Introduction to Internet

Internet is a worldwide system of interconnected computer networks. It connects several millions of computers all over the world. There is no central computer. All computers are placed at different places and are connected to each other by phone lines, cables or wireless connections. Any two computers connected to the internet can exchange information. The internet is therefore a very fast and efficient way of sending information. According to recent statistics, there is an estimated 3,179,035,200 internet users worldwide. The number of Internet users represents nearly 40 per cent of the world's population. The largest number of Internet users is in China, followed by the United States and India.

This chapter is organized as follows. It gives an introduction to internet and its applications in day to day life followed by basic requirements for connecting to internet. Subsequently a brief on World Wide Web, Web browsers, search engines, online safety measures are given. Lastly, a step by step procedure for creating e-mail ID is given in the chapter.

Internet has been the most beneficial technology of the modern times which supports us not only in our daily lives, but also our personal and professional lives developments. The internet helps to attain this in several ways. Emails, blogging, chatting are the modern ways of communication. All the information you want regarding anything is now just a click away. E-marketing, e-business, e-commerce and internet shopping are becoming popular really fast. To make sure your search for the required information is fast and smooth, search engines are created, that can open up a diverse range of websites, loaded with information that you may need. The internet is therefore the largest encyclopedia for everyone, in all age categories. Movies, music, videos and games are all available for your entertainment. The top 5 most popular websites in the world are: Google, Facebook, YouTube, Yahoo, and Baidu (basically the Chinese version of Google).
To connect to internet, computer/mobile, communication channel, modem, browser and Internet Service Provider are needed. Computer is the most common device used to access the internet. A communication channel, such as a telephone line, a cable or a wireless signal (WiFi) is required to connect to internet. A modem, which is a hardware device that converts computer information into a suitable form, is needed for sending over the communication channel. It allows us to communicate with other computers.

A software called browser helps to display the text and graphics available in a webpage on your computer. Google chrome, internet explorer, Mozilla Firefox are some of the popular browsers. An Internet Service Provider (ISP) such as BSNL, Idea, Airtel is required to provide connections to homes and offices.

**World Wide Web**

The fastest growing area of internet is World Wide Web (WWW). The web enables you to access information stored in computers connected to the internet. Web consists of millions of websites. Most of these websites are divided into pages called web pages. There is one main page or starting page called as Home page. You can go to any other page in the site from the Home page. The links to other pages are called hyperlinks. They are not limited to pages in the sites you are in. Some hyperlinks on a page may take you to page on another site on another computer. Thus hyperlinks can take you on a worldwide tour of connected pages in different computers containing related information. Moving from one site to another on WWW is called surfing the Net. HTTP protocol (hypertext transfer protocol) is one of the ways to transmit data in the web. It also utilizes special software called browsers to access websites and their graphics, sounds and animations. Google Chrome, Internet Explorer and Mozilla Firefox are popular browsers.

**Searching for information**

The internet provides easy access to new and varied information. Each site on the internet has a unique address. This unique address is known as URL (Uniform Resource Locator). A URL indicates the location of the website on the web. If you want to access the site, type in the URL on the Address bar of the web browser and press Enter. In a few seconds the Home Page of the site will appear on the screen. So the information about the link is provided to the browser by the URL. There are typically four main parts to a URL or web address. Let’s look at the example below.

http://www.cmfri.org.in/

(a) The http:// helps your web browser to locate the webpage or website and to display it for you to see. Most browsers will automatically add this prefix, so you don’t have to worry about typing it every time.
(b) The www stands for World Wide Web. This means that the page you're looking for is somewhere on the World Wide Web. For some websites, it's not even necessary to type in the “www” part.

(c) The next section, which is “cmfri” in this example, is the name of the webpage or website. It is flanked by dots on either side which separate it from other sections of the web address.

(d) The .org .in here is the top level domain name. A domain name is an identification label that defines a realm of administrative autonomy, authority, or control in the Internet. .org means sites belonging to non-profit organisation, .in means the Internet country code for India. Some common domains are, .com (means that you're looking at a commercial site, or a site that someone has paid to use) .edu (sites for educational institutions) and .gov (sites sponsored by state or central government).

Sometimes you may not know the URL of any website that provides the information, then special programs called search engines can be used to find out the sites. A search engine searches for the keywords specified by the user. It is especially used to find particular site on the internet. Google is the most popular search engine in the world. 79% of internet users use Google as their search engine, followed by Bing (9%), Yahoo (8%), and Ask.com (1.5%). Google is pretty much simple search box. As you begin typing, Google will begin to autosuggest words or phrases which it thinks you might be searching for. Once you do a search, you’ll be taken to a new page with results for your search keyword(s). For instance, if you do a search for internet, you will see the list of results for the search “internet.” At the top of the page on the far right you will notice it says “Results 1-10 of about...” That means that results displayed on the page right now are just the first 10 of however many total results there were for your keyword.

**Internet Safety**

Worms, trojans, spammers, phishers and viruses are funny-sounding names, but these are part of the dark side of the internet and the consequences aren't very funny. These are programs designed to infect your computer without your knowledge and they can slow down your computer, spy on you, or possibly even destroy data and cause your computer to “crash” (or stop working). Internet fraud is also something to be concerned about.
Phishing and other scams can cost you time, aggravation, money or even steal your identity. The fact is, the internet can be fun, entertaining, educational, and many other wonderful things, but anyone can be on the internet, and that includes malicious people and criminals as well as good people. In order to be safe online, it's important for you to be aware of the dangers. If you are using a computer, always be sure to run current, updated antivirus software to help protect yourself from the many different types of computer viruses and other malware. You can also help yourself stay protected from viruses by not opening any emails (especially email attachments) that seem strange or are from people you don't know. To protect yourself scam or theft, avoid giving out personal information on the internet. Think carefully before posting pictures or videos of yourself, never give out your passwords and don't befriend people you don't know. Internet safety is an on-going process that you should continue to educate yourself about.

Creating an E-Mail Account

Email, short for Electronic Mail, is a component of internet. It is a fast and economic way of sending messages to individuals and groups of people. Messages can include text, pictures or animations.

This section discusses on creation and accession of an email account, opening and reading of received mails and composing and sending mails. Several sites on the internet allow you to create an email account and send and receive email and attachments for free, for example gmail.com, hotmail.com, rediff.com, yahoo.com. This session focus on the services available through Gmail as it is free and is the most popular email service available today.

E-Mail Address

To send or receive an email, you must have an email address. This address is unique in nature and it has two important parts. The first part is the ‘user name’ and the other is the ‘domain name’. These two are separated by a special symbol @. The domain name can be same for lots of people. For example cmfri@gmail.com and cmfri1@gmail.com are two addresses with the same domain name gmail.com. But the user names cmfri and cmfri1 are different and hence the addresses are different.

Setting up an email account

1. Connect to the Internet by double-clicking the Google chrome, Internet Explorer or Firefox desktop icon.
2. Go to the Gmail site by typing gmail.com into the address bar at the top of the screen, and press the Enter key on your keyboard.
3. You should see a screen that looks like this:
4. Click on the Create an Account link at the bottom of the box and following window will be displayed. Complete all starred information in the form, beginning with the Get Started section. Finally, you have to agree to the Terms of Service. Read through the text, and then click "I Agree." So now you have created an email account and your email address is your Google Login Name followed by "@gmail.com."

Checking Your Email

Once you have set up your email account, you can check your mail anywhere that you can access the Internet. For this follow the steps given below.

1. Connect to the Internet by double-clicking the Google chrome, Internet Explorer or Firefox icon.
2. Go to the Gmail site by typing gmail.com into the address bar at the top of the screen.
3. Type your Google Login Name and Password into the box on the right.
4. The next page will show you the number of new messages in your Inbox.

The inbox is where all of your incoming messages are stored. Click on the subject of the message to open and read it.

Composing and Sending Messages

To create a new message, click the Compose button on the top left side of the screen. Type the email address of the person(s) to whom you wish to send the email in 'To'. Once you have completed your message, send it by clicking on the Send button at the bottom of the window.

Gmail Help

For any help in connection with Gmail, Help link is given at the top right corner of the Gmail page.
The internet is just a world passing around notes in a classroom

Summary

- Internet is a worldwide system of interconnected computer networks.
- Computer/mobile, communication channel, modem, browser and Internet Service Provider are needed to connect to internet.
- A software called browser helps to display the text and graphics available in a webpage on your computer. Google chrome, internet explorer, Mozilla Firefox are some of the popular browsers.
- An Internet Service Provider (ISP) such as BSNL, Idea, and Airtel is required to provide connections to homes and offices.
- WWW enables to access information stored in computers connected to the internet. Web consists of millions of websites.
- Moving from one site to another on Web is called surfing the Net.
- Each site on the internet has a unique address. This unique address is known as URL.
- E-mail is an internet facility that helps to send messages to individuals and groups.