

# UNIT 4

# EXPLOITING THE INTERNET

## UNIT OUTCOME

### Students will be able to:

- 🔍 find specific information on the worldwide web in the form of text, images or sound required to solve a problem;
- 🔍 develop an awareness of web developments in making information available in different formats.


## 4.1 ADVANCED SEARCHING

You have already learnt the basics of web and web searching in Grades 9 and 10. When you use a keyword or a connector to search for a topic, you are using a piece of software known as a search engine. Internet search engines are extremely useful tools—but the results you get back are often extremely numerous and sometimes irrelevant.

**Boolean Searching:** *Boolean searching* is built on a method of symbolic logic developed by *George Boole*, a 19th century English mathematician. Most search engines support Boolean searches. Boolean search techniques can be used to carry out effective searches, cutting out many unrelated documents.

For web searching you must be specific. Remember that nearly all search engines have an advanced search option. Do not be afraid to make use of these as they tend to list the various options you have for making your search more specific. For example, the search engines *Google* and *Yahoo* provide advanced web searching methods.

To open *Google Advanced Search form*, click on the *Advanced search* hyperlink on the right side of the *Google Search box* at *www.google.com*.

Now, you can use the *Google Advanced Search form* for advanced searching (see Fig. 4.1). Type the desired search topic and press  button, your advanced search will appear on the screen.

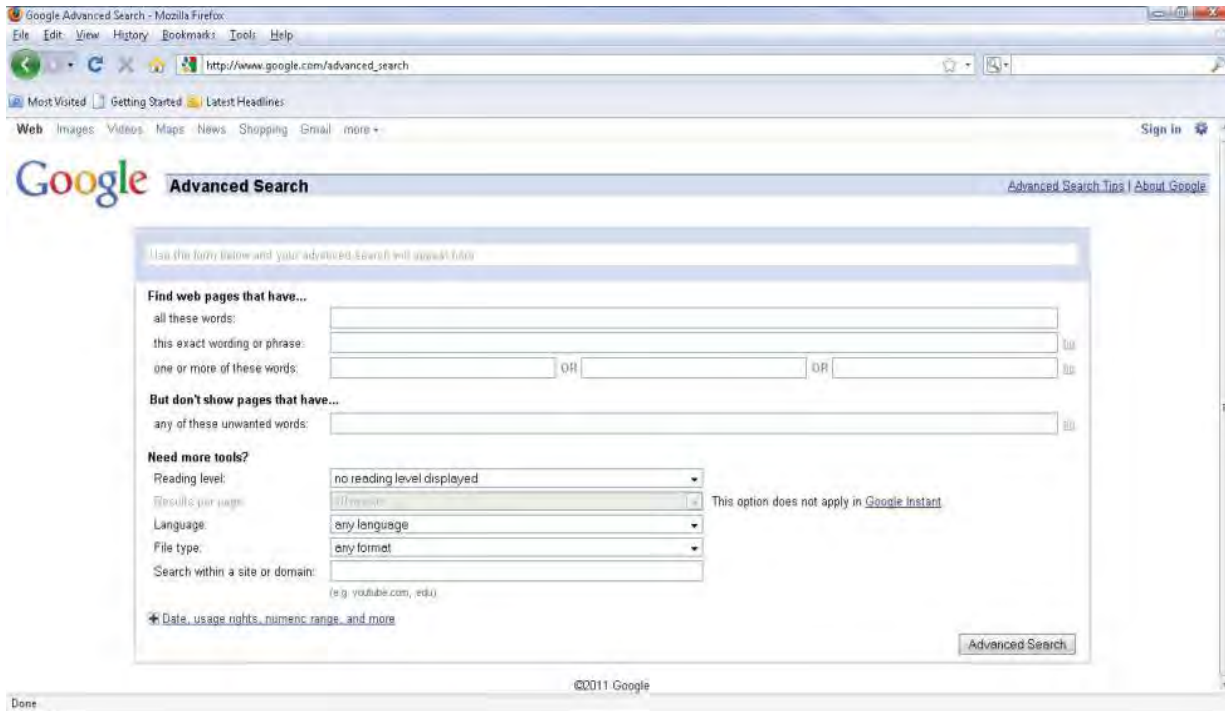


Fig. 4.1: Google Advanced Search form

To open *Yahoo Advanced Web Search page* go to *www.yahoo.com*, click the down arrow in *More* option above the *Yahoo Web Search box*, then from the menu that appears click the *Advanced Search* hyperlink.

Now, you can use the options on the *Yahoo Advanced Web Search page* to create a very specific search (see Fig. 4.2). Just fill in the fields you need for your current search and click the **Yahoo! Search** button, your advanced search will appear on the screen.

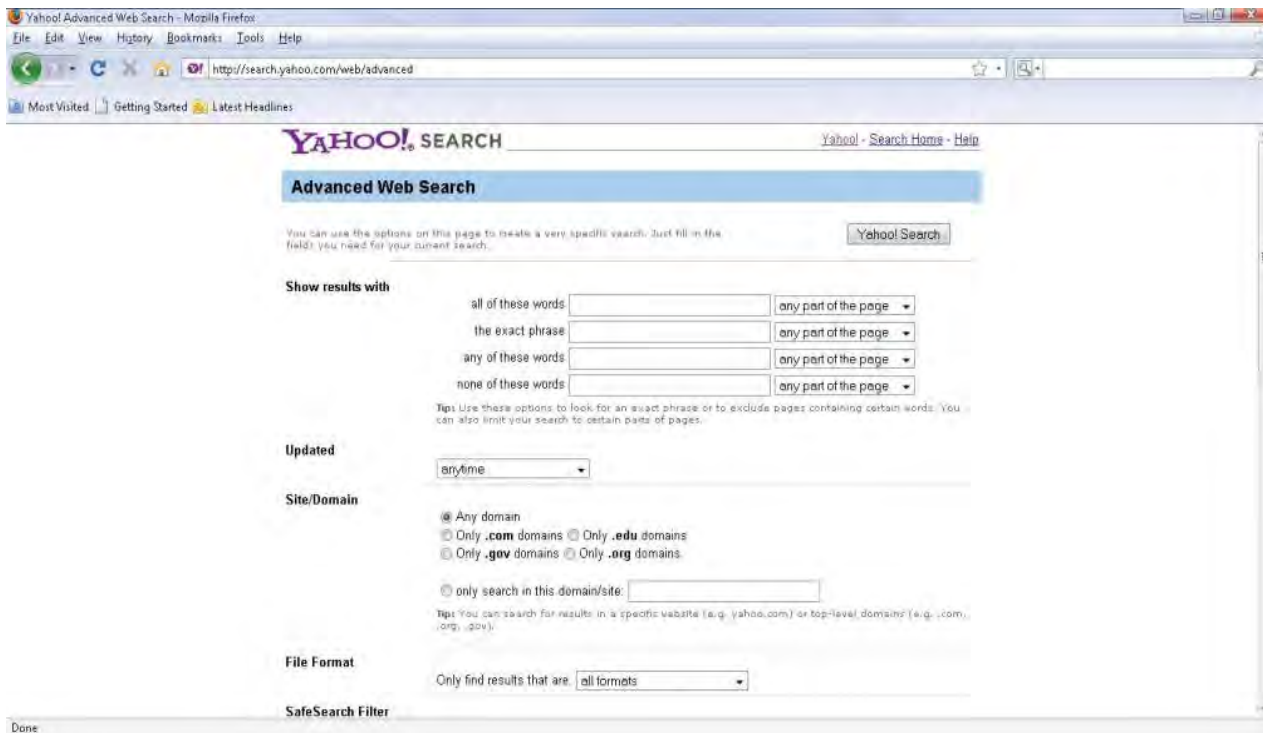


Fig. 4.2: Yahoo Advanced Web Search page

## ● Exact Match

If you want to search for exact match then use phrases with quotation marks rather than separate words. The search returns documents containing the exact phrase only. For example, typing “Ethiopian music”, though the *Advanced Search* screen will nearly always give a specific box for phrase searching (see Fig 4.3).

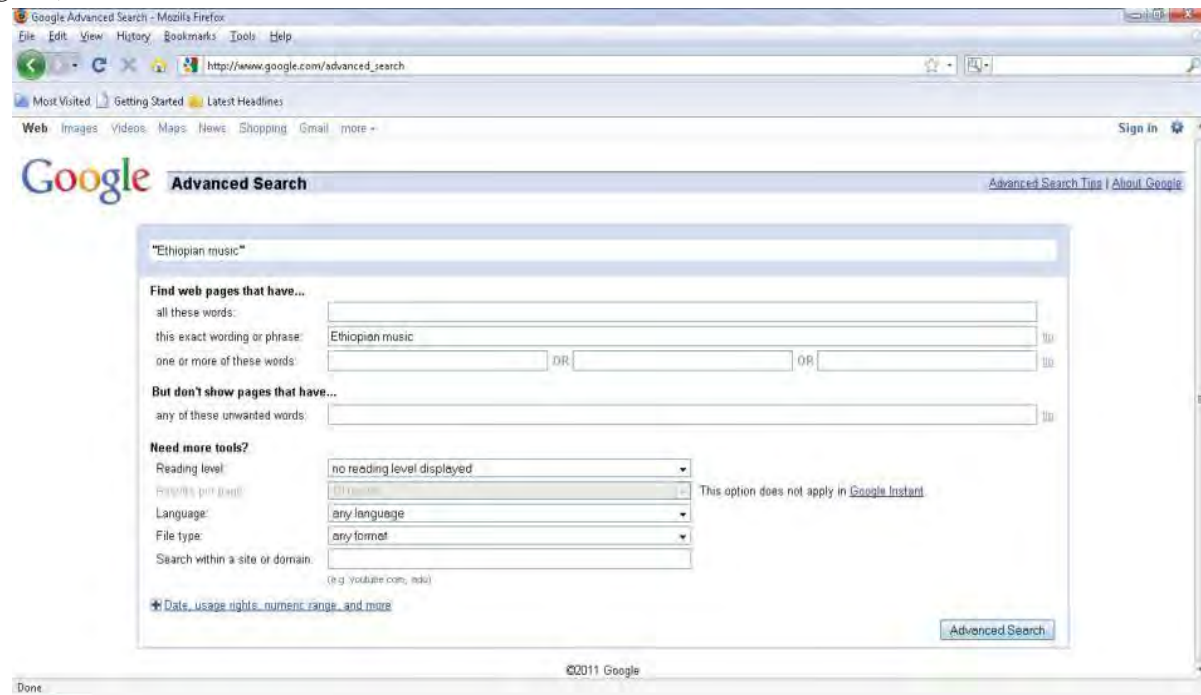


Fig. 4.3: Using Google Advanced Search for exact match

Google always uses the order and the fact that the words are together as a very strong signal and will stray (drift) from it only for a good reason, so quotes are usually unnecessary. By insisting on phrase search you might be missing good results accidentally. For example, a search for ["Alexander Bell"] (with quotes) will miss the pages that refer to Alexander G. Bell.

Let us use the Boolean operators OR and AND for advanced searching of the web:

## ● “x” or “y”

If you want to broaden your search to find documents that contain either of the keywords, use the OR operator between words. This is very useful when searching for terms that have synonyms. For example, “Ethiopian” OR “music”.

## ● “x” and “y”

If you want a document that contains all of your keywords, use the capitalized word AND between keywords. The search engine will only find documents that have both words. For example, “Ethiopian” AND “music”.

## ● “x” but “y”

When you use BUT between two keywords, the stress is given for searching the first keyword without ignoring the second keyword. For example, “Ethiopian” BUT “music”.

Type *Ethiopian BUT music* in the Advanced Web Search page of Yahoo to get the search results (see Fig. 4.4).



Fig. 4.4: Showing the search results after using BUT on Yahoo Advanced Search page

### ● Language Limitations

You have used the “advanced search” pages of Google and Yahoo search engines. Here, a searcher can define the search results in many ways beyond the simpler keyword search found on the front page search at these search engines. For example, Google and Yahoo advanced webpage search lets searchers select a combination of different search limitations, such as language limitations.

Figure 4.5 shows the Languages option to limit the searching using Yahoo search engine.



Fig. 4.5: Yahoo language limitations on web searching



Searching the Internet effectively is a skill that comes with experience.

## 4.2 USING WIKIS, BLOGS AND PODCASTS

In this sub-unit, we will learn about using wikis, blogs and podcasts.

### ● Wikis

Wikis are Webpages that can be viewed and modified by anyone with a Web browser and Internet access.

A wiki is a website that allows the creation and editing of any number of interlinked webpages via a web browser using a simplified markup language or a WYSIWYG text editor. Wikis are typically powered by wiki software and are often used to create collaborative works. For example, community websites, corporate intranets, knowledge management systems, and note services. The software can also be used for personal note taking.

Some examples of wikis are:

- (i) Wikipedia
- (ii) Wiki about Wikis
- (iii) Classroom Wikis
- (iv) Teachers First Guide to Making a Successful Wiki

### Advantages

Some advantages of using a wiki are:

- (i) Anyone can edit.
- (ii) Easy to use and learn.
- (iii) Wikis are instantaneous so there is no need to wait for a publisher to create a new edition or update information.
- (iv) People located in different parts of the world can work on the same document.
- (v) The wiki software keeps track of every edit made and it is a simple process to revert back to a previous version of an article.
- (vi) Widens access to the power of web publishing to non-technical users.
- (vii) The wiki has no predetermined structure—consequently it is a flexible tool which can be used for a wide range of applications.
- (viii) There is a wide range of open source software wiki has to choose from so licensing costs should not be a barrier to installing an institutional wiki.

### Disadvantages

Some disadvantages of using a wiki are:

- (i) It can get messy, especially in big projects where a large number of people contribute.
- (ii) It requires some maintenance otherwise it will become unstable.
- (iii) The content management system is not good.

## ● Blogs

Many users of the Internet have fun keeping journals, or web logs—called *blogs* for short, accessible to users. Blogs are often updated daily and reflect the personality and views of a blogger. Blog sites—for example, blogging network (*www.bloggingnetwork.com*) and Pyra Labs (*www.blogger.com*)—provide information about how you can create and maintain your own web log for a small fee. Figure 4.6 shows the Google blog.



Fig. 4.6: Google blog

Some examples of blogs related to Ethiopia are:

- (i) *www.bottomlysandethiopia.blogspot.com*      (ii) *journeytonumberthree.blogspot.com*  
 (iii) *theeyesofmyeyesareopened.blogspot.com*      (iv) *www.colefamilyadventure.blogspot.com*

## Advantages

Some advantages of blogs are:

- (i) Blog sites can be developed with the help of simple procedures.
- (ii) A blog post goes public, in other words, it can be accessed and read by almost everyone who has an access to Internet.
- (iii) The usage of blogs are very convenient, hence people tend to use them more frequently.
- (iv) Students tend to improve their writing skills as blog articles should be reasonably good enough and free from grammatical mistakes.
- (v) Students get into the habit of writing, which helps them in all their future endeavours.
- (vi) Blog sites used as online class forums enable students to interact with various personalities to participate in a discussion far more effectively than they can otherwise.
- (vii) Individuals learn to express their opinions and exchange their views on topics of common interest, which not only keeps them updated but also makes them effective contributors of new ideas.

- (viii) Individuals get a chance to read other blogs, which indirectly helps them to improve upon their skill of writing.
- (ix) Instructors of online classes get an opportunity to know what students feel about the class and its presentation quality and help to find ways to improve upon drawbacks if any.
- (x) It is a place for students and individuals to share their articles and opinions with people outside their community.

### Disadvantages

Some disadvantages of blogs are:

- (i) It involves a lot of time to update and post an entry on the blog site.
- (ii) Regular writing may give rise to slangs and sloppy way of writing, spoiling the quality of proper usage of language.
- (iii) One major drawback is that not all information can be shared on blog sites. Hence, it may not be useful for everyone.
- (iv) Individuals and students may have reluctance in getting used to the technological advancements.
- (v) Blogging cannot be thrust upon students who are hardly interested in reading and replying to the post.
- (vi) Blogging on day-to-day issues is different from writing on a subject. Hence it may not be a practical idea to force students to do it.
- (vii) There is no confidentiality as it is a public forum.
- (viii) It is not suited for issues requiring immediate solution.
- (ix) Blogs create a sense of students competing with each other just for posting entries. The fear of students getting diverted away from the subject is an issue of concern.



In a search engine, type the word **blog** or the words **web log** and the name and a topic of your interest to read the bloggers' views about it.

### ● Podcasts

Podcasts are online broadcasts that you can download to portable devices. It is a piece of audio (usually an MP3 file) that can be automatically delivered to your computer, for you to listen to at your convenience. It might be a professional radio programme, a film review, a language lesson, a daily recipe. Whatever your interests, you are likely to find a podcast to fit the bill.

Podcasting lets you automatically receive the latest episode of your chosen programme as soon as it is available. With our current range of audio podcasts, you can take your favourite radio programmes with you on the move and listen wherever and whenever you like.

You can “subscribe” to receive a podcast, rather like you might subscribe to a magazine and get it delivered each week. For example, all of the BBC’s podcasts are free, and you can stop receiving the files at any time (see Fig. 4.7). If you would rather not subscribe, you can download episodes of a podcast series individually.



Fig. 4.7: BBC podcasts

In order to subscribe for a podcast, you need an Internet connection and a piece of podcast software which is usually available free of charge. Once you have installed this software, it will check the podcast for new episodes of your chosen podcast series and automatically download new episodes for you.

You can then listen to podcast episodes on your computer, or transfer them to a portable device, such as an MP3 player.

### Advantages

Some advantages of podcasts are:

- (i) Available anytime/anywhere for students.
- (ii) Easy to create, distribute, and download—no professional equipment is required.
- (iii) New podcasts are auto-downloaded.
- (iv) Can restrict podcasts to students enrolled in the course.
- (v) Power of audio over text—students can listen and learn while walking, riding, waiting in line, etc.

### Disadvantages

Some disadvantages of podcasts are:

- (i) Entire file is downloaded to user's computer/device.
- (ii) Need sufficient bandwidth to download the podcasts in a timely fashion.
- (iii) Limited usefulness for hearing impaired people.
- (iv) No interactivity—audience cannot participate, etc.
- (v) Intellectual property issues.





## ACTIVITY 4.1

### VISITING A WIKI, E.G., WIKIPEDIA

In small groups, the students will visit a wiki, *e.g.*, Wikipedia.

To visit Wikipedia, perform the following steps:

1. Connect to the Internet.
2. Type *www.wikipedia.org* in the URL bar of the browser and press the *Enter* key.
3. The Wikipedia home page appears. Type a topic you want to learn in the search box (see Fig. 4.8)



Fig. 4.8: Wikipedia home page

Now you can search and use the contents available on Wikipedia for learning the topic of your choice (see Fig. 4.9).



Fig. 4.9: Using Wikipedia contents



Wikipedia is the free encyclopedia that anyone can edit.

### 4.3 SOCIAL NETWORKING

A *case study* is a detailed, in-depth study about a person, small group, or situation. Let us analyze the case study given below:

## CASE STUDY

### SOCIAL NETWORKING—A NEED OF SOCIAL LIFE

Nigatu moved from *Gonder* to a new locality in *Addis Ababa* three months back. After spending whole day in the office when he used to come back home he felt lonely and started missing his old pals and family. Like all other human beings he also needed a social life so that after office he could relax and interact with buddies.

One day one of his colleagues suggested him to go to a club in his area where he can find people with varied interests. On his colleague's advice Nigatu went to the club. There he found a group of people playing snooker, another group just gossiping and chatting and yet another group involved in various other activities. Nigatu has always been a good player of chess so he headed towards that group and became a part of it. And now he is very happy and does not feel lonely. Also he has found the contact number of one of his school time friend whom one of the club members knows, so now he is in touch with him also.



Fig. 4.10: Nigatu sitting alone after moving to a new place



Fig. 4.11: Nigatu enjoying social life with friends

A common activity just brings two people together but afterwards they share all their thoughts, happiness and sorrows. In today's life people are so occupied that they hardly get time to go to a club but they also need a social circle and since most of the time they are online so nothing like having a friends group available on computer only. And social networking sites on Internet provide a platform for this. For example, Facebook, Orkut, etc.

Social networking is the grouping of individuals or organizations into specific groups. Although social networking is possible in person, especially in the workplace, universities, and high schools, it is most popular online. This means that although you are in Ethiopia, you could develop an online friendship with someone in India or USA.

Initially social networking was an initiative to communicate amongst known and unknown users working over network worldwide. It has now turned into a much matured area to explore and exploit experiences and expertises of individuals sitting miles and miles away from each other. It gives a common platform to find people of varied interests and social backgrounds. A number of people utilize the services of social networking sites as a common place to develop group projects on various subjects. It also helps to find out alumni and old friends and also allows you to contact and start fresh conversations. It creates an extended network by connecting friends of friends and further enabling the empowerment of knowledge and resources. The social networking websites are known as social sites. Some of the common social networking sites are Facebook, Twitter, Netlog, Hi5, Orkut, etc.

Figure 4.12 shows people connected on Facebook (Courtesy: [www.NewsDire.com](http://www.NewsDire.com)).



Fig. 4.12: People connected on Facebook

As mentioned earlier, social networking often involves grouping specific individuals or organizations together. While there are a number of social networking websites that focus on particular interests, there are others that do not. The websites without a main focus are often referred to as “traditional” social networking websites and usually have open memberships. This means that anyone can become a member, no matter what his hobbies, beliefs, or views are. However, once you are inside this online community, you can begin to create your own network of friends and eliminate members that do not share common interests or goals.

Although the idea of online social networking sounds very useful but there is certain element of risk and danger involved in it. Through networking you not only communicate with your known ones but also to strangers and revealing your personal details to strangers can sometimes be very dangerous. Sometimes a stranger may pretend to be someone which he is not in reality. But then this type of risk is involved in real world too. Everyday, for the business purpose or otherwise, one has to meet and interact with many unknown people. In such situations we use our wisdom to calculate how much of ourselves to reveal before him. Similarly, while interacting online, one should use his inner voice to react accordingly. The other type of risk involved in social networking is hacking. Even if you are interacting with known people, your information and personal details can be hacked by hackers. So one has to be cautious and supply only minimum required details.

There are some common threats pertaining to these sites which are shared along with the precautions below:

- (i) **Threat:** Unknown users on Internet can misuse your personal information disclosed by you on your account.

**Precaution:** Do not reveal personal information to strangers. Have restricted and brief conversations only.

- (ii) **Threat:** A lot of abusive and unwanted content may be present on such social networking sites.

**Precaution:** All the service providers of such sites are very proactive and careful about such things. So as an ethical user you should report it to the service provider immediately.\*

(iii) **Threat:** Fake identity of someone known to you or someone famous.

**Precaution:** As soon as you come across a user with a fake identity on such sites, you should immediately report about the same to service provider.\*



Precautions marked by \* are taken very seriously and acted upon by service providers.

Once you are well informed and comfortable with your findings, you can begin your search from hundreds of networking communities to join. This can easily be done by performing a standard Internet search. Your search will likely return a number of results, including MySpace, FriendWise, FriendFinder, Yahoo! 360, Facebook, Orkut, and Classmates.

## 4.4 PRODUCING A WEBPAGE USING SIMPLE WEB DESIGN SOFTWARE

Creating webpages takes a little practice, but once you are familiar to it, you will have a lot of fun. The first step is to decide what you want to publish on your webpage. Maybe you want to publish an original story you have written, share reviews of books you have read, or create an electronic magazine related to one of your hobbies. A web design software is required to create a webpage.

MS-Publisher 2007 is an excellent authoring tool to use when you want to quickly create, publish, and manage simple webpage.

**To create a webpage, perform the following steps:**

1. Start Publisher.
2. On the Menu bar click *File* and then click *New*.
3. In the *Publication Types* list, click *Web Sites*. Select any web design template from the *Newer Designs*. Here we select *Bounce* (see Fig. 4.13).

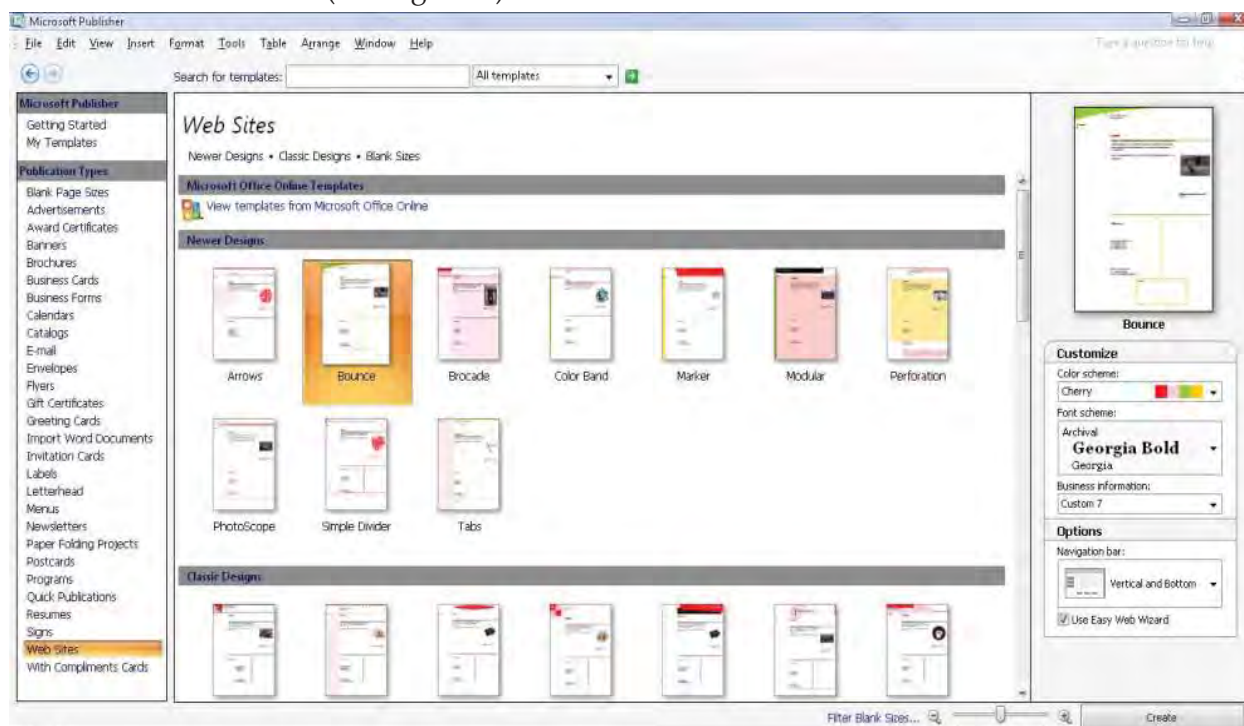


Fig. 4.13: Selecting web design template

4. Click *Create*.
5. The *Easy Web Site Builder* dialog box appears (see Fig. 4.14).

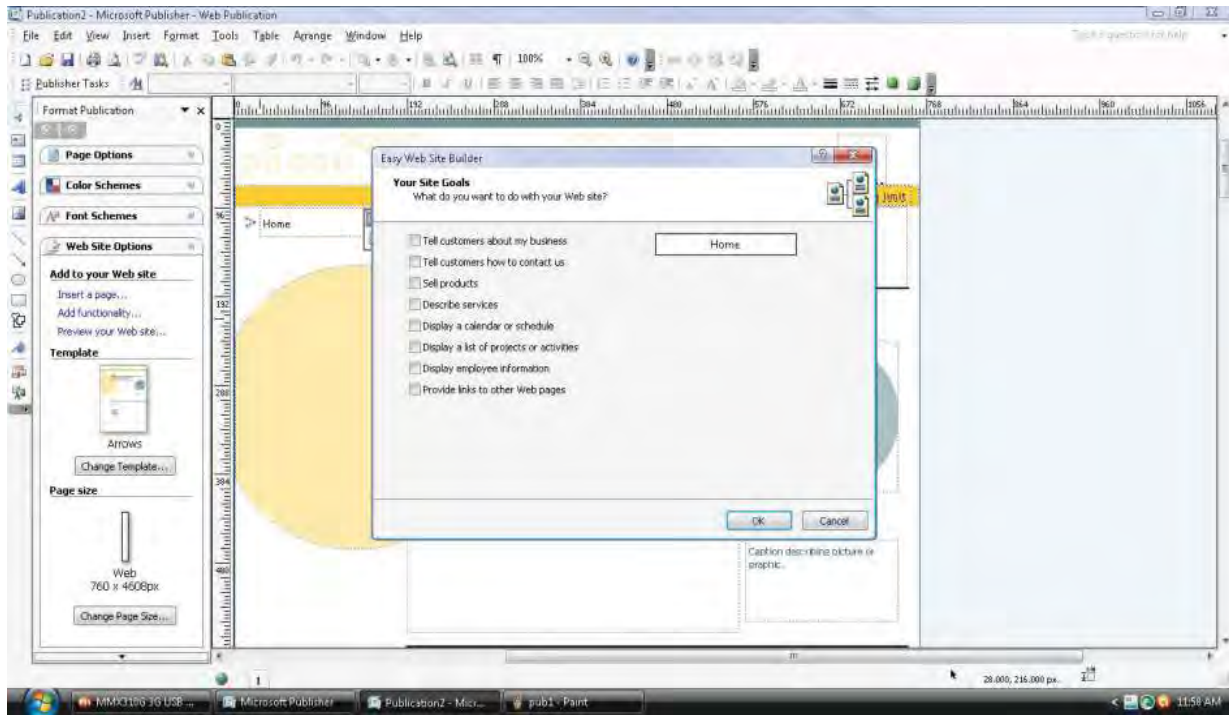


Fig. 4.14: *Easy Web Site Builder* dialog box

6. Click *OK*.
7. Add content to your publication, and make any changes that you want (see Fig. 4.15).

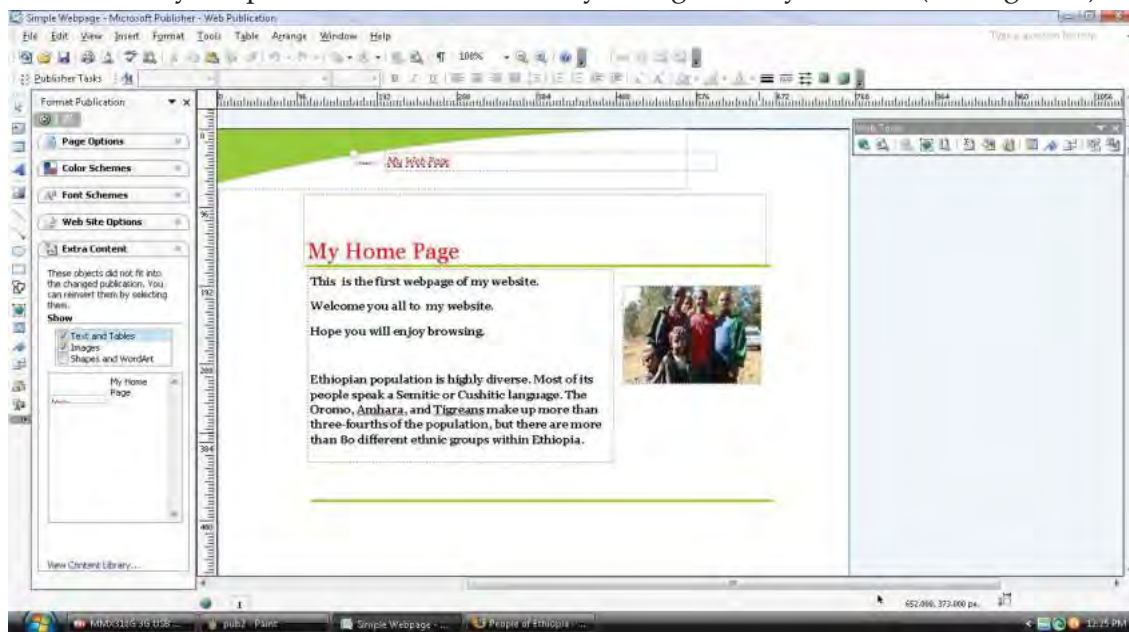


Fig. 4.15: Adding content to publication



Avoid placing objects on master pages in your Web publication. Objects that are placed on Publisher 2007 master pages do not display correctly when they are viewed in some Web browsers.



8. Click *Webpage Preview* in Web Tools (see Fig. 4.16) or on the *File* menu, click *Webpage Preview*.

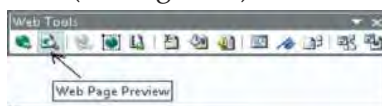


Fig. 4.16: Clicking *Webpage Preview*

9. The webpage is shown in your default browser (see Fig. 4.17)

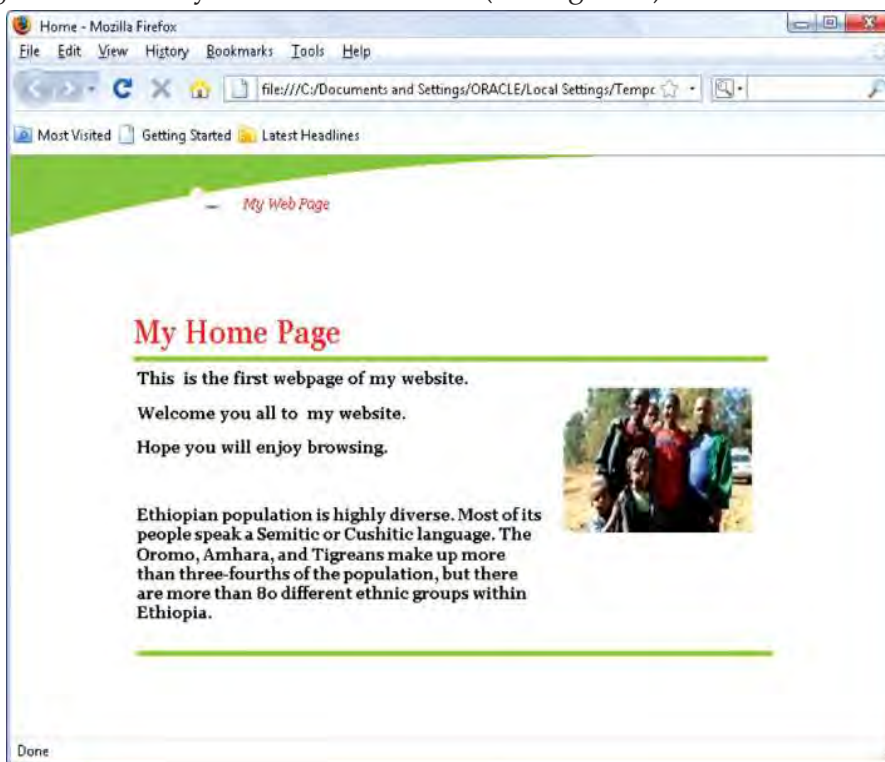


Fig. 4.17: Previewing the designed webpage in a web browser

10. Close the browser.

## 4.5

### PUBLISHING TO A WEB SERVER (OR FREE WEB SERVER OR A WIKIPEDIA WEB SERVER)

Now you have produced a webpage using simple web design software (Publisher 2007). For publishing it on the web, we require a web server. Some web servers which offer free web hosting or publishing on the web are:

- |                                      |                                  |
|--------------------------------------|----------------------------------|
| (i) <i>crystalserve.com</i>          | (ii) <i>monkeyserve.com</i>      |
| (iii) <i>www.instantfreesite.com</i> | (iv) <i>webhostingdeluxe.com</i> |
| (v) <i>www.redwebhost.com</i>        | (vi) <i>www.0catch.com</i>       |

Here, we select *www.0catch.com* to implement the webpage.

To publish the webpage, perform the following steps:

1. Connect to the Internet using a browser. Here, we are using the Internet Explorer browser.
2. Type *www.0catch.com* in the URL. The home page of the website appears (see Fig. 4.18).



Fig. 4.18: Home page of website www.0catch.com

3. Click *SIGN UP* button. Choose your site name and click *Sign Up Now* (see Fig. 4.19). Here, we select *senyaali*.



Fig. 4.19: Selecting Signup Options

4. Select your plan. Here, we select *Free* under Plan #1 (see Fig. 4.20)



Fig. 4.20: Choosing Web Plan

5. Click *Continue With Signup*
6. On the next screen click on *No Thanks, a FREE site will be fine*.
7. Fill your Account Information and click *Create Your Account* (see Fig. 4.21)

Fig. 4.21: Filling Account Information

8. Enter your E-mail address to get special offers and click on *Subscribe* (if you want) otherwise *No Thanks, Skip Offer* (see Fig. 4.22).

Fig. 4.22: Choosing Special Offers

9. The website creation message will appear. It shows the URL of your website (see Fig. 4.23). Here, the website address is *http://senyaali.0catch.com* or *http://www.senyaali.0catch.com*





Fig. 4.23: Website conformation message

10. Click on the URL. The following page appears (see Fig. 4.24). Click on *I have my web page on my hard drive and want to upload but don't know how.*



Fig. 4.24: Uploading the Website

11. Click *File Uploader* in *Create/Build Your Site* (see Fig. 4.25).

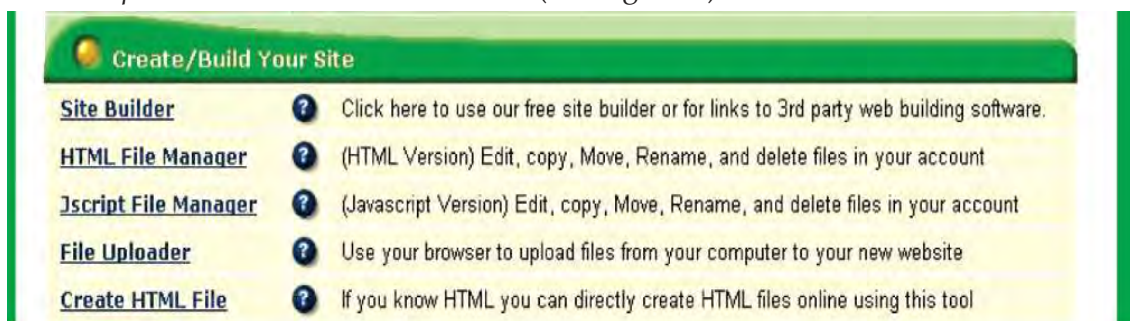


Fig. 4.25: Clicking File Uploader

12. Click on *CLICK HERE- To use our older browser based one file at a time upload tool* (see Fig. 4.26).

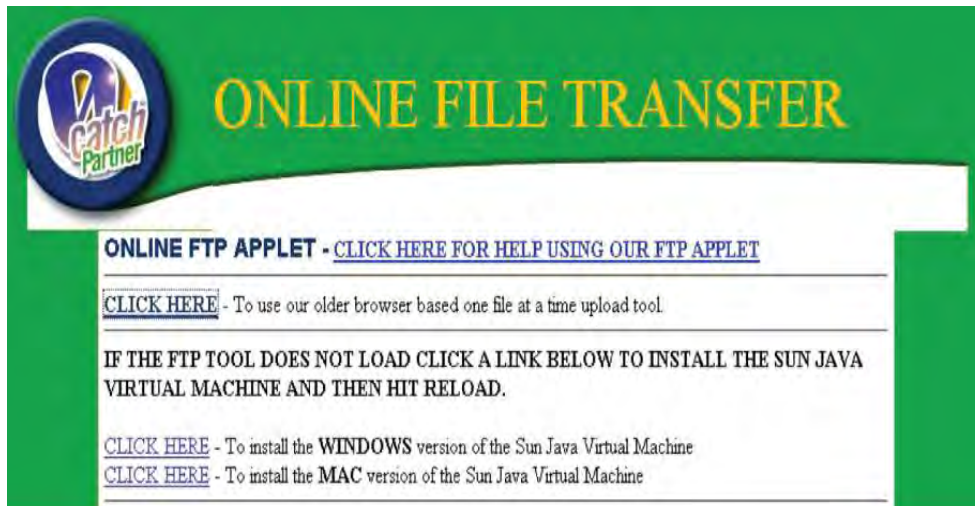


Fig. 4.26: Selecting upload tool

13. Now click on *Browse* and select your webpage file and click *Upload Files* button (see Fig. 4.27).



Fig. 4.27: Uploading Webpage File

14. The upload result message appears (see Fig. 4.28).



Fig. 4.28: Upload message result

Now, the webpage has been successfully uploaded. Close the uploaded site.

15. In the URL bar of browser, type the address of your Webpage (here, *senyaali.0catch.com*) and press Enter key to see your webpage! (see Fig. 4.29).



Fig. 4.29: Published webpage on the web



## KEY CONCEPTS

- Nearly all search engines have an advanced search option.
- Wikis are webpages that can be viewed and modified by anyone with a web browser and Internet access.
- Many users of the Internet have fun keeping journals, or web logs—called blogs for short—accessible to users.
- Podcasts are online broadcasts that can be downloaded to portable devices.
- Social networking is the grouping of individuals or organizations into specific groups.
- We can produce a webpage using simple web design software and publish it to a web server.



## REVIEW QUESTIONS

### Fill in the Blanks

1. Nearly all ..... have an advanced search option.
2. .... are webpages that can be viewed and modified by anyone with a web browser and Internet access.
3. .... are online broadcasts that you can download to portable devices.
4. Some of the social networking sites are ....., ..... and .....

### State Whether True or False

1. Boolean searching is not built on a method of symbolic logic developed by George Boole.
2. Wikis are webpages that can be viewed and modified by anyone with a web browser and Internet access.
3. Blogs are often updated daily and reflect the personality and views of the blogger.
4. MS-Publisher 2007 cannot be used to quickly create, publish, and manage simple webpages.



### Multiple Choice Questions

- Which of the following search engine(s) provide advanced web searching methods?  
 (a) Google                      (b) Yahoo                      (c) Both (a) and (b)                      (d) None of these
- Which of the following is/are the advantage(s) of using a Wiki?  
 (a) Anyone can edit                      (b) Easy to use and learn  
 (c) Wikis are instantaneous                      (d) All of these
- ..... is/are the grouping of individuals or organizations into specific groups.  
 (a) Social Networking                      (b) Standalone Computer  
 (c) Ideal Networking                      (d) All of these
- Which of the following is/are required to create and publish a webpage?  
 (a) Web design software                      (b) Web server  
 (c) Both (a) and (b)                      (d) None of these

### Match the Following

Column A	Column B
1. Language Limitations	(a) Social networking site
2. Blogs	(b) MP3 player
3. Listen to Podcast episode	(c) Fun keeping journals
4. FriendFinder	(d) Allowed search limitations in advanced search

### Answer the Following

- How will you use the Boolean searching techniques? Report on improvements.
- Explain the functions of wikis, blogs and podcasts. List the advantages and disadvantages of their use.
- What is meant by “social networking”? Explain.
- Give the steps to design a simple webpage using simple web design software.

### Suggested Activities

- Explore connection between Newman Hollerith and the millennium bug.
- Set up a blog about life in your community.
- View and listen to a podcast *e.g.*, BBC.
- Join a social network, *e.g.*, Facebook, Hi5, etc.
- Implement the webpage by selecting free web server or a wikipedia web server.

### Field Trip

Organize a field trip to various Business Houses, Universities or Ethiopian Telecommunication Corporation (ETC) stations to find out and report on:  
 Wikis, Blogs, Podcasts and Social Networking.