WWW

The World Wide Web (WWW), also called the Web, consists of a worldwide collection of electronic documents. Each of these documents on the Web is called a Web page. The WWW emerged in service on the Internet. A Web page can contain text, graphics, animations, audio, and vide (i.e. multimedia elements), as well as built-in connections, called hyperlinks, to other documents. A Web site is a collection of related Web Pages.

- ✓ **A Home page** is the starting page or a table of contents for a Web site, and normally has a name called index.htm or index.html.
- ✓ A Web browser is a software program used to access and view Web pages.
- ✓ *A **web browser*** (commonly referred to as a **browser**) is a software application for retrieving, presenting and traversing information resources on the World Wide **Web**. An information resource is identified by a Uniform Resource Identifier (URI/URL) and may be a **web** page, image, video or other piece of content.

It can also be called an Internet browser which is a piece of software that allows the user to access and view web pages on the Internet.

Examples of web browsers include:

- ✓ Internet Explorer
- ✓ Mozilla Firefox
- ✓ Opera Mini
- ✓ Apple Safari
- ✓ Google Chrome
- ✓ Konqueror
- ✓ Arora
- ✓ Dillo
- ✓ K-Meleon
- ✓ Lynx
- ✓ Lobo
- ✓ Kazekhase
- ✓ Amanya
- ✓ NetPositive
- ✓ QNX Voyager
- ✓ Planet Web
- ✓ Netscape Navigator
- ✓ Lunarscape
- ✓ Flock
- ✓ Avant
- ✓ Mosaic

Each Web page has a unique address, called a ***Uniform Resource Locator*** (URL), which tells the browser where to locate the document.
A URL consists of a protocol, a *domain name*, and *sometimes the path to a specific* Web page or location on a Web page.
When the Web Browser contacts a server, they are asking for documents or pages built with HTML (Hyper Text Markup Language) the browser then interprets these pages and display them on your computer.
To be able to send and receive Web Pages, the client and server use a Protocol ***i.e. the set of rules satisfied by both clients and server for information to move across them on a Network.***
-A set of rules that govern the transfer of message between networks devices
This protocol is known as (HTTP) ***Hyper Text Transfer Protocol.*** This is the reason why most Web Documents or pages have Addresses that begin with http e.g. http://www.sthenryskitovu.ac.ug***, http://www.exite.com*** ,***http://www.yahoo.com***

WEBSITES

Qn. Define a website
This is a connected group of pages on the World Wide **Web** regarded as a single entity, usually maintained by one person or organization and devoted to a single topic or several closely related topics

Also defined as a group of World Wide Web pages usually containing hyperlinks to each other and made available online by an individual, company, educational institution, government or organization

Websites are categorized into two

i) according to the building method (basing on how they are built)
Static-These deliver static information to the user i.e. the information can be created and organized but does not change over time and remains in the same form as sent by the web server
Dynamic /interactive-Information can change over time when sent to the user according to some criteria

Types of Websites / Categories for Types of Websites
1. Search Engines & Directory Types of Websites (Google.com)
These are some of the *most popular types of websites* in the world. Some search engine companies, like Google or Gigablast, prefer to keep their homepage simple and stress on only one service, while Yahoo! and MSN have a more "portal" look which many services are advertised to the user like email, news etc. The portal provides a broader platform for the company to promote their different services but it also fragments the visitors. Classified directories and yellow pages websites list businesses (both online and offline) segregated into different categories or geographic locations. These may also include an internal search engine that helps users quickly locate information.

2. Informational Types of Websites (CNN.com)
These are the types of websites which are dedicated to the purpose of providing information – whether free or paid. Information website can also contain updated time tables, TV guides, reference material, sports data (like cricket scores), weather and stock data.

3. Personal Websites (Stallman.org)
With tons of tools and services available, creating a website is no longer rocket science. The astronomical number of personal types of websites one finds on the web is mind-blowing! Personal websites and blogs are the *fastest growing types of web site. Unfortunately, with personal websites, comes misinformation, poor designs and provides a sense of false-security for the general public in proper website design.* Personal websites can contain any kind of information and are usually administered by a single individual who can choose whatever content they would like to put online. Anyone can now create a web site using online free hosting accounts that might also offer pre-made templates that are like "ready-to-go websites", or with free and commercial versions of WYSIWYG HTML editors like Frontpage, DreamWeaver etc.

4. Blogs & Online Diaries (HuffingtonPost.com)
Blogs are like online diaries (the irony is, though you keep your hardcopy diary under lock-and-key, you want more and more visitors to read the online one). Blogs can be created by anyone using free services like Blogger.com (Google) or Windows Live Spaces (Microsoft). You can also install blog software to your pre-existing website and start putting your thoughts online in a matter of minutes! Because blogs are so easy to create, manage and even earn from (there are a lot of profitable blogs online, if you didn't know), the web has increased manifold. And it's all

thanks to the many free blog services and a strong enthusiasm by the ever growing blogging community who keep maintaining and updating their web space regularly. From ramblings of a wandering mind to detailed and specific information on technical fields, the content of blog types of web site can vary widely.

5. Company Websites (NorthAmerican.com)

Company websites are by far the most important. Company websites range from the very small to the very large and can be a non-profit or for-profit business. Company websites have pages of information on the business, its services and clients. Company websites are often "static". In other words, they don't change much or very often. These are more like "online brochures" However, with modern Web 2.0, interactions with users and websites are becoming extremely popular and lots of companies are integrating new types of services and features into their sites. These sites are called "fusion" sites.

6. Forums (AngiesList.com)

Forum types of websites serve as platforms and promote interactions amongst the users. Unless specifically blocked and requiring a special invitation, you can join any forum on the web. Most forums cater to a specific industry or a field. So, for example, you will find forums on printers, banking and finance, biotechnology, even people with phobias of butterflies. Forums on websites, typically, contain categories that further narrow down the subject. Registered users can post questions or start a topic which other users can reply or add to. A lot of valuable information and knowledge exists in online forums and we urge you to join and actively participate in online discussions with people that share the same interests.

7. e-Commerce i.e. Online Stores (eBay.com)

The web is primarily used for communication and information search, but many companies have set up shops online. In fact, some companies like the popular Amazon don't have brick-and-mortar shops – the *entire buying and selling takes place online*. Online shops are not restricted to selling tangible products; they can also provide services and a good example of this would be travel and matrimony websites. Furthermore, you can integrate payment gateways, like Paypal.com and moneybookers.com, in your online shopping mall and process the orders and receive funds.

8. Web 2.0 Types of Websites (WordPress.com)

Web 2.0 is an amorphous concept and primarily encompasses websites that offer a particular service. The purpose of these websites can be varied – information storage, communication etc. Sites like Flickr.com, Google docs, del.icio.us fall into this category. Imagine it like this, browsers have upgrades such as the new Internet Explorer Version 9, and the World Wide Web is transitioning from static webpages into an interactive, highly-personalized experience. This is Web 2.0: the next "version" of the web.

9. Social Networking (Facebook.com)

The new mantra on the web is social networking. These websites *can* be classified as Web 2.0 sites but their sheer number and popular demands we have a separate category. Facebook,

Orkut, LinkedIn, Twitter have been the rage past couple of years. From helping you locate schoolmates and past colleagues to microblogging, these websites have a whole array of utilities and features with more being added each day. Dating websites have grown over the years and now offer services quite similar to those of social networking (the idea is basically the same) hence they are a good fit in this category.

10. File-Sharing (RapidShare.com)

As internet speeds have increased and more and more people are using broadband connections, the importance of file sharing types of websites has grown. Megaupload.com and RapidShare.com are two prime examples of such types of websites. You can not only find images, but also music (sometimes even full albums) and video (entire movies). These types of websites offer both free and paid memberships – the former is usually a cut down version of the latter. However, because of the huge number of files stored on these sites, it is almost impossible to find the file you are looking for unless you know the direct link. Websites like loadingvault.com provides a search engine that helps you locate files based on your query. All of these are great Types of Websites that our Web Designers in Asheville can build for you. What's your favorite Types of Websites?
[top]

- **Affiliate**: A site, typically few in pages, whose purpose is to sell a third party's product. The seller receives a commission for facilitating the sale.
- **Affiliate Agency**: Enabled portal that renders not only its custom CMS but also syndicated content from other content providers for an agreed fee.
- **Archive site**: Used to preserve valuable electronic content threatened with extinction. Two examples are: Internet Archive, which since 1996 has preserved billions of old (and new) web pages; and Google Groups, which in early 2005 was archiving over 845,000,000 messages posted to Usenet news/discussion groups.
- **Attack site**: A site created specifically to attack visitor's computers on their first visit to a website by downloading a file (usually a Trojan horse).

These websites rely on unsuspecting users with poor anti-virus protection in their computers.

- **Blog (web log)**: sites generally used to post online dairies which may include discussion forums (e.g., blogger, Zanga). Many bloggers use blogs like an editorial section of a newspaper to express their ideas on anything ranging from politics to religion to video games to parenting, along with anything in between. Some bloggers are professional bloggers and they are paid to blog about a certain subject, and they are usually found on news sites.
- **Brand building site**: A site with the purpose of creating an experience of a brand online. These sites usually do not sell anything, but focus on building the brand. Brand building sites are most common for low-value, high-volume fast moving consumer goods (FMCG)
- **Celebrity website**: A websire whose information revolves around a celebrity. This sites can be official (endorsed by the celebrity) or fan made (run by his/her fan, fans, without implicit endorsement).
- **Click**-to-donate site: A website that allows the visitor to donate to charity simply by clicking on a button or answering a question correctly. An advertiser usually donates to the charity for each correct answer generated.
- **Community site**: A site where persons with similar interest communicate with each other, usually by chat or message boards.
- **Content site**: Sites whose business is the creation and distribution of original content.

- **Corporate website**: Used to provide background information about a business, organisation, or service.
- **Dating website**: A site where users can find other single people looking for long range relationships, dating, or just friends.
- **Electronic commerce (e-commerce) site**: A site offering goods and services for online sale and enabling online transaction for such sales.
- **Forum website**: A site where people discuss various topics.
- **Gallery Website**: A website designed specifically for use as a Gallery, these may be an art gallery or photo gallery and of commercial or non-commercial nature.
- **Government Site**: A website made by the local, state, department or national government of a country. Usually these sites also operate websites that are intended to inform tourists or support tourism.
- **Gripe site**: A site devoted to the criticism of a person, place, corporation, government, or institution.
- **Gaming website and gambling website**: A site that lets users play online games. Some enable people to gamble online.
- **Humor site**: Exists only to amuse.
- **Information site**: Most websites could fit in this type of website to some extent many of them are not necessarily for commercial purposes.
- **Media sharing site**: A site that enables users to upload and view media such as pictures, music, and videos.
- **Mirror site**: A website that is the replication of another website. This type of websites is used as a response to spikes in user visitors.
- **Microblog site**: A short and simple form of blogging. Micro blogs are limited to certain amounts of characters and works similar to a status update on Face book.
- **News site**: Similar to information site, but dedicated to dispersing news, politics, and commentary
- **Personal website**: Websites about an individual or a small group (such as a family) that contains information or any content that the individual wishes to include.

Many personal homepages are rare, thanks to the modern era of social networking sites such as MySpace, but some are still used for at home businesses. This website is different from a celebrity website, which can be very expensive and run by a publicist or agency.

- **Phishing site**: A website created to fraudulently acquire sensitive information, such as passwords and credit card details, by masquerading as a trustworthy person or business (such as Social Security Administration. PayPal) in an electronic communication.
- **p2p/Torrents website**: Websites that index torrent files. This type of website is different from a Bit torrent client which is usually stand alone software.
- **Political site**: A site on which people may voice political views, show political humor, campaigning for elections, or show information about a certain political party or ideology.
- **Porn site**: A site that shows sexually plain content for enjoyment and relaxation. They can be similar to a personal website when it's a website of a porn actor/actor/actress or a media sharing website where user can upload from their own sexually explicit material to movies made by adult studios.
- **Question and answer (Q & A) Site**: answer site is a site where people can ask questions and get answers.
- **Rating site**: A site on which people can praise or laugh at what is featured.
- **Religious site**: A site in which people may advertise a place of worship, or provide inspiration or seek to encourage the faith of a follower of that religion.

- **Review site**: A site on which people can post reviews for products or services.
- **School site**: A site on which teachers, students, or administrators can post information about current evens at or involving their school. Ugandan school websites generally use .sc, .ac, in the URL
- **Scraper site**: a site which largely duplicates without permission the content of another site, without actually pretending to be that site, in order to capture some of that site's traffic (especially from search engines) and profit from advertising revenue or in other ways.
- **Search engine site**: A website that indexes material on the Internet or an Intranet (and lately on traditional media such as hooks and newspaper) and provides links to information as a response to a query.
- **Shock site**: Includes images or other material that is intended to be offensive to most viewers.
- **Showcase sit**: web portals used by individuals and organisations to showcase things of interest or value.
- **Social bookmarking site**: A site where users share other content from the Internet and rate and comment on the content.
- **Social networking site**: A site where users could communicate with one another and share media, such as pictures, videos, music, blogs, etc, with other users. These may include games and web applications.
- **Warez**: A site designed to host or link materials such as music, movies and software for the user to download.
- **Webmail**: A site that provides a webmail service.
- **Web portal**: A site that provides a starting point or a gateway to other resources on the Internet or an Intranet.
- **Wiki site**: A site which users collaboratively edit its content. A web server is a computer that delivers Web pages requested by users. Multiple Web sites can be stored on the same Web server. A Webmaster is the individual responsible for developing Web pages and maintaining a Web site. Web publishing is the development and maintenance of Web pages.
    - **Content aggregator**: website that collects a certain type of information from various online places and group it.(video,data,search,news).

USES OF WEBSITES

- ✓ Good for advertisements and marketing of business
- ✓ Using a website for communication is faster and cheaper than using postal offices or radios
- ✓ Can help you to get some money due people who may bring their adverts to be uploaded for public.e.g.face book is visited by many people and this can attract businesses to advertise on it and the FB owner can earn some money
- ✓ Provides room for goods display, buying and selling of our goods online
- ✓ Improves on sales or business promotion
- ✓ Can help you sensitize your clients about the use of some goods they buy from your business and also keep on updating your customers
- ✓ It can help you win your competitor in one way or the other
- ✓ Can assist you when carrying out market research

Web addresses (URLs)

A Web address or URL (Uniform Resource Locator) indicates where the web page is stored on the Internet. The Uniform Resource Locator (URL) is the addressing system used on the Web.

Every Web page, graphic or other file has a unique URL (address), so that it can't be confused with anything else on the Internet. You need to type a URL *exactly* for your browser to locate the desired web page; otherwise you will access the wrong site or get an error message. Although URLs may contain spaces between characters, they usually do not.

The location box or address field on your browser indicates the URL of the page you arrived at after clicking a link.
Is an internet address that enables computers and other devices to visit it
e.g. www.ntares.sc.ug, www.yahoo.com , www.arsenal.com

Therefore to access to any site on the internet, you must know its URL (**Unique address for a Web page**). Normal URL will always consist of three parts.

Uniform Resource Locator (URL)
This is the addressing system used on the World Wide Web (WWW). It contains information about the method of access. E.g whether it an HTTP file or FTP file.

Example of a URL.
http://www.enteruganda.com/balloons/hotair.html

Parts of a URL.

http:// - (Hypertext Transfer Protocol) It indicates the way data is transferred over the Internet.

www. - This indicates a page on the world wide web.
enteruganda.com/ - Called Domain name. Indicates the name of the company, university, organization, and even the country.

http://	**www. Yahoo.**	**Com**
1	**2**	**3**

1= mode of accessing the site (protocol)
2=Domain name (The unique name that identifies an Internet site)
3= Designation for the site
A).The first part refers to a Protocol used to access the site (***A set of rules that govern the transfer of message between networks devices***) and may be any of the following
Protocol
It is a set of rules that govern the exchange of information. A protocol is a standard that controls or enables the connection, communication, and data transfer between two computing endpoints. A Protocol contains guidelines or rules that help in governing an operation on the internet and communications over it. There are many types such as FTP (File Transfer Protocol), HTTP (Hypertext Transfer Protocol), TCP/IP (Transaction Control Protocol/Internet Protocol), Telnet (TELecommunication NETwork) etc.

B).The second part of the part of the URL is known as "The Domain Name" contains the server Name to be accessed.

It can also contain the name of the company being accessed.

Domain Name

It is the identifier of computers connected to the internet. A domain name always contains two or more parts separated by periods called "dots". Example of domain name are mubs.ac, microsoft.com etc. the major categories of top level domain include; edu – Education, com – commercial entity, co – Companies, ac – academic institution, org – organisations usually non profit making, mil – military, gov – Government entity.

C). The third part normally ends in the designation code such as .com. these codes indicate a kind or type of company or organization being accessed or what they do e.g.

.com for business companies / commercial companies
.net for internet Service Provider
.org for non-profit making organization
.mil for military institutions
.info. information domain
.ac. academics institution
.biz Business domain
.gov for government agencies
.edu for education institutions such as Universities
.tv for mass-media broadcasting
.ug/.ca/.ke/.de/.au./.tz for country initials

Example two:

https://www.facebook.com/desire

https:is the protocol that work hand in hand with the web browser to retrieve (get) the website file from the service.

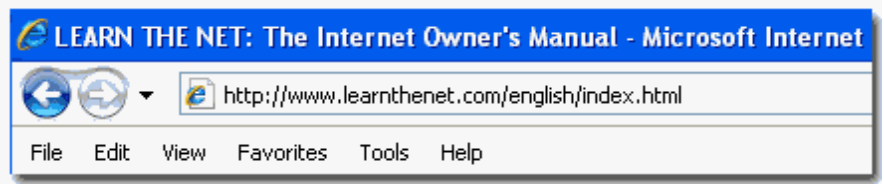
www.facebook.com :is the domain name (host name) .i.e. the name of the machine that runs the website service

desire:is the name of the file on the server.

Note: A domain name is the name or identification that defines a field of authority and control on the internet

There two types of domains

Top level domain
.com.this is a commercial top domain
Second level Domain
.co.uk
.com.ac
.gov.ac
Examples of URLs.
http://www.google.com
http://www.facebook.com
http://www.youtube.com
http://www.thesun.co.uk



Examples of URLs
http://www.bbc.com
The **home page** for the British Broadcasting Corporation website.

http://amkhan.blogspot.com
Blogs or weblogs for an individual.

ftp://rtfm.mit.edu/pub/
A **directory** of files at the Massachusetts Institute of Technology (MIT) that you can download.

news:rec.gardens.roses
A **newsgroup** about rose gardening.

Anatomy of a URL
Here's how to interpret the various parts of a URL: http:// www. shack.com /english/ start.htm

http://
Short for **Hypertext Transfer Protocol**, this indicates a Web document or directory.

www.
This indicates the presence of a web page on the **World Wide Web**. (These days, the "www" is optional.)

shack.com/
Called the **domain name**, it often indicates the name of a company, university, organization or individual who owns the website. It can also tell you the country of origin.

www.shack.com/
Together, these indicate the **web server name**.

english/
This is **directory** or **folder** on the web server that contains a group of related web pages within the website.

start.htm
This is a **web page** inside the folder. (The same file can be named start.html) A URL doesn't always include the name of the web page.

Reading a Typical URL

http://www.bisznet.net/resources/index.html

protocol	Web server name	directory	filename
http	www.bisznet.net	resources	index.html

The last part of the Web site name often specifies what type of organization operates the site. Some common ones are:

Address	Meaning	Example
.com	commercial organization (private business)	http://www.yahoo.com/
.gov	Ugandan government agency	http://www.ura.gov/
.net	network or communications entity	http://www.bushnet.net/
.org	Non-profit organization	http://www.nssf.org/
.mil	U.S. military	http://www.navy.mil/

In addition, the URLs of non-U.S. sites may indicate where the Web site is located, as in the following examples:

Address	Meaning	Example
.uk	United Kingdom (Great Britain)	http://www.bbc.co.uk/
.nz	New Zealand	http://www.converge.org.nz
.no	Norway	http://www.norwaypost.no
.za	South Africa	http://www.multichoice.co.za

Search engines

A search engine is a software program that can be used to find Web sites, Web pages, and files on the Internet.

Is a web site that collects, organizes and displays content from all over internet.

To find a Web site or Web page, the user just enters a word or phrase, called the keywords or search text, in the search engine's text box, and the search engine then displays a list of all the Web sites or Web pages that match the keywords or search text entered.

Examples include; Bing, Yahoo, Ask, My web search, Hotbot, Excite, You Tube, Info seek

The URLs of several Internet search engines are listed below:

Search engine	URL
Alta Vista	www.altavista.com

Excite	www.excite.com
Google	www.google.com
HotBot	www.hotboat.com
Lycos	www.lycos.com
WebCrawler.com	www.webcrawler.com
Yahoo	www.yahoo.com
Askme!	www.askme.com

How to use search engines

There are a gazillion Web pages out there - no exaggeration. Most of us can't even find the letter "z" on the keyboard. That's where search engines come in. The problem with search engines isn't that they don't find the info you want but that they find too much info. Keep reading to find out how to narrow down your search and find exactly what you're looking for.

So how do search engines work? Search engines put together a database of sites by sending "spiders" or "robots" to crawl through the Web, going from link to link. When spiders get to a Web site, they index most of the words on the available pages. When you use a search engine, the engine scans its database of sites to match your keywords to those same keywords in pages in the database.

Basic Search Tips

It's easy to improve your search results. All you need to know are some basics. Some search engines have menus to do this but for others you have to enter the right commands. The following basic commands should be plenty of info for most people and should work in most of the major search engines.

Be Specific

The more specific you are, the more info you'll find. Tell the search engine exactly what you're looking for. For example, if you're looking for science experiments, enter School Science Fair Projects instead of science projects. If you know it's a chemistry experiment, add the word chemistry to your search.

The + Symbol

Put the most important terms in your search first. To make sure the search finds pages with all the words you're looking for, put the + symbol in front of each word. For example, if you're looking for info on Britney and Justin (like if they're still together) then enter +Britney +Justin. Only pages that have both words will be on the list.

The - Symbol

If you're looking for something specific but don't want tons of other info that's not related to your topic, use the - symbol. For example, if you're looking for info on Tony Hawk but don't wanna read about his games, enter Tony Hawk -Pro -Skater -game -Playstation.

Using Quotation Marks

When you put your search terms in quotation marks, it's called a "phrase search." The search engine will give you pages that have the terms in the exact order of the words in quotations. For example, if you're looking specifically for a biography on Sarah Michelle Gellar, enter "Sarah Michelle Gellar Biography" and see what comes up.

Combining Symbols

Once you know how the above symbols work, try combining them to narrow down your search. A better search, than using a bunch of subtractions, might be to do the following: "Kylie Minoque" -Fever -"CD Review"

Booleans

Booleans (pronounced boo lee ans) can be used in most major search engines when they allow some kind of advanced searching. The most popular boolean operators are AND, OR and NOT. Booleans are a lot like the + and - symbols. AND means "include all of the words," OR means "include any of the words" and NOT means "exclude." For example, if you're looking for info on music and dancing enter music AND dancing. Your search will bring back sites that only include both those words.

Search operators

You can use search operators and other punctuation to get more specific search results. Except for the examples below, Google Search usually ignores punctuation.

Punctuation & symbols

Even though you can use the punctuation marks below when you search, including them doesn't always improve the results. If we don't think the punctuation will give you better results, you'll see suggested results for that search without punctuation.

Symbol	How to use it
+	Search for Google+ pages or blood types Examples: **+Chrome** or **AB+**
@	Find social tags Example: **@agoogler**
$	Find prices Example: **nikon $400**
#	Find popular hashtags for trending topics Example: **#throwbackthursday**
-	When you use a dash before a word or site, it excludes sites with that info from your results. This is useful for words with multiple meanings, like Jaguar the car brand and jaguar the animal. Examples: **jaguar speed -car** or **pandas -site:wikipedia.org**

"	When you put a word or phrase in quotes, the results will only include pages with the same words in the same order as the ones inside the quotes. Only use this if you're looking for an exact word or phrase, otherwise you'll exclude many helpful results by mistake. Example: **"imagine all the people"**
*****	Add an asterisk as a placeholder for any unknown or wildcard terms. . Example: **"a * saved is a * earned"**
..	Separate numbers by two periods without spaces to see results that contain numbers in a range. Example: camera **$50..$100**

Search operators

Search operators are words that can be added to searches to help narrow down the results. Don't worry about memorizing every operator, because you can also use the Advanced Search page to create these searches.

Operator	How to use it
site:	Get results from certain sites or domains. Examples: **olympics site:nbc.com** and **olympics site:.gov**
link:	Find pages that link to a certain page. Example: **link:youtube.com**
related:	Find sites that are similar to a web address you already know. Example: **related:time.com**
OR	Find pages that might use one of several words. Example: **marathon OR race**
info:	Get information about a web address, including the cached version of the page, similar pages, and pages that link to the site. Example: **info:google.com**
cache:	See what a page looks like the last time Google visited the site. Example: **cache:washington.edu**

Note: When you search using operators or punctuation marks, don't add any spaces between the operator and your search terms. A search for **site:nytimes.com** will work, but **site: nytimes.com** won't.

The concept of Netiquette (Technology)

Netiquette or net etiquette refers to etiquette on the internet.
They are guidelines for communicating on a network such as the internet.
Good netiquette involves respecting others, privacy and not doing anything online that will annoy or frustrate other people. Three areas where good netiquette is highly stressed are e-mail, online chat, and newsgroups. For example, people that spam other users with unwanted e-mails or flood them with messages have very bad netiquette. If you're new to a newsgroup or online chat room, it may help to observe how people communicate with each other before jumping in.
The word netiquette is made up of two words, NET which stands for a network, and ETIQUETTE which means good behaviors' that can be showed to others OR *The acceptable code of polite behavior in society or among members of particular profession or group*

Now the combination of the two words has meaning. i.e.***- Good behaviors that can be shown on a network OR***

-The correct or acceptable way of communicating on the internet

It spells out the proper manners on the internet, especially during chatting. The network can be LAN, Intranet, Internet or any other. Like many public areas have etiquette, also when you are on a network you need to mind about other people soon should not forget that at the other end of the connection there is a person and off colored remarks and inconsiderate comments are as of offending via a computer screen as in face to face encounter/communication!!!

It's therefore important to note that without rules there is no order and without order there is no organization.

Some of the rules of netiquette are as follows

- Use the golden rule-internet Etiquette's golden rule is to treat others the way you want to be treated. i.e. Do unto others online as you would want them do to you
- Be nice to others no one likes to interact with people who are mean. Being mean is anti-social and being nice is social
    - ✓ Spell check the message before you send it
    - ✓ Don't write the whole massage in capital letters. Using capital may appear like you are shouting at someone.
    - ✓ Tell the truth
    - ✓ Be yourself
    - ✓ Avoid sending message at night coz this may look like interference
    - ✓ Do not lurk: it's not good to receive a message and you avoid replying or responding on to it.
    - ✓ Mind about quality of the message than the quantity
    - ✓ No spamming: spam messages are the one that goes or sent to the people that are not supposed to receive them
    - ✓ Do not flame (over react when annoyed by someone). Flaming on internet means sending a message that will anger the recipient .Flames are sometimes sent by people who are annoyed but this may bring out problems

"The greatest thing is to know when to speak and when to keep quiet, because proper words in a proper place makes a true definition of a style "

Using the e-mail:

E-mail, or electronic mail, is the transmission of messages via a computer network such as a local area oft the Internet.

The message can be simple text, or can include an attachment such as a word processing document, a graphical image, an audio clip, or a video clip.

E-mail software creates, sends, receives, forwards, stores, prints, and deletes e-mail messages.

An e-mail address is a combination of a user name and a domain name that identifies a user who sends or receives e-mail. (e.g., for the e-mail address mwondhamd@live.com, *mwondhamdmd* is a user name, *live.com* is the domain name.)

Most e-mail programs allow users to create an address book, which contains a list of names and e-mail addresses. Most ISPs provide their users with a mailbox, which stores their e-mails, on a special server called a mail server.

When an e-mail arrives at the recipient's mail server, the e-mail transfers to a POP or POP3 server, unitl the recipient retrieves it with his or her e-mail software.

Popular e-mail software includes Microsoft Outlook Express and Eudora. Some Websites provide

e-mail services called webmail, which can be accessed by the Web browser.

Parts / Components of an Email Address

An email address has three main components. For the sake of simplicity, this is how it can be demonstrated:

accountname @ domain.com

1) Domain name: This part of the email address is the name of server that hosts your emails. It is not necessary that the domain name would always be of a .com kind. It can be anything from the standard list of domain extension (e.g. .org , .net , .gov, .co.in etc.)

A server could that be of a free web-based email service provider (like Gmail, Hotmail, Yahoo! Mail etc.) or server may belong to a specific organization (for example, if you're working in a company named XYZ … the server name could be xyz.com)

2) Account name (or username): An email hosting server may host emails for one person —or millions of persons. You can imagine your account like a pigeon-hole or letter box whose key only you have. This key is called… yes, you guessed it right!… it's called password ! Allow me to add a word of advice here. You should set your passwords to be strong. Weak passwords can compromise security of your email account.

All the email account names on a server has to be unique so that the server can send emails to various accounts without any confusion. There cannot be two accounts with the same name on a server. Therefore, two techwelkin @ gmail.com are not possible. But *techwelkin @ gmail.com* and *techwelkin @ yahoo.com* are possible.

3) @ Sign: First thing first, in case of email address, this symbol is pronounced as **at** and *not* as **"at the rate"**

This symbol is used in an email address to separate account name from domain name. When a computer tries to understand an email address, it splits the address from @ sign. The part of email address that comes before @ is account name and the part that comes after it is domain name. Simple!

There must be **one (and ONLY one)** @ sign in an email address. If the address does not have this sign —it is not a valid email address.

Ok, now that we know the structure of email address, let's understand a few more things:

1. Email addresses are not case-sensitive. This means it does not matter whether you write address in uppercase or lowercase or mixed case. (**ONLY rarely** the account name may be case-sensitive but domain name is never case-sensitive)… All free web-based email services

use non-case-sensitive addresses… Therefore: *TECHWELKIN @ GMAIL.COM* is same as *techwelkin @ gmail.com*

2. Conventionally, however, email addresses are written in small letters. But as said in previous point, it would not matter even if you write it in capital letters.
3. To show the account holder's real name against an email id, the **email id is enclosed in angular brackets**.
   For example:Lalit Kumar <techwelkin @ gmail.com>
4. Account name cannot be longer than 64 characters and domain name cannot be, practically, longer than 254 characters.

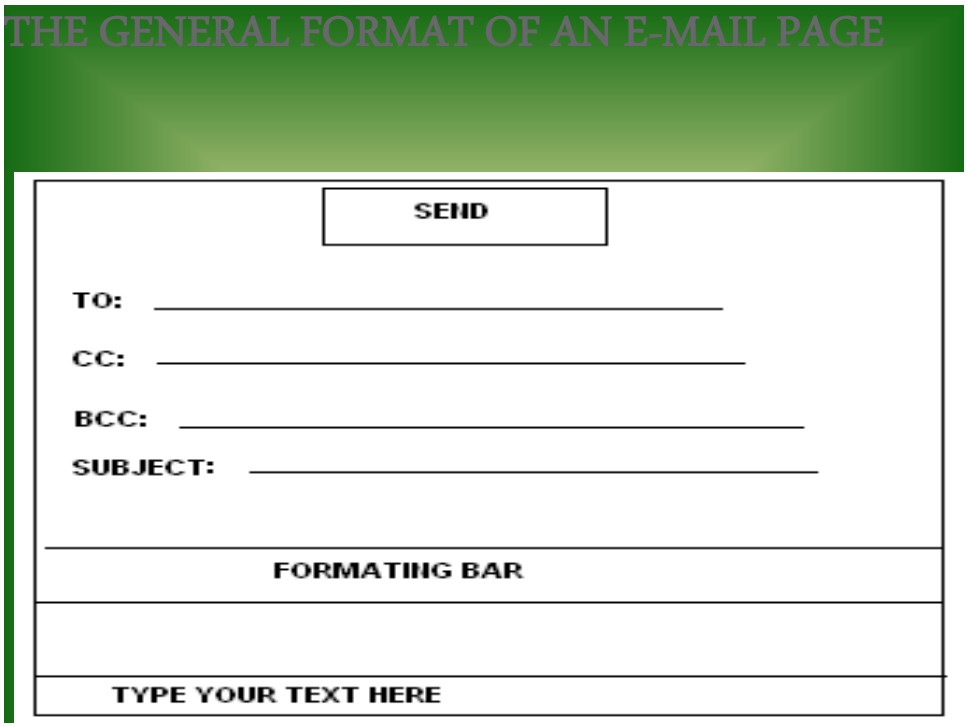
Example / parts of an Email address

Ugandan_teachers@yahoo.com

- Ugandan Teachers – user name
- @ (at) –
- yahoo - the domain name (mail server)
- . (dot)
- com - indicates the type of organization

Abbreviation	**Type of Domain**
com	Commercial, business, companies
org	Non-Profit Organizations
net	Network providers
edu	Educational Institutions
gov	Government agencies
mil	Military organizations

STRUCTURE OF AN EMAIL



An e-mail is made up of many components that include:

- **Check mail:** Used to check incoming mails.
- **Compose, new**: enables one to write a new e-mail.
- **Subject**: the user writes the title of heading of the message.
- **To**: write the correct e-mail address of the recipient of the e-mail.
- **C.C.**: make a copy of work to other recipients, but all will know that others have received a copy of the e-mail. In otherwards in Carbon copy, Type addresses of those who will receive copies.
- **B.C.C.**: makes a copy of an e-mail to other recipients, but all will not know that others have a copy of the same e-mail. in other words, Blind Carbon Copy is used to send a copy of an email without the notice of the other recipients.
- **In-box**: shows that list of all incoming e-mails.
- **Delete**: removes an e-mail from the in-box.
- **Flag as read**: shows that the e-mail was read.
    - **Body**: the body of a message contains text that is the actual content
    - **Attchments**: Is a file that you can include as part of your email massage.
    - ***Note:*** E-mail addresses in these textboxes that are more than one must be separated with commas

Advantages of Electronic mails

- Reduces paper costs and irritation.
- Provides immediate delivery feedback.
- They offer provision for attachments.
- Secured by passwords.
- E-mails can be conveniently sent to multiple recipients.
- By providing a list of senders and subjects one can prioritize on which messages to read first.
- Sending is cheaper.

- There is a possibility of multimedia mails where they can be received as voice mails and read aloud.
- Can easily go across many time zones (continents).

Disadvantages of Electronic mails

- E- mails introduces viruses
- E-mail is not secure i.e. snoopers and hackers can read it as it tallies along in the public ways that make up internet. In order that this problem is solved an Encryption code can be used. An Encryption is a software that scrambles the mail so that only those with proper encryption key can read it
- Involves time consuming sorting through lots of messages every day.
- E-mails are not very private through tapings.
- System overloads can cause unnecessary delays

Advantages of using an e-mail over ordinary mail

- Emails are delivered extremely fast when compared to traditional post.
- Emails can be sent 24 hours a day, 365 days a year.
- Webmail means emails can be sent and received from any computer, anywhere in the world, that has an Internet connection.
- Cheap-when using broadband, each email sent is effectively free. Dial-up users are charged at local call rates but it only takes a few seconds (for conventional email, e.g. text only) to send an email.
- Emails can be sent to one person or several people.
- Computer files can be attached to an email.
- Records and copies are kept automatically.

Disadvantages of using an e-mail over ordinary mail

- A computer and other hardware (e.g., a modem) are required.
- It is not secure
- It is easy to get on junk mail lists
- The recipient needs access to the Internet to receive email.
- Viruses are easily spread via email attachments (most email providers scan emails for viruses on your behalf.
- Phishing – sending an email to a user falsely claiming to be a legitimate company to cheat the user into providing information, such as personal information and bank account numbers on a fake website. The details will then be used for identifying theft.
- No guarantee the mail will be read until the user logs on the checks their email.

Cyber crime

Cyber-crime refers to online or Internet-based illegal acts. These include:-

- **Spam**: or the unsolicited sending of bulk email for commercial purposes is unlawful. This involves sending bulk mail to persons not known to you.
- **Fraud**: is any dishonest distortion of fact intended to let another to do or refrain from doing something which causes loss. In this context, the fraud will result in obtaining a benefit by:
    - Altering computer input in an unauthorized way. This requires little technical expertise and is not an uncommon form of theft by employees altering the data before entry or entering false data, or by entering unauthorized instructions or using unauthorized processes.
    - Altering, destroying , suppressing, or stealing output, usually to cover up unauthorized transactions: this is difficult to detect,
    - Altering or deleting stored data;

    - Altering or misusing existing system tools software packages, or altering or writing code for fraudulent purposes.
- **Obscene or offensive content**: the content of websites and other electronic communications may be unpleasant, obscene or offensive for a variety of reasons. In some instances there communications may be illegal e.g. pornography.
- **Harassment**: it directs obscenities and belittling comments at specific individuals focusing for example on gender, race, religion, nationality, sexual orientation.
- **Threats**: it involves written or recorded messages intended to scare an individual or a group of individuals as a group. This may involve writing threatening, belittling messages to the user.
- **Drug trafficking**: drug traffickers are increasingly taking advantage of the Internet to sell their illegal substances through encrypted e-mail and other Internet technology. Some drug traffickers arrange deals at internet cafés, use courier Web sites to track illegal packages of pills, and swap guidelines for access in say chat rooms. The rise in Internet drug trades could also be attributed to the lack of face -to -face communication.
- **Cyber terrorism**: can be defined as an act of terrorism committed through the use of committed through the use of cyberspace or computer resources (Parker 1983). As such, a simple propaganda in the Internet, that there will be bomb attacks during the holidays can be considered cyber terrorism.
- **An online predator**: is an adult Internet user who exploits vulnerable children or teens usually for sexual or other abusive purposes.

CLOUD COMPUTING

The practice of using a network of remote servers hosted on the internet to store, manage, and process data rather than local server or a personal computer.
Cloud computing, or something within the cloud, is an expression used to describe a variety of computing concepts that involve a large number of computers connected through a real-time communication networks such as the internet.

Advantages of Cloud Computing

- **Cost Efficient**

  Cloud computing is probably the most cost efficient method to use, maintain and upgrade. Traditional desktop software costs companies a lot in terms of finance. Adding up the licensing fees for multiple users can prove to be very expensive for the establishment concerned. The cloud, on the other hand, is available at much cheaper rates and hence, can significantly lower the company's IT expenses. Besides, there are many one-time-payment, pay-as-you-go and other scalable options available, which makes it very reasonable for the company in question.

- **Almost Unlimited Storage**

  Storing information in the cloud gives you almost unlimited storage capacity. Hence, you no more need to worry about running out of storage space or increasing your current storage space availability.

- **Backup and Recovery**

Since all your data is stored in the cloud, backing it up and restoring the same is relatively much easier than storing the same on a physical device. Furthermore, most cloud service providers are usually competent enough to handle recovery of information. Hence, this makes the entire process of backup and recovery much simpler than other traditional methods of data storage.

- **Automatic Software Integration**

  In the cloud, software integration is usually something that occurs automatically. This means that you do not need to take additional efforts to customize and integrate your applications as per your preferences. This aspect usually takes care of itself. Not only that, cloud computing allows you to customize your options with great ease. Hence, you can handpick just those services and software applications that you think will best suit your particular enterprise.

- **Easy Access to Information**

  Once you register yourself in the cloud, you can access the information from anywhere, where there is an Internet connection. This convenient feature lets you move beyond time zone and geographic location issues.

- **Quick Deployment**

  Lastly and most importantly, cloud computing gives you the advantage of quick deployment. Once you opt for this method of functioning, your entire system can be fully functional in a matter of a few minutes. Of course, the amount of time taken here will depend on the exact kind of technology that you need for your business.

Disadvantages of Cloud Computing

- **Technical Issues**

  Though it is true that information and data on the cloud can be accessed anytime and from anywhere at all, there are times when this system can have some serious dysfunction. You should be aware of the fact that this technology is always prone to outages and other technical issues. Even the best cloud service providers run into this kind of trouble, in spite of keeping up high standards of maintenance. Besides, you will need a very good Internet connection to be logged onto the server at all times. You will invariably be stuck in case of network and connectivity problems.

- **Security in the Cloud**

  The other major issue while in the cloud is that of security issues. Before adopting this technology, you should know that you will be surrendering all your company's sensitive information to a third-party cloud service provider. This could potentially put your company to great risk. Hence, you need to make absolutely sure that you choose the most reliable service provider, who will keep your information totally secure.
- **Prone to Attack**

Storing information in the cloud could make your company vulnerable to external hack attacks and threats. As you are well aware, nothing on the Internet is completely secure and hence, there is always the lurking possibility of stealth of sensitive data.

IMPORTANCE OF CLOUD COMPUTING

- 24 hrs information accessibility on internet
- Wide storage space for the files and other application
- Availability of free online running programmer like online photo editing software
- Open to every device that can connect to internet
- Some clouds like yahoo, Gmail, face book and others are free
- Fast and effective communication. Clouds allows user to attach more files like pictures and this can supplement on the coounication

NB.They are different types of cloud computing and some of the them includes
Public cloud: where many people or organization can share infrastructures
Community cloud: here an organization or a community can use its infrastructure. For example workers, administrators and the clients

Revision questions

1. (a) Define the term Internet.
   (b) What is netiquette?
   (c) Mention any **four** requirements for accessing the Internet.
2. (a) Outline **five** services of the Internet
   (b) Briefly, explain seven advantages and six disadvantages of using the Internet.
3. (a) What is e-commerce?
   (b) State **five** advantages and disadvantages of e-commerce to a business.
4. (a) Write www in full.
   (b) State the difference between www and the Internet.
5. (a) Define a web browser.
   (b) Give **five** examples of web browsers in common use.
   (c) Explain briefly the following websites:
      i) Affiliate
      ii) Blog
      iii) Content site
      iv) Gripe site
      v) P2P torrent site
      vi) Social networking site.
6. (a) Give the difference between a webpage and a website.
   (b) State **four** examples of search engines.
7. (a) What are search engines?
   (b) State **four** examples of search engines.
8. (a) What is an e-mail?
   (b) State **four** advantages and five disadvantages of using an e-mail.
9. (a) Briefly, explain how an e-mail is transmitted.
   (b) Give the meaning of the following:
      i) To
      ii) Compose, new
      iii) Subject.
      iv) Attachment
      vi) Flag

INTRODUCTION TO DATA COMMUNICATION AND COMPUTER NETWORKING