

STEP-BY-STEP APPROACH TO BASIC INTERNET AND EMAIL OPERATIONS FOR BEGINNERS

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ABSTRACT

The way Internet has evolved over the years makes it difficult for us to believe that it was created to allow data transfer and communications in case of a nuclear attack on US or a big disaster. Internet has come a long way from a restricted-use network created for such a special purpose. People today communicate with friends, family and business contacts, participate in community activities developed around their interest areas, shop, bank, study, entertain themselves, and research using the Internet. It is therefore becoming essential for people to learn how to use Internet and email.

1. INTRODUCTION

Before we begin learning how to use the Internet and email, we must get familiar with some of the fundamental concepts. Internet is a huge network of computers. People connect their computers to local networks, which in turn are connected to regional networks and these regional networks are connected to a central structure called backbone. Also Internet is a worldwide interconnection of different types of computers from thousands of networks around the world. In other words, the Internet consists of many computer networks from different countries all connected together. These computers are connected through telephone lines and satellite links, all having ability to communicate with a common language called TCP/IP (***Transmission Control Protocol/Internet Protocol***).

Internet has made the world a global village. It provides us with the unprecedented amount of information. On the internet, interaction with other computers uses a client-server mode. Once you are accessing a site all you are doing is logging on a computer somewhere in the world and that computer is known as the server because it houses the information or services, while your computer is the client because it is accessing or receiving information from the server.

1.1 OBJECTIVES

- ✓ Ability to conduct basic operations required to use Internet and email independently
- ✓ Familiarity with the fundamental concepts to enable learning to use Internet and email
- ✓ Good understanding of commands and steps required to access the web
- ✓ Good understanding of commands and steps required to use emails on Yahoo

2 LITERATURE REVIEW

2.1 INTERNET

The Internet is a global system of interconnected computer networks that use the standard Internet protocol suite (often called TCP/IP, although not all applications use TCP) to serve billions of users worldwide. It is a network of networks that consists of millions of private, public, academic, business, and government networks, of local to global scope, that are linked by a broad array of electronic, wireless and optical networking technologies. The Internet carries an extensive range of information resources and services, such as the inter-linked hypertext documents of the World Wide Web (WWW) and the infrastructure to support email.

Most traditional communications media including telephone, music, film, and television are reshaped or redefined by the Internet, giving birth to new services such as Voice over Internet Protocol (VoIP) and Internet Protocol Television (IPTV). Newspaper, book and other print publishing are adapting to Web site technology, or are reshaped into blogging and web feeds. The Internet has enabled and accelerated new forms of human interactions through instant messaging, Internet forums, and social networking. Online shopping has boomed both for major retail outlets and small artisans and traders. Business-to-business and financial services on the Internet affect supply chains across entire industries.

The origins of the Internet reach back to research of the 1960s, commissioned by the United States government in collaboration with private commercial interests to build robust, fault-tolerant, and distributed computer networks. The funding of a new U.S. backbone by the National Science Foundation in the 1980s, as well as private funding for other commercial backbones, led to worldwide participation in the development of new networking technologies, and the merger of many networks. The commercialization of what was by the 1990s an international network resulted in its popularization and incorporation into virtually every aspect of modern human life. As of 2011 more than 2.2 billion people—nearly a third of Earth's population—used the services of the Internet. (Mockapetris, P, 1983)

The Internet has no centralized governance in either technological implementation or policies for access and usage; each constituent network sets its own standards. Only the overreaching definitions of the two principal name spaces in the Internet, the Internet Protocol address space and the Domain Name System, are directed by a maintainer organization, the Internet Corporation for Assigned Names and Numbers (ICANN). The technical underpinning and standardization of the core protocols (IPv4 and IPv6) is an activity of the Internet Engineering Task Force (IETF), a non-profit organization of loosely affiliated international participants that anyone may associate with by contributing technical expertise.

2.2 WORLD WIDE WEB

Many people use the terms Internet and World Wide Web, or just the Web, interchangeably, but the two terms are not synonymous. The World Wide Web is a global set of documents, images and other resources, logically interrelated by hyperlinks and referenced with Uniform Resource Identifiers (URIs). URIs symbolically identifies services, servers, and other databases, and the documents and resources that they can provide. Hypertext Transfer Protocol (HTTP) is the main access protocol of the World Wide Web, but it is only one of the hundreds of communication protocols used on the Internet. Web services also use HTTP to allow software systems to communicate in order to share and

exchange business logic and data.

World Wide Web browser software, such as Microsoft's Internet Explorer, Mozilla Firefox, Opera, Apple's Safari, and Google Chrome, lets users navigate from one web page to another via hyperlinks embedded in the documents. These documents may also contain any combination of computer data, including graphics, sounds, text, video, multimedia and interactive content that runs while the user is interacting with the page. Client-side software can include animations, games, office applications and scientific demonstrations. Through keyword-driven Internet research using search engines like Yahoo! and Google, users worldwide have easy, instant access to a vast and diverse amount of online information. Compared to printed media, books, encyclopedias and traditional libraries, the World Wide Web has enabled the decentralization of information on a large scale.

The Web has also enabled individuals and organizations to publish ideas and information to a potentially large audience online at greatly reduced expense and time delay. Publishing a web page, a blog, or building a website involves little initial cost and many cost-free services are available. Publishing and maintaining large, professional web sites with attractive, diverse and up-to-date information is still a difficult and expensive proposition, however. Many individuals and some companies and groups use web logs or blogs, which are largely used as easily updatable online diaries. Some commercial organizations encourage staff to communicate advice in their areas of specialization in the hope that visitors will be impressed by the expert knowledge and free information, and be attracted to the corporation as a result. One example of this practice is Microsoft, whose product developers publish their personal blogs in order to pique the public's interest in their work. Collections of personal web pages published by large service providers remain popular, and have become increasingly sophisticated. Whereas operations such as Angelfire and GeoCities have existed since the early days of the Web, newer offerings from, for example, Facebook and Twitter currently have large followings. These operations often brand themselves as social network services rather than simply as web page hosts.

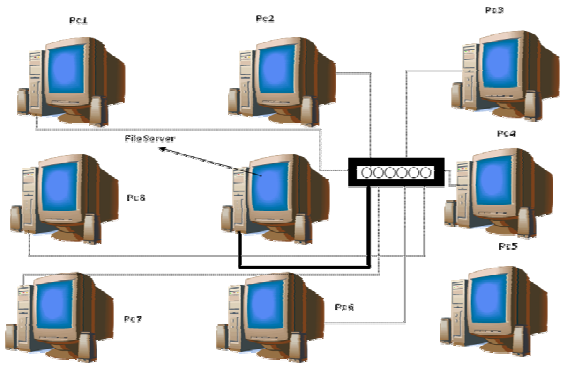
Advertising on popular web pages can be lucrative, and e-commerce or the sale of products and services directly via the Web continues to grow.
When the Web began in the 1990s, a typical web page was stored in completed form on a web server, formatted in HTML, ready to be sent to a user's browser in response to a request. Over time, the process of creating and serving web pages has become more automated and more dynamic. Websites are often created using content management or wiki software with, initially, very little content. Contributors to these systems, who may be paid staff, members of a club or other organization or members of the public, fill underlying databases with content using editing pages designed for that purpose, while casual visitors view and read this content in its final HTML form. There may or may not be editorial, approval and security systems built into the process of taking newly entered content and making it available to the target visitors.

2.3 HOW DID THE INTERNET BEGIN?

In 1969, the U. S. Department of Defense established the ARPANET (Advanced Research Projects Agency Network) to aid the military research going on in some universities by sharing information. This later grew to encompass all of America. More networks emerged that accommodated non-military research like the NSFNET (National Science

Foundation Network), in the 80s, which allowed universities and other agencies to link up with its supercomputers. The NSFNET later became known as the Internet.

In 1991, only the handful of people use the internet until the development of the World Wide Web by Tim Berner Leer popularly called the father of the web in 1993. The World Wide Web (WWW) is created by the development of hypertext, which has the ability to combine words, pictures and sound on web pages.



SAMPLE NETWORK OF COMPUTERS

2.4 NETWORK TERMINOLOGY

2.4.1 TCP/IP

Just like two people can communicate easily if they talk in the same language and its rules. Similarly, all computers connected to Internet follow same rules and procedure, also called protocols, to communicate with each other. These protocols, or the common language, of the Internet are known as Transmission Control Protocol/Internet Protocol or TCP/IP.

Every computer on the Internet has a unique address. This is a four-part numeric address called Internet Protocol Address or IP address, and it contains information that identifies the location of this computer. Some examples of IP addresses are 255.230.54.1, or 10.11.0.220. Therefore, we can see that each part of IP address is a number ranging between 0 and 255.

2.4.2 DNS

The Domain Name System

The Internet evolved as an experimental system during the 1970s and early 1980s. It then flourished after the TCP/IP protocols were made mandatory on the ARPANET and other networks in January 1983; these protocols thus became the standard for many other networks as well. Indeed, the Internet grew so rapidly that the existing mechanisms for

associating the names of host computers (e.g. UCLA, USC-ISI) to Internet addresses (known as IP addresses) were about to be stretched beyond acceptable engineering limits. Most of the applications in the Internet referred to the target computers by name. These names had to be translated into Internet addresses before the lower level protocols could be activated to support the application. For a time, a group at SRI International in Menlo Park, CA, called the Network Information Center (NIC), maintained a simple, machine-readable list of names and associated Internet addresses which was made available on the net. Hosts on the Internet would simply copy this list, usually daily, so as to maintain a local copy of the table. This list was called the "host.txt" file (since it was simply a text file). The list served the function in the Internet that directory services (e.g. 411 or 703-555-1212) do in the US telephone system - the translation of a name into an address.

As the Internet grew, it became harder and harder for the NIC to keep the list current. Anticipating that this problem would only get worse as the network expanded, researchers at USC Information Sciences Institute launched an effort to design a more distributed way of providing this same information. The end result was the Domain Name System (DNS) [2] which allowed hundreds of thousands of "name servers" to maintain small portions of a global database of information associating IP addresses with the names of computers on the Internet.

The naming structure was hierarchical in character. For example, all host computers associated with educational institutions would have names like "stanford.edu" or "ucla.edu". Specific hosts would have names like "cs.ucla.edu" to refer to a computer in the computer science department of UCLA, for example. A special set of computers called "root servers" maintained information about the names and addresses of other servers that contained more detailed name/address associations. The designers of the DNS also developed seven generic "top level" domains, as follows:

Education – EDU, Government – GOV, Military – MIL, International – INT, Network – NET, (non-profit) Organization – ORG, Commercial - COM

Under this system, for example, the host name "UCLA" became "UCLA.EDU" because it was operated by an educational institution, while the host computer for "BBN" became "BBN.COM" because it was a commercial organization. Top-level domain names also were created for every country: United Kingdom names would end in ".UK," while the ending ".FR" was created for the names of France.

The Domain Name System (DNS) was and continues to be a major element of the Internet architecture, which contributes to its scalability. It also contributes to controversy over trademarks and general rules for the creation and use of domain names, creation of new top-level domains and the like. At the same time, other resolution schemes exist as well. One of the authors (Kahn) has been involved in the development of a different kind of standard identification and resolution scheme [3] that, for example, is being used as the base technology by book publishers to identify books on the Internet by adapting various identification schemes for use in the Internet environment. For example, International Standard Book Numbers (ISBNs) can be used as part of the identifiers. The identifiers then resolve to state information about the referenced books, such as location information (e.g. multiple sites) on the Internet that is used to access the books or to order them. These developments are taking place in parallel with the more traditional means of managing Internet resources. They offer an alternative to the existing Domain Name System with enhanced functionality.

The growth of Web servers and users of the Web has been remarkable, but some people are confused about the relationship between the World Wide Web and the Internet. The Internet is the global information system that includes communication capabilities and many high level applications. The Web is one such application. The existing connectivity of the Internet made it possible for users and servers all over the world to participate in this activity. Electronic mail is another important application. As of today, over 60 million computers take part in the Internet and about 3.6 million web sites were estimated to be accessible on the net. Virtually every user of the net has access to electronic mail and web browsing capability. Email remains a critically important application for most users of the Internet, and these two functions largely dominate the use of the Internet for most users.

2.4.3 WORLD WIDE WEB

For the purpose of this tutorial, when we mention Internet, we are actually referring to the World Wide Web (WWW or the web). The web was developed as a method for incorporating footnotes, figures, and cross-references into online hypertext documents, also called web pages. These web pages are files encoded by using the hypertext markup language or HTML, and this language allows developers to insert hypertext links in the documents. It is through this facility that the web has become so useful for all of us. The web users can click any link on a web page to access more information about these links. A collection of related web pages is called a website. The first page of a website is called its home page. On the home page, links to various web pages of the website are listed.

2.4.4 WEB BROWSERS

You need a web browser to access web pages on the web. A web browser is a software application specially designed to look up and open web pages on the user's computer. The two most popular web browsers are Microsoft Internet Explorer, and Netscape Navigator. For the purpose of this tutorial we will refer to the Microsoft Internet Explorer 5.0 which is used by a vast majority of web users.

2.4.5 URL

The World Wide Web is built on a set of rules called the Hypertext transfer protocol (HTTP). This protocol requires the Internet addresses in a special format, called URL or Uniform Resource Locator. A typical example of a URL is as follows:

http://www.google.com

Let us see what the various parts of a URL stand for:

a. **http://**
b. **www**
c. **google**

stands for a server that uses the hypertext transfer protocol means the website is on the World Wide Web part of the Internet stands for the name of the service/company/organization whose website you are accessing refers to a web folder belonging to the website of google refers to the specific web page in the web folder named home.
Sometimes the name of the web page is not displayed in the URL. However, each web page on the web has a unique URL. To access a website, you must know its URL and that URL should be typed in the Address bar of the web browser used by you.

2.5 Email

Electronic mail, also known as email or e-mail, is a method of exchanging digital messages from an author to one or more recipients. Modern email operates across the Internet or other computer networks. Some early email systems required that the author and the recipient both be online at the same time, in common with instant messaging. Today's email systems are based on a store-and-forward model. Email servers accept, forward, deliver and store messages. Neither the users nor their computers are required to be online simultaneously; they need connect only briefly, typically to an email server, for as long as it takes to send or receive messages.

An Internet email message consists of three components, the message *envelope*, the message *header*, and the message *body*. The message header contains control information, including, minimally, an originator's email address and one or more recipient addresses. Usually descriptive information is also added, such as a subject header field and a message submission date/time stamp.

To send and receive mails in electronic format, an email account and an Internet connection are required. There are email programs available to help you manage your emails on your computer. Some of the most commonly used email programs are Microsoft Outlook Express and Netscape Messenger. However, it is not essential to have an email program to be able to send and receive emails. There are several free email service providers on the web, including Hotmail, Yahoo, Rediffmail and Indiatimes. You need to register with them and open an account with them to start sending and receiving emails. After you drop your letter in the post box, the post-man collects and takes it to the central post office. From here it is dispatched to the recipient's city. Similarly, after an email is sent from a computer, it is sent to the nearest mail server. Here, depending on the recipient's domain and top-level domain name, the mail is forwarded to the mail servers closest to the recipient.

To deliver a letter, a postman collects the recipient's mail from the central post office and delivers it to the recipient's home. Similarly, whenever the recipient connects to his mail server, the email program retrieves the mail from there and presents it to the recipient. Irrespective of what time of the day you send a mail, and no matter how far your recipient is, the whole process of sending and receiving mails takes a few seconds.

2.6 Email Address

Just like every letter should have an address where it can be delivered, there are addresses for sending and receiving emails also. Every email user has a unique email address.

A typical example of an Email address is as follows:

jerry@internet.com

Email addresses have three parts:

i. User name
ii. Domain name - 'internet' in the example. The domain name refers to the mail server - a type of computer - where the recipient has an electronic mailbox. It is usually the name of a company or an Internet service provider. A domain name and user name are always separated by the axiom symbol '@'.
iii. Top-level domain - '.com' in the example. The top-level domain is always preceded by a dot and refers to the country or type of organization where the recipient's domain mail server is located. Some of the commonly used top-level domains are

1..com, 2. .edu, 3. .org, 4. .net

- A commercial enterprise or an online service - An educational institution or university - A non-profit organization - A network

- 'jerry' in the example. The user name refers to the mailbox of the recipient.

3. METHODOLOGY

3.1 THE INTERNET

To be able to use Internet and email, you need to set up a connection with an Internet Service Provider (ISP). Internet connections are available over the telephone line through dial-up modems or DSL; over cable through Cable T. V. wires; and through wireless. The most common way of connecting to the Internet is over telephone line using a dial-up modem. However, lately Internet over cable is also becoming quite popular. There are also a large number of cyber cafes in the country offering Internet Access facility on hourly rental basis.

Before we begin, ensure that you have an Internet connection on your PC. If you are accessing from home, you need to connect to the net using the software provided by your service provider. This software can be launched from the Program sub-menu in Start Menu or from Desktop, if there is a shortcut on the desktop.

1. Starting Microsoft Internet Explorer 8.0 or any other higher vision of browsers

To access websites on the web, we need to launch a web browser. Here we will learn to access websites using the web browser from Microsoft - the Microsoft Internet Explorer 8.0. To launch Internet Explorer, follow the instructions given below:

i. Press the start button to open the start menu. Go to Programs and open the programs sub-menu.
ii. Now use the down arrow direction key to reach the option labeled Internet Explorer, and press Enter.

iii. Alternatively, you can use the shortcut icon for Internet Explorer on the desktop

2. Components of Microsoft Internet Explorer 8.0

The components of Microsoft Internet Explorer 8.0 are quite similar to the Windows Explorer. It consists of the following parts:

1. Title Bar - It is the topmost part of the web browser, and is a thin rectangular strip. The left hand corner of Title bar displays, the icon of Internet Explorer, name of the web site, and name of the program i.e. Internet Explorer. On the right hand corner the three buttons - Minimize, Maximize and Close are displayed.
2. Menu Bar - This consists of a horizontal row of command options. These are File, Edit, View, Favorites, Tools, and Help.
3. Command Tool Bar - It displays shortcut icons of some of the most frequently used menu commands on the browser and this command tool bar replaced standard tool bar in lower vision of Microsoft Internet Explorer.
4. Short cut links bar - This may or may not be present. It displays shortcuts to a few most preferred links by the user.
5. Address Bar - It displays the URL of the website being accessed by the user.
6. Contents Pane - The contents of the web page will be displayed here.
7. Status Bar - It displays the status of download, connectivity and the URL of the link being downloaded.

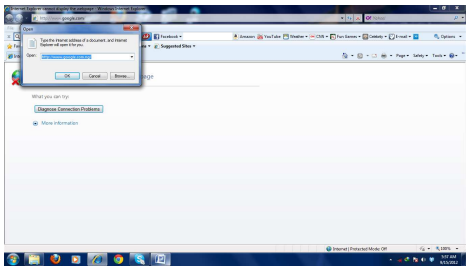
3.2 WEBSITES

To access websites, follow the instructions given by steps:

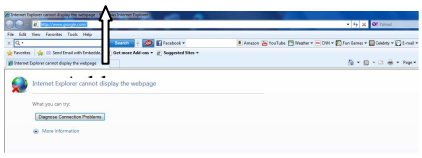
Step:
1. Ensure that you are connected to the Internet. Launch the Internet Explorer from the start menu, programs sub-menu.

2. Go to File Menu option of the Internet Explorer by pressing the Alt key to activate the accessing key. Use the down arrow direction key to drop down the file menu or press the Alt Key + F key on the keyboard to also drop down the file menu. In this drop down, use the down arrow direction key to go to the option labeled 'open'. This will open the 'Open'

dialog box. Alternatively, you can press Control key and O key. The cursor will be in an edit text box. Here type the URL of the website you want to visit. We will take the example of Google website. So, type www.google.com in the open edit text box, and press Enter.



Alternatively, you can also launch a google website by typing into the address bar



3. The browser will then look for the google website on the web. The status bar will display "searching www.google.com.ng". When it finds the website, the status bar will display 'website found'. After this a process of displaying the website on your computer will begin, this process is called downloading. The page that appears after downloading is complete is called the home page of the website. Once the site is completely downloaded, JAWS will start reading the page. To stop JAWS from reading the entire page, press the control key once.

4. Typically, a website is divided into five distinct areas. It is like a window and its frame. So the area of the window is the content section, while each side of the frame represents a particular section. The different sides of the frames are called navigation bars, because they contain links to navigate through the website. Therefore, usually there is a top navigation bar, a bottom navigation bar, a left navigation bar and a right navigation bar. The top and bottom navigation bars of the frame contain links to various sections in the website. These are also called the global navigation bars. The left navigation bar of the frame usually serves as a section navigation bar i.e. it contains links to pages within the particular section being accessed. The right navigation bar is for links to specific pages, or links outside the website. This placement and the number of these navigation bars can vary widely from website to website, however, a global and section navigation bar is always there.

5. JAWS will start reading the downloaded web page from top left-hand corner of the screen to the bottom right-hand corner. You can stop JAWS from reading the page by pressing the control key. If you want JAWS to begin reading the web page again, press the down arrow key. JAWS will start reading forward from the point it had stopped when you pressed the control key. You can now keep pressing the down arrow key to move forward step by step at your own pace. To move backwards, press the up arrow direction key.

6. A web page usually consists of many elements such as hyperlinks to other web pages in the same website or to other websites; buttons for commands; Forms with text boxes, combo boxes, check boxes and radio buttons; graphic images; and of course plain text. While reading the web page, JAWS will distinguish each element as follows:

A. Plain Text: JAWS will simply read out the plain text

B. Hyperlink: Before reading out a hyperlink, JAWS will speak out the word "link" and then read out the name of the link. For example if a hyperlink is labeled 'About Us' then JAWS will read "link About Us".

C. Buttons: JAWS will first read out the title of the button and then speak out the word "button". For example if a button is labeled 'Submit' then JAWS will read “Submit button".

D. Graphic Images: Every graphic image has an alternative text associated with it; JAWS will speak out the word 'Graphic' first and then read out the alternative text of the graphic.

E. Forms: A form has many fields in which a user can type relevant information. There are different types of fields in a form. These are:

- Text Box: These are areas in which the user can type limited information. JAWS will first speak out the label of the text box and then it will speak out the word "Edit". For example, if there is a field in which the user has to enter his first name, then JAWS will read "First Name Edit'
- Combo Box: Usually combo boxes are provided to make certain pre-defined selections. These selection options can be browsed by using the down and up arrow keys. JAWS will speak out the label of the combo box and then it will speak the word "Combo". For example, if there is a field in which the user has to select his country from a list of countries provided in a combo box, then JAWS will read "Select your Country combo". Sometimes, user can type in a combo box also, for such combo boxes JAWS will speak out "Edit Combo".
- Check box selection: This is a small box provided for single selection options. To select and deselect the option against a check box, use the space bar. JAWS will speak out "check box checked" if the option is selected and "check box unchecked" if the option is not selected.
- Radio buttons: These are small buttons provided when there are limited options, usually two to five options, to select from. These options are changed by using the direction arrow keys. JAWS will speak out the word "radio button" and then the option that is against it. For example if there are two options A and B, and option A is selected, then JAWS will speak out "Radio button Option A selected", for the option not selected it will speak out "Radio button Option B unselected".

7. To access a link that you would want to access, there are two ways

First: Use Tab key to browse through the links sequentially, and when you reach the link you want to access, press Enter key.

Second: Press Insert key + F7 key. This will open a 'Links list' dialog box. As the name suggests, links list dialog box has the complete list of links present in the opened web page. You can reach the link you want to access by using the up

or down arrow direction keys. You can also use the alphabet keys. For example, if you want to access a link labeled 'Email', then press E key. Keep pressing E key till you reach the link labeled Email. After you reach this link, press Enter. This will then open the page hyper linked to the accessed link.
8. To know your position on the page, press Insert key + Up arrow key.

9. To go back to the previous page, press Alt key + left arrow key. To move forward to a visited page press Alt key + right arrow key.

4. EMAILS

e-mail is an acronym for electronic mail. It is one of the most popular resources of the internet. E-mail is nothing other than an electronic way of sending and receiving letters or messages. It lets you send texts to a recipient through the computer. Sending and receiving e-mail messages has been made easy and free courtesy of internet portals like yahoo and others. Free web based e-mail account – the kind available at yahoo, http://www.yahoo.com; Hotmail, http://www.hotmail.com; OneBox, http://www.onebox.com; Google, http://www.gmail.com and a host of other sites- have cost, convenience and spped advantages among others. You can easily send or check your mail from any computer connected to the internet in any part of the world.

Cost: if you have a personal computer that is connected to the internet via an Internet Service Provider (ISP) or any network Internet Modem, you do not pay extra charges for sending or receiving e-mail messages. If you are not connected at a very minimal cost, you can send or check your mails in a Cyber Café (Business Centre) scattered around town.

Convenience: You can send or check your mail at any time of the day and from any computer that is connected to the Internet in any part of the world, if the e-mail address is correct. You do not need to configure your computer differently as required by some internet service providers, which you use their service to receive mails.

Speed: it takes an e-mail few minutes even seconds to reach its destination in any part of the world. This however depends on your connection, the speed of your computer and the speed at which your Internet Service Provider transmits. It is unlike the regular postal service/Courier service that takes a lot of time.

4.1 E-MAIL BASICS COMPONENTS

E-mail id/Username: Email id/username is the name of the owner of the e-mail address. If name is Chuks Jerry, so your e-mail can be chuksjerry. E-mail id or username and e-mail address will be used interchangeably in this work. Email id is followed by @ (at), then the name of the web server where the user maintains the account and lastly the suffix. So your e-mail address at yahoo will read something like yourname@yahoo.com or yourname@gmail.com, mine is chukwuorih@gmail.com. Two people cannot use the same username as an e-mail address in one web service, just as two persons cannot have the same account number with the same bank. This is to avoid duplicity. For instance, you cannot register chukwuorih@gmail.com because I have already registered it, but if you add any other thing before or after chukwuorih for instance chukwu_orih@gmail.com or chukwuorih23@gmail.com, it may be registered if not already taken and username is usually written in small letters.

Password: This refers to a key or code with which the user opens his/her e-mail box. With your password, you can be sure that nobody- except technically proficient miscreants called hackers will have access to your e-mail box. Passwords are case sensitive, that is if you use an upper case (capital letter) to sign on, you must use upper case letter to open the box or vice versa. When you type your password, it will appear in asterisks to prevent others from reading it. Make sure you remember your password, if you forget it, you will have difficulty opening the box.

4.2 UNDERSTANDING "To", "CC", "BCC"

The "To" field is where you enter the primary recipient's e-mail address. The "CC", which stands for Carbon Copy. The field is where you enter the e-mail address of the other recipient you want to receive the same mail. The "BCC", which stands for Blind Carbon Copy. This is where you enter the e-mail address of the person(s) you want to receive the same mail but would not want others who receive similar mail to know. That is, when you enter my e-mail address in BCC field, other recipients of the mail will not know you sent me a copy of the same letter/mail.

4.3 E-MAIL PROTOCOL/RULE

Here are some basic rules, you should try to observe while using email and this is called e-mail netiquette:

1. Always use subject line, this will help the mail recipient to have an idea of what your message is all about.
2. Be brief in writing, if the information you want to send is much, consider sending some as attachment.
3. Keep paragraphs short and to the point, it is hard to view long paragraphs. Remember most people will read your message on the computer screen, so do not give them trouble reading your mail.
4. Do not use all capital or all small letters, some consider all capital letters as ***surprises*** and all small letters as ***sloppy***. Write in a conventional way.
5. Remember to check your mail for spelling errors before you send.

4.4 CREATION OF E-MAIL

Steps:

1. Opening an Email account

Before you can start accessing an email, you must have an email account. There are two ways of acquiring an email account:

- Buy an Internet account from an Internet Service Provider. An email account is provided to you as part of the package.
- Open an email account with web-based email services such as Hotmail, Yahoo!, Rediffmail etc.

We will learn how to open an email account with the web-based email service Yahoo!

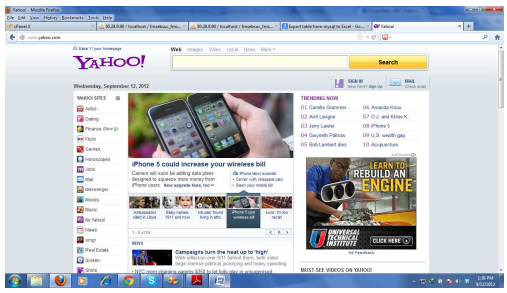
Step 1:

Ensure that you are connected to the Internet. Open Internet Explorer, press control key + O key to open the 'Open'

dialog box, type www.yahoo.com and press enter key or enter www.yahoo.com in the address bar and hit the enter key on the keyboard. This URL is of the website for the Yahoo! email service.

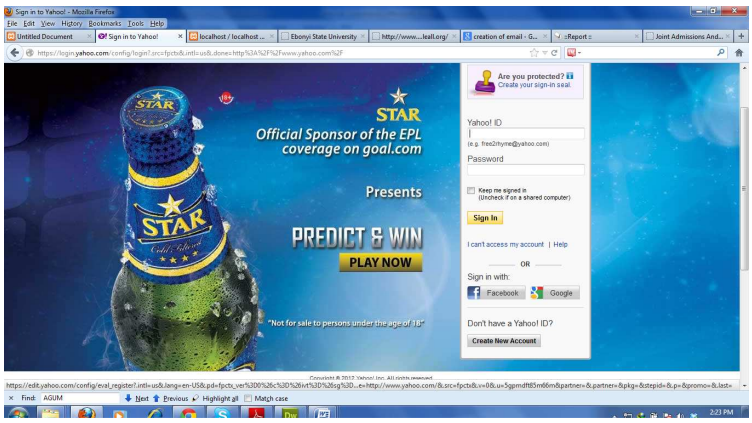
Step 2:

The Yahoo home page will download on your screen. Now, since we want to open an Email account, we will look for the link labeled 'Sign Up' on the home page and click the left mouse button or if it is Sign In page that display, move to step 3.



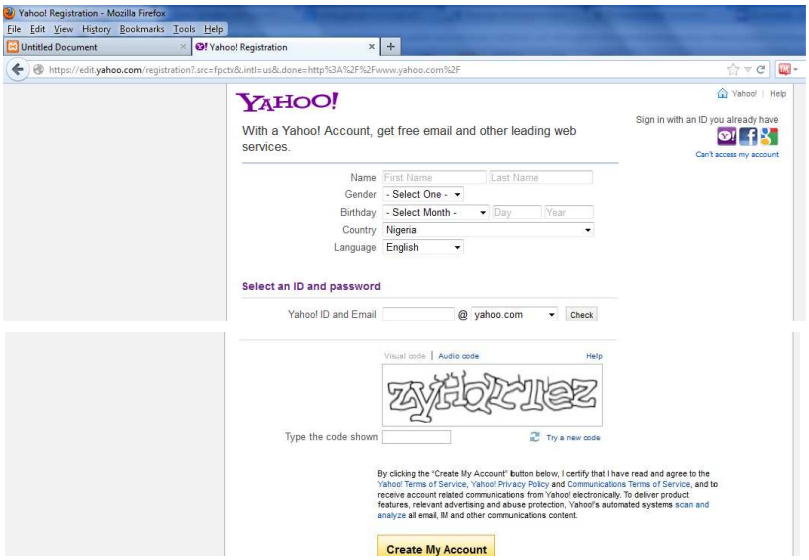
Step 3:

On the 'Email Sign In' page, email account holders with Yahoo type in their username/yahoo id and password to access their email account. This page also contains hyperlink to the page with the registration form for opening new email accounts. These links is labeled **Create New Account** and click the left mouse button to open the registration page.



Step 4:

This will open a registration page. But it might interest you to know that Yahoo offers this email services free. In this approach, we are interested in creating free yahoo mail account. In this registration form, there are several sections that you have to fill. The fields in these sections of the registration form are:



Step 5:

Follow the instructions and enter your particulars in the fields (spaces) provided. Scroll to view the other pages of the registration form.

Step 6:

At the end of the form, move your mouse to **Submit/Create My Account** button and click the left mouse button.

If you had entered a username already taken by someone else, the web server will display alternative username/yahoo id for you to choose from, make selection from the suggestions or choose another username yourself.

Step 7:

Make other needed changes, then move your mouse to submit/Create Account button and click the left mouse button. If the information you entered are correct, the web server will display a "**Congratulation**" page indicating that you have successfully registered your e-mail address with some of the information entered at the course of creating the mail.

Step 8:

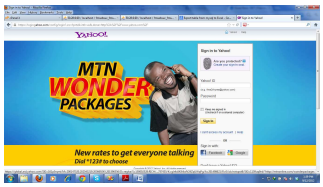
Move your mouse to **Continue** to yahoo mail and click the left mouse button. Your e-mail account display with first mail sent to you by yahoo as a confirmation.

4.5 SENDING AND RECEIVING EMAILS IN YAHOO!

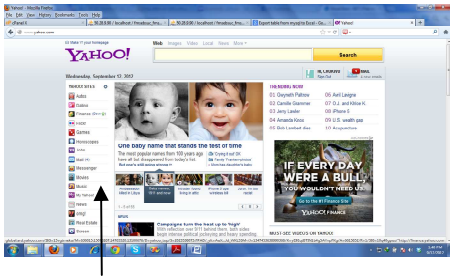
1. Ensure that you are connected to the Internet. Open Internet Explorer, press control key + O key to open the 'Open' dialog box, type www.yahoo.com and press enter key. This URL is of the website for the Yahoo! email service.

2. The Yahoo home page will download/display on your screen. Now, since you want to access your Email account, look for the links labeled 'Sign In' on the home page and click the left mouse button.

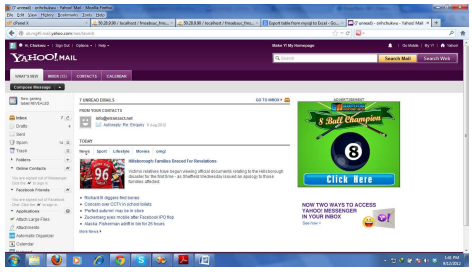
3. After a short while, the 'Email Sign In' page will open. On this page, email account holders with Yahoo type in their username and password to access their email account. When this page opens, the cursor will be in Yahoo ID field. It is a text box, press enter to turn the forms mode on and type your Yahoo ID. Press tab to go to the Password field. It is a text box, type your password in this field and press enter key.



4. After a short while, your email account home page will be opened with a message Hi your name and also the number of unread mail in your inbox, look for a link called Mail towards your left hand side and click the left mouse button.

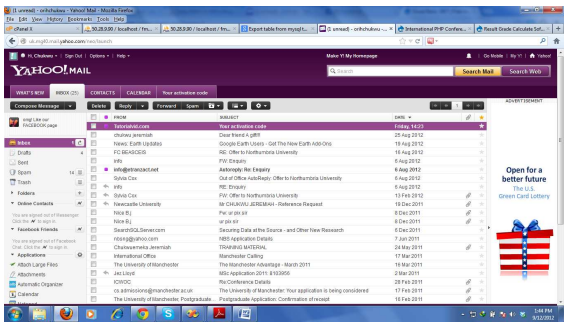


5. There are two links that we will look for in this page - Inbox and compose. Inbox is like your mailbox; all incoming mails will come here. Therefore, Inbox link will take you to all emails sent to this Yahoo email ID. Compose link will take you to an email form in which you can type your email and send to any email ID.



6. To check new emails and even old emails in your Yahoo email account, go to the Inbox link/Check Mail link and click the left mouse button.

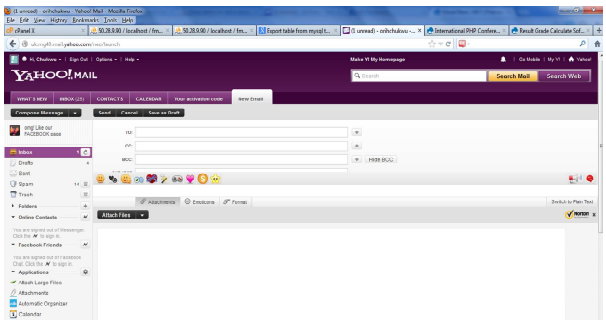
7. An email listing page will open. Here all incoming emails will be listed in reverse chronological order, that is, the latest emails will be listed on the top, while the oldest will be at the bottom. The email list is organized as a table. Each email occupies a row and is divided into five columns.



These five columns are:

- Check box - Each email has a check box in the beginning. It is used to select the email for operations like delete or moving it to another folder.
- Sender/From - In this column, the sender's name is displayed
- Subject - The subject of the incoming mail is displayed in this column and it is a hyperlink.
- Date - The day and date on which the incoming mail is received is displayed in this column
- Size - The size of each email is displayed in this column

8. To view the content of an email, move your mouse to the subject o the mail and click the left mouse button.
9. To send an email, we need to access the compose link and click the left mouse button. A email form will open as shown below.



The email form has the following fields:

- 'To': This is a text box in which you will type the email address of the person to whom you want to send your email. When the email form opens, the cursor will be in this field. Press enter to turn on the forms mode and type the email address of the recipient. Press tab to go to the next field.
- CC: It refers to carbon copy, which is if you want to send a copy of this email to some other persons then type the email IDs of these persons in this field. Press tab to go to the next field. All the recipients will see who else has received this message. To send the same mail to more than one recipient, separate the email addresses of the recipients by a comma or a semi-colon.
- BCC: If you want to send a copy of your message to someone, but do not want others to know, then use the blind carbon copy (BCC) option for this undisclosed recipient. Type the email IDs of such person/s in this field. Press tab to go to the next field.
- Subject: Type the subject of your email in this field and press tab to go to the next field.
- Text: This is the place where you would write your message. This is like notepad and you just need to start typing. When you are done, press tab once to go to send button. Press enter on Send button.

10. After a short while, a confirmation screen will appear. This will inform you that your message has been sent.
11. You can send a reply to any email received in your account. To do this, go to the Inbox email listing page. Go to the subject hyperlink of the email to which you want to reply and press enter. This will open the detailed text of the email on the screen. On this page, there is button labeled Reply. Use arrow direction keys to reach this button and press enter. After a short while, a page with the email form, similar to the compose email form will appear. However, unlike the compose form, the reply form will have the following fields appearing pre-filled.

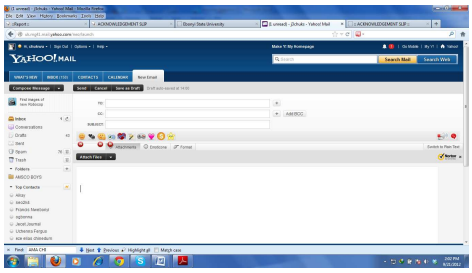
- 'TO' field: The email address in the 'From' field of the message to which you are replying, will appear pre-filled in the 'To' field of the reply form. For example, if say you received an email from jerry chukwu, whose email address is chukwuorih@yahoo.com. Now, when you reply to his message, the To field of the reply form will have chukwuorih@yahoo.com pre-filled.
- CC field and BCC field will be blank
- Subject: The text in the subject field of the message to which you are replying, will appear pre-filled in the 'Subject' field of the reply form with the text 'Re:' pre-fixed to it. For example, In jerry's email, if the subject field had 'Hello there', then the subject field of the reply form will have the text 'Re: Hello there' pre-filled in it.
- Text: The complete text of the original message will appear pre-filled in the Text box for writing messages. When the reply form opens, press tab once and the cursor will be placed in the text field. You can now start typing your reply. When you are done, press tab to reach the send button.

4.6 ATTACHMENT

It might interest you to know that e-mail is designed to transfer light text messages only, when you want to send graphics, audio/visual files, send then as attachments. It is assumed that you had typed the mail and the accompanying attachment.

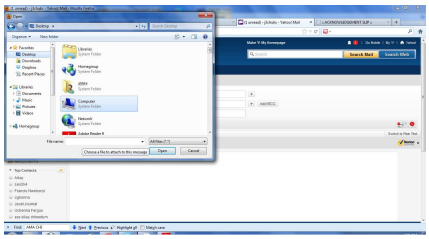
Step 1:

Move your mouse to attachments and click, a link will appear called attach file, click on it to display the attachment window for you.



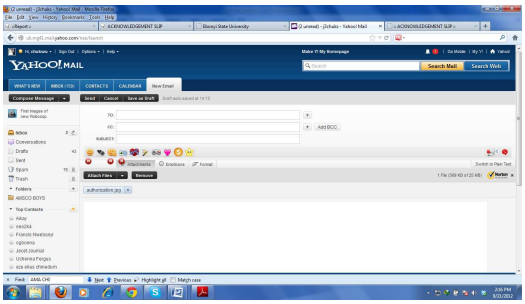
Step 2:

In choose file window/attachment window, move your mouse to look in, click the left mouse button then select the driver/ search where the file you want to attach is located.



Step 3:

Move your mouse to the file name of the file you want to send and click the left mouse button, then choose Open button, the start attaching, after which a clip indicate successfully attachment with the file name.



5. USING SEARCH ENGINES:

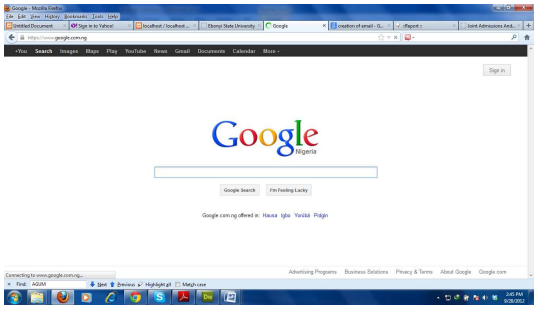
The web has become a huge repository of information on a variety of topics. This makes it a preferred mode to research on a large number of topics. However, the volume of information is so large, that it makes the access to right

information difficult and slow. This is the reason for the popularity of Search Engines. Search Engines help web-users to find information quickly. Some of the most popular search engines are Google, Altavista, and Hotbot. Usually search engines have a text box, where the users have to enter the information they want to search on the web. On pressing Enter, the search engine looks for a match to the words entered in the text box. After a few moments, a list of search results is displayed on the screen. This list usually consists of a listing of links to various websites containing and a brief description of each link. These results are arranged according to their accuracy, i.e. the closer the match with the text entered by the user, the higher up the list it is placed. The user, then has to browse through this list to find which results are relevant and open the links by pressing Enter key on them.

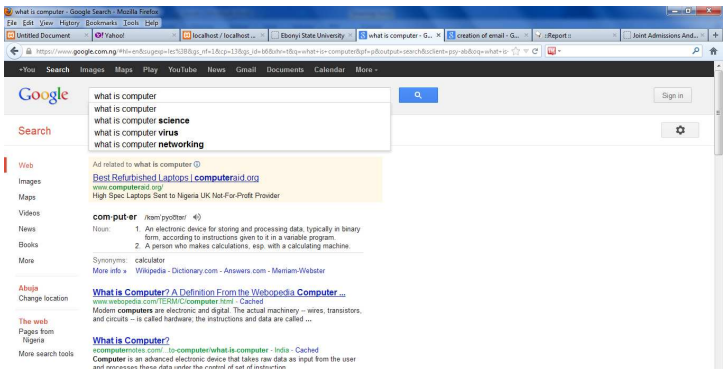
We will learn to conduct search on Google.

1. Open Internet Explorer.

2. Press control key + O key to open the 'Open' dialog box, type www.google.com and press enter key or type the web address at the address bar and hit the enter key on the keyboard.



3. In a few moments the home page of the Google website will be opened as shown above. The cursor will be placed in the search text box, press enter key to put on the forms mode. Now, type the text you want to search on the web in this box and press enter key.



4. In a few seconds, the search results will be listed on your computer.

5. Use Tab to browse the links. Or if you are already know the link, press Insert key + F7 key to open the links listing dialog box. Now, use the arrow direction keys to reach the link you want to access, and press enter key.

CONCLUSION

In the modern society, a computer has become a vital component for people, leading to email and the internet being an essential tool in every area of human endeavor. This has indisputably had a positive impact on people and the benefits are clear to see, such as the greatly increased speed at which information between friends, colleagues and customers can be accessed and shared, improve efficiency, find new business opportunities and work more closely with customers and suppliers. It is important to remember however that these valuable tools can also be misused by people, when used in carrying out operations against the email and internet policy. Enhance, people are encourage to positively engage themselves in positive usage of these great facilities in improving their businesses and academic work.

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