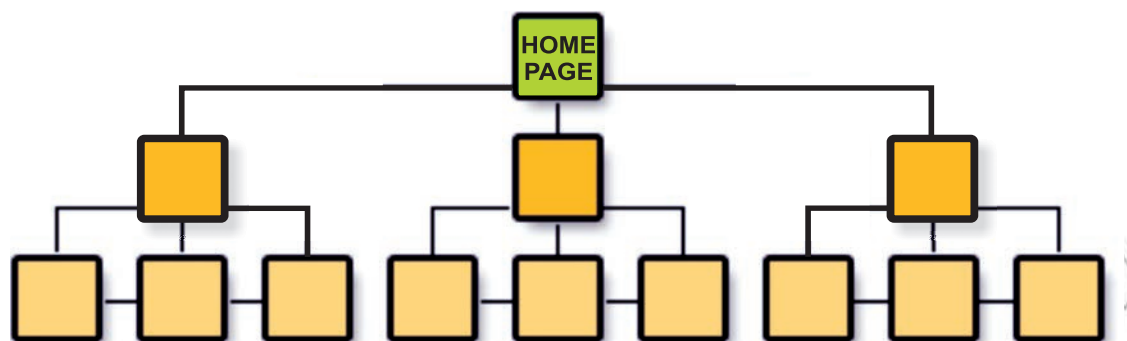
Fig 5.16: Strict hierarchy

This pattern is applicable to a real-world model where there is a strict parent-child relationship between objects, such as arranging web pages for an organization's offices by their country. For example, let the head office of a company be in Ethiopia and a sub office cannot be in more than one country.

Although this is a strictly hierarchical real-world model, it does not mean that a strict hierarchy is the best way to represent it online, for example, a person can serve in more than one office.

• Identify Contents for the Website

Content is the 'stuff' that makes up a website. This could be words (text), pictures, images or sounds. Web content means content in a textual nature. Content therefore in this sense is the 'information' a website provides.

To serve the intended purpose, the site must contain complete and relevant information. Ensuring appropriate content will satisfy users and prevent losing potential business. Website content can be broken into two categories: *general* and *detailed*.

1. **General Content:** This provides a brief overview of the website, organization, products and services, and other items. Brief descriptive information helps users in determining that what they seek is available, directs them to the appropriate specific data, peaks their interests, informs them of other available items at the site, and gives them a feel for the content and layout of the site.

2. **Detailed Content:** This provides users with the specific detailed information on the website, organization, products and services, and other items. The layout of the website must ensure easy access to the detailed information, and specific information they seek.

A website is a valuable tool for businesses and other organizations when composed of the right material (content). So, we conclude that a website having appropriate contents can perform an outstanding job.

note A website can provide useful but irrelevant information like: links to other websites, public service notices, or information on Web and Internet items that may interest many expected website visitors.

ACTIVITY 5.1

DESIGNING AND IMPLEMENTING A SIMPLE WEB PAGE

Students in groups will design and implement a simple Web page and present it in the class.

Perform the following steps to plan the Web page:

1. Open a text editor (preferably NotePad).

2. Write the basic format, or skeleton, of a HTML page.

3. Save it as a HTML file.

4. View it in a web browser.

Now, perform the following steps to actually create a Web page:

1. Open a new file by selecting the *New* command under *File* in NotePad (see Fig. 5.17).

2. Save this file as first.html file. This indicates that the file is an HTML file that will be used on the Web.

3. Begin the page with the <html> tag.

4. The following tag is <head>.

5. Use <title> tag to give title of the page. The title should be related to the information provided by the page. The complete tag looks like this:

    <title>Planning A Trip To Ethiopian National Parks</title>

6. Close the head tag with </head>.

7. Use the body tag <body> to start the body of the page. You can use attributes such as bgcolor. The tag used here is

    <body bgcolor=purple>

    This sets the background color of the page.

8. The title tag alone puts a title in the title bar, so to add a title within the page let us use Heading 1, aligned in the center of the page and white in color:

    <h1 align=center>A Trip to Ethiopian National Parks </h1>

9. An image adds life to a Web page. To insert an image use the image tag. We want to surround the image with paragraph tags so there would be space between the text and the image and want to align the image to the center of page. The tag looks like this:

    <p align=center><img src="Gambela.jpeg"></p>

    You can give the name of another picture here, instead of Gambela.jpeg (if you want) from your computer.

10. The page contents should be readable. So, pay attention to the color and size of text to be used.

    Attractions

    After this tag, add the text you want. Lastly, do not forget to put the tag.

11. Let us use <ul> tag for an unordered list to show details, also select blue, and arial/geneva font.

    <p>

    The font tag is not closed here because we want to continue using this font in the following text.

12. The <ul> tag starts the list and to add bullets use the <li> tag. This list item tag does not need to be closed. After completing the list end it with

    <p>

         Gambela National Park

         Bale National Park

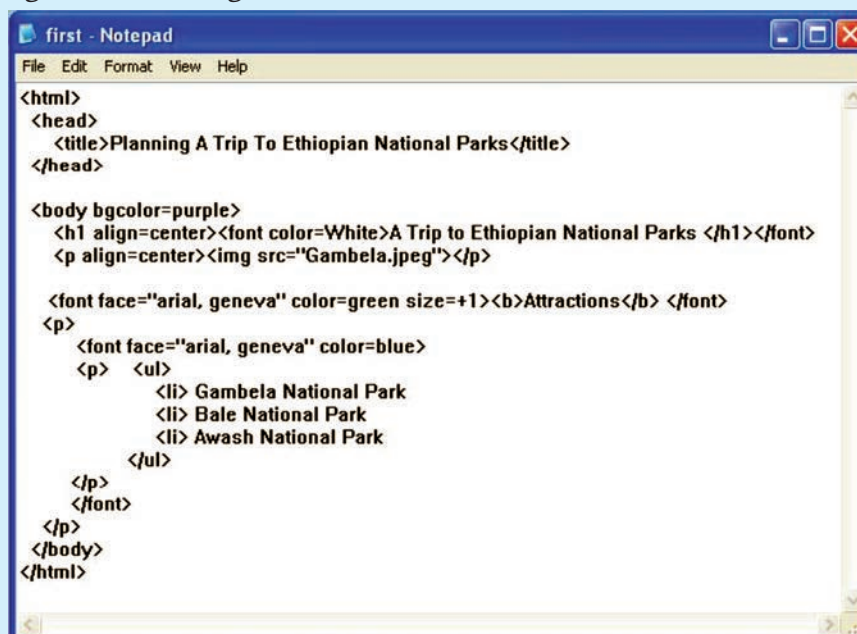   Awash National Park

13. End the font tag from Step 11 like this: . End the paragraph from Step 12 like this:

    </p>

14. End the paragraph from Step 11 like this: </p>
15. End the body like this: </body>.
16. Lastly, end the html tag like this: </html>. Don't forget to save your file.

The HTML coding is shown in Fig. 5.17.

Fig. 5.17: HTML coding for a Web page

Now open the web browser and select the file first.html using following sequence of steps:

FILE → OPEN → BROWSE → C:\My Documents\FIRST.HTML

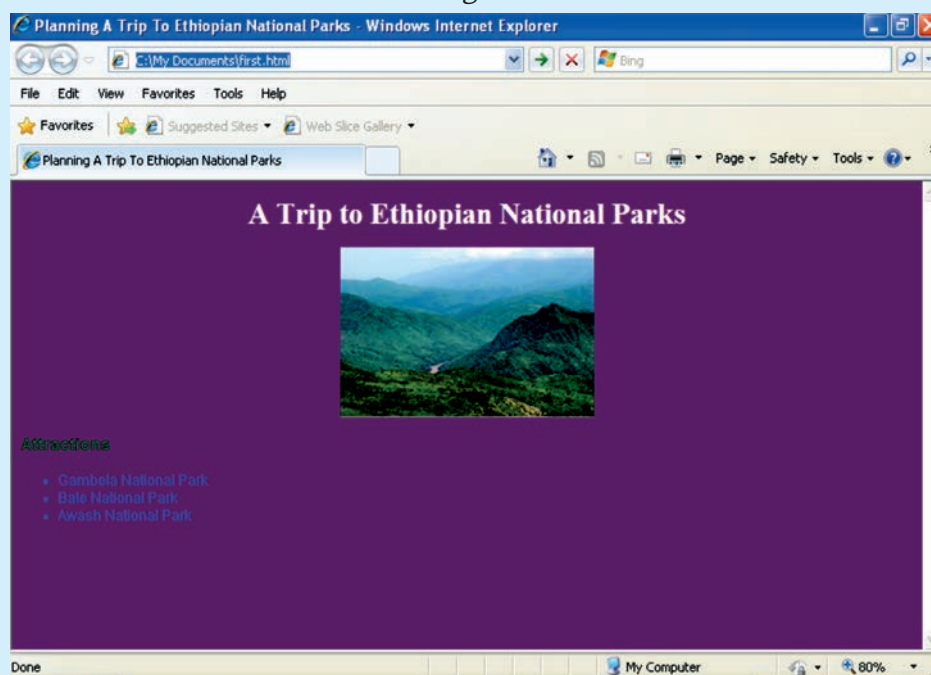The page will look in the Web browser as shown in Fig. 5.18.

Fig. 5.18: Web page after implementation

KEY CONCEPTS

➢ Some advantages of the Internet are: Sharing and collecting Information, E-commerce, News, Advertisement, Communication, Formation of communities, Entertainment, Online Learning, Services etc.

➢ *Downloading* is transmitting data from a remote computer to a local computer.

➢ The *World Wide Web* (*WWW*) or *the Web* is an interconnected system of Internet computers (called servers) that support specifically formatted documents in multimedia form—sounds, photos, and video as well as text.

➢ A computer with a domain name is called a website (site). Websites are of two types: *Static* and *dynamic* website.

➢ The purpose of a website influences the style, the website technologies required, the hosting costs and the budget required for it.

REVIEW QUESTIONS

Fill in the Blanks

1. Computers linked to the .... have high probability of virus attacks and as a result of this their hard disks can crash, giving the users a lot of trouble.

2. .... is the subject word or words of the topic you wish to find in a web search.

3. .... is the transmission of data from a local computer to a remote computer, as from your PC to a website you are constructing.

4. A .... is a document on the *World Wide Web* that can include text, pictures, sound and video.

State Whether True or False

1. People cannot get latest news of the world on the Internet.

2. Most search sites use symbols called Boolean operators (OR, AND, NOT) between search terms to make searching more precise than is possible with just keyword searching.

3. *Web server* is a particular computer on the Internet that hosts websites, serving pages to viewers upon request.

4. Website content can be broken into two categories: *general* and *detailed*.

Multiple Choice Questions

1. Which of the following is/are advantage(s) of the Internet?

   (*a*) Sharing and collecting information   (*b*) E-commerce

   (*c*) Entertainment   (*d*) All of these

2. Which of the following is not a Boolean operator?

   (*a*) AND   (*b*) OR

   (*c*) GOT   (*d*) NOT

3. .... is transmitting data from a remote computer to a local computer.

   (*a*) Downloading   (*b*) Uploading

   (*c*) Home Page   (*d*) Dynamic Website

4. A unique address of the website is referred to as
   (a) University Related Locker
   (b) Uniform Resource Locator
   (c) Union Resource Locality
   (d) File Transfer Protocol

Match the Following

Column A		Column B
1. HTTP	(a)	Security problems
2. Disadvantage of Internet	(b)	Static and dynamic
3. Types of websites	(c)	It has the social value for all people
4. Use of WWW	(d)	Hypertext Transfer Protocol

Answer the Following

1. What is Internet? List its advantages and disadvantages.
2. What is the use of keywords and connectors in a search? Explain with examples.
3. Define the following terms:
   (i) Webpage   (ii) Website   (iii) Web Server   (iv) Web Technology
4. List some uses of the WWW.
5. How will you design a simple Webpage and implement it?

Suggested Activities

1. Explain the brief history of the Internet.
2. Describe with examples, how to select a keyword.
3. Explain how pages belong to a person, organization or government. One day they might have their own web page!
4. Demonstrate locating information contents.
5. Explain and demonstrate how to incorporate the features of a design into a webpage.
6. Describe how the Internet can be searched to find information and comment on how this information could be used by people.

Field Trip

Visit some reputed educational institutions and business houses to prepare a list on the following topic and present it in your ICT class.

How has the Internet affected our lives?