Internet Concepts

1 ISP – This term Internet Service Provider is used to refer to the company which is providing our Internet connection. Therefore, for all your internet needs, first you need to connect to the ISP and then through the ISP you will be able to connect to the whole world.

2 FTP – This File Transfer Protocol is another service provided on the Internet. Using this service, servers will be able to provide their files to client computers in a format which is more suitable for files.

3 Torrent – A Peer to Per sharing system where data comes not from 1 centralized distributor but from many other clients, people downloading the file. Each client shares/sends pieces of data with others reducing the cost and load on any given individual source. People who want to download the file are called 'Peers' and the 'tracker' is a single computer maintaining the list of clients from where to download. The group of peers are called a 'swarm'.

4 Logon Websites – Since the Internet is open to all, some websites include some sections which are restricted to a group of users. This restriction is made by enabling the user to Logon into the website using a Username and a Password. The process to get a website Username & Password is called Registration. Some Registrations are free of charge while others are against payment.

5 Spam – The term SPAM refers to unsolicited e-mails. Giving your e-mail address to many websites may result in your e-mail being abused and your Inbox being bombarded with hundreds of unwanted advertisement e-mails.

6 Fraud – Never give your details or worse still credit card details to anyone or any company unless you know that you are dealing with a reputable organization. You may find that the items you purchase are never delivered, or worse that your credit card details were used fraudulently to make other purchases.

7 Submitting Forms – Some websites provide a space for writing. After filling in the required in the necessary information, we send the information using a button on the web page. This sending of information to a website is usually called Submitting.

8 Bookmarks/Favourites – Whenever we need to take note of a website address, we bookmark it in our browser's Bookmarks/Favourites. The advantage is that if in the future we need to revisit the website, we use its address in our organised Bookmarks folder. Bookmarks can be added thorough the main menu while viewing the web page. Bookmarks can also be organised into Folders. Remember that bookmarks save only the address. Some browsers include also Dialups to save the website on the background starting page of the browser.

9 Search Engines – A Search Engine is a special website which enables us to find other website addresses. A Search engine works in this way:

- First, the Search Engine browses millions of websites by itself.
- While browsing, it keeps relevant information about the visited websites.

- When we use the search tool of a Search Engine, the Search Engine database displays a special webpage with the websites which may be related to our search.
- On clicking the links, we will then be able to check out these websites without typing or remembering any website address.
- In our Search, we should only include the keywords of the required stuff and if we need to further fine tune our search we use the engine's Advanced Search tools.
- The best search engine on the web is currently: www.google.com.

10 Printing – All browsers support the basic printing of a webpage. Still, the printing of webpages directly from browsers tend to waste a lot of paper and ink to print unwanted material – such as advertisements, menus, borders, backgrounds etc. Therefore it is more advisable to Copy->Paste Special the required material from the webpage into a word processor and then print it from there.

Online - Shopping

1. Steps – Steps required to buy something online:

- Browsing to the website from where you need to buy something.
- Search for the required product in the website's search engine.
- Since most websites use the Basket/Trolley shopping system, select the products you need, by clicking on the 'Add to Basket' icon.
- When finished Adding items, click on your Shopping Basket to check the items you have got in it. Change the quantities or delete the items if necessary.
- Then “Proceed to Checkout” and most websites will require that the user Registers with the website or Logs In/Signs In with his Username & Password if he has already used the website.
- Then you will be prompted with information and options which enable you to insert the Dispatching Address (where to send the physical goods).
- Finally and most importantly you insert the Credit Card details – from where the on-line shop is going to get the money. Try to use PayPal for a secure transaction.
- Finally, press Finish, Purchase or Pay ONCE and the shopping is done.

2. Security – Since on the Internet there exist thousands of fake, cheating virtual online-shops, the following are some tips to verify whether the website is a genuine one or a fake:

- When inserting Credit Card details, a genuine online-shop will provide an Encrypted webpage (your browser will show a closed padlock on the screen);

- The Digital certificate should be verified by a trustable Authority (your browser will warn you about it if it is expired or the Authority is not a well-known one);
- The website includes a real physical contact address (on Earth not on the Internet) and the Contacts include real working telephone numbers and not only E-mails;
- The website is a popular one – your friends have bought things from it and so it can be trusted.

If any of these is missing, better not use its services and find another more secure shop. If you suspect that your Credit Card details were used illegally, immediately inform your bank to stop all card transactions and order new Credit Card.

3. Phishing - The term comes from "Password Fishing". Phishing is a type of deception designed to steal your valuable personal data, such as credit card numbers, passwords, account data etc. The criminal tricks their victim into believing they are communicating with a trusted source. Ex: users receive emails that attempt to fool them into disclosing online banking passwords, by sending them to a site that looks very similar to of the bank's Web site.

4. Website cookies – To enable simple user identification, some websites use Cookies. A cookie is a very short code (numbers & letters) which is sent over by the website to uniquely represent your computer. Afterwards, whenever the browser contacts that website, the browser sends this cookie and in this way the website will identify the user. This is usually used for automatic personal greetings.

5. Internet Cache – Whenever the browser accesses a webpage, the browser downloads the text, images and any other objects related to that webpage. Since downloading takes time, browsers uses a system of cache which means that a selection of the automatically downloaded stuff is saved temporarily on disk. If the user then goes back to that website, the stuff is loaded from the disk instead of downloading it again.

6. Digital certificates – Everybody connected to the Internet can create his own website or web server. In this way anybody can say that his is someone else, since there is NO WAY to prove that a website is a genuine one or a fake. To minimize this problem, Digital certificates were invented. From a well known authority, such as Microsoft or Verisign, genuine websites will obtain a digital certificate signed by these trusted authorities. Clients using these websites will be able to verify their certificates, thus making sure that the website is not a fake. (since we trust Microsoft that it checked out that the website is genuine).

7. Encryption – When we need to send important confidential data (Credit Card numbers) over the Internet, we must make sure that our data is not sniffed (intercepted, copied, edited) by illegal users/programs. Therefore a system to Encrypt (scramble) the data sent over the Internet was invented. Nowadays we normally use at least a 128-bit encryption. In this way we are sure that even if someone intercepts the data, he/she will not be able to make any sense out of it. Ex: hello encrypts to 'ifmmp'

8. Firewalls – While connected to the Internet, more important than Anti-viruses are Firewall programs. Firewalls enable the user to control all the communication between your computer and the Internet. In this way we can identify programs/viruses which are trying to connect to the Internet without our permission and also block illegal users which are trying to connect to your computer without permission. Nowadays, most anti-virus programs include a firewall. Still stand-alone firewalls exist: www.zonealarm.com

9. View History – To view a list of the websites we visited, we use the History icon in the Standard toolbar. This is useful to retrace a website you visited but forgot its address.

10. Delete Cache – To delete the temporary Internet files saved on your hard disk which were used to help cut on downloading time, use the Tools->Internet Options->General tab.

E-Mail – Electronic Mail has many big advantages, and these include: High Speed delivery (almost instantaneously), Low cost or Free of charge, Worldwide Portability - can be accessed from anywhere around the globe. Still it has one single disadvantage – Only digital/computer information can be sent, physical objects cannot be sent!

An E-Mail address – An E-Mail address consists of 3 essential parts. The username of the receiver, the @ symbol and the name of the server to which the receiver is subscribed for the E-Mail service. Ex: joan@hotmail.com Joan is the username and Hotmail.com is the server providing the E-mail service. Spaces and special characters are not allowed in E-mail addresses and all characters are kept small letters (no Capitals).

E-mail Netiquette – Although E-mail is practically used everywhere and is very useful, abuse is ruining the E-mail service. Nowadays it is very common to open the E-mail box and find unsolicited, unwanted, junk e-mails. Apart from preventing the disclosure of your E-mail address and other people's addresses one should follow these few steps when writing an E-Mail.

- First, the Subject should be clear enough to give an idea about the contents of your E-mail
- The message should be short & sweet (brief & to the point -since most people don't like to read lots of text)
- Do not Forward fake advertisements or useless chain letters!

E-mail Box Size – Since E-mails take physical space on the Hard Disk of the server, E-mail boxes are given a limit on their size. If that limit is reached, the server providing the E-mail service will send back (the sender will be notified that the delivery was unsuccessful) all your received e-mails until you Delete messages make some space in your Mailbox.

Compatibility – Using simple text-only formatting in an E-mail guarantees that all users will be able to read your e-mail. Therefore, the simpler and shorter an E-mail is, the better.

Viruses – Using E-mails, viruses can travel from one computer to another and infect all

of them. When you receive an unexpected E-mail, from an unknown user with an attachment, make sure that you delete the E-mail without downloading the attachments.

Security – The common E-Mail service provides no level of security. The messages are sent as plain text and anyone on the Internet sniffing the communication can easily read your E-mails. Therefore, plain E-mails should never contain confidential information such as passwords, bank accounts or worse still credit card numbers. To make e-mails safer we can use Encryption tools, encrypted attachments and to digitally sign an e-mail (to verify the sender) we can also use personal Digital Certificates.

Using E-Mail

Registering for an E-mail address – Before we can start sending and receiving E-mails we first need to apply/register for an E-mail address. Many websites provide free Web-mail services while ISPs usually provide real POP3 E-Mail. The POP3 email is the original and fastest type of E-Mail is usually against payment, provide more storage space & large size e-mail handling, better SPAM and anti-virus scanning tools and above all provide a faster service.

IMAP - Internet Message Access Protocol. It is a system used to check & send e-mail, where emails reside on the server instead of the client application. Messages are read, stored, and organized on a remote server, rather than downloading them all to a single client computer, as is usually done with POP3.

Programs – POP3 & IMAP E-mail programs exist, such has Opera Mail, Evolution, Thunderbird and MS Outlook Express. Free WebMail addresses can be registered on Google Mail, Windows Live and Yahoo.

Logging In – To check out the contents of your E-mail box, we first Log In/Sign In. Using the Username (the first part of your E-mail address) and the Password, the e-mail server verifies that you are the real owner of the E-mail box.

The Inbox – This box contains all the messages you have received in your E-Mail. Messages are viewed/opened by clicking on the Subject of the message. We can Delete unwanted messages, Move and organise messages into different folders and Compose new messages. Unopened messages are usually displayed in a Light Blue colour using a Bold font effect, while already opened messages are shown in a Black color with no special font effect.

Emails - Whenever we open an E-Mail we can:

- Reply (Compose a new Message to the sender),
- Reply All (Compose a new message & send it to all the receivers it was originally sent),
- Forward (send it as it is to other people, including the attachments)
- Delete (Delete the message).

- To open attachments, when using POP3 E-mail simply double-click on them while in WebMail you first need to download them to your computer before opening them.

Compose – To write a new message, press New or Compose. An e-mail message should include:

- The receiver's exact e-mail address (compulsory),
- The Subject (a brief title for your E-Mail)
- The Message Body (the Letter).
- If we need to send any pictures, documents or files with the E-mail we need to use the Attach button. After Browsing for the file on our Hard Disk we press OK and the file is uploaded and attached to the E-mail.
- We may also Tag the message as Urgent/High Priority. (Still this does not mean that the E-mail will be delivered / considered differently from the Normal priority E-mails.

Addressing Options – When sending emailos to:

- One person, we fill-in the 'To' text box with the recipient's address.
- To a large number of people, we insert their E-mail addresses one after the other (separated by a comma) in the 'CC' text box. The CC (Carbon Copy) option discloses all the addresses of our recipients.
- The BCC (Blind Carbon Copy) can be used so that the recipients will only be able to see their address in the E-mail.

Address Books/Contacts – Most email programs support the use of an E-mail Address book/Contacts. We can add recipients' e-mail addresses and avoid typing & remembering the addresses every time we need to send an e-mail.

Sent/Outbox – Saves a copy of the sent e-mails. Sometimes, these mails are deleted automatically when you log out.

Recycle Bin/Trash – When we delete an E-mail it is usually sent to the Recycle Bin of the e-mail program. Sometimes, these mails are deleted automatically when you log out or after a number of days.

E-Mail Folders – By creating folders we my organise the sent and received E-mails in appropriate folders.

Printing Messages– To Print a message, simply use the menu File->Print. When using WebMail try to look for the Printer Fiendly webpage which tries to eliminate all the unwanted menus, backgrounds and colours from the WebMail webpage.