

UNIT – 1**Fundamentals Of Electronic Mail:**

E-mail (electronic mail) is the exchange of computer-stored messages by telecommunication. (Some publications spell it email; we prefer the currently more established spelling of e-mail.) E-mail messages are usually encoded in ASCII text. However, you can also send non-text files, such as graphic images and sound files, as attachments sent in binary streams. E-mail was one of the first uses of the Internet and is still the most popular use. A large percentage of the total traffic over the Internet is e-mail. E-mail can also be exchanged between online service provider users and in networks other than the Internet, both public and private

Electronic mail, or email, is a method of exchanging digital messages between people using digital devices such as computers, tablets and mobile phones. Email first entered substantial use in the 1960s and by the mid-1970s had taken the form now recognized as email. Email operates across computer networks, which in the 2010s is primarily the Internet. Some early email systems required the author and the recipient to 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 to connect only briefly, typically to a mail server or a webmail interface, for as long as it takes to send or receive messages.

EMAIL ADDRESS

The general format of an email address is local-part@domain, and a specific example is jsmith@example.com. An address consists of two parts. The part before the @ symbol (local- part) identifies the name of a mailbox. This is often the username of the recipient, e.g., jsmith.

An email address identifies an email box to which email messages are delivered. A wide variety of formats were used in early email systems, but only a single format is used today, following the standards developed for Internet mail systems since the 1980s.

An email address such as John.Smith@example.com is made up of a local-part, an@ symbol, then a caseinsensitive domain. Although the standard specifies the local part to be case-sensitive, in practice the mail system at example.com may treat John.Smith as equivalent to JohnSmith or even as johnsmith, and mail systems often limit their users' choice of name to a subset of the technically valid characters. In some cases they also limit which addresses it is possible to send mail to.



Working of E-mail

Email working follows the client server approach. In this client is the mailer i.e. the mail application or mail program and server is a device that manages emails.

... The message is routed to Simple Mail Transfer Protocol to person B's mail server.

Email working follows the client server approach. In this client is the mailer i.e. the mail application or mail program and server is a device that manages emails.

Following example will take you through the basic steps involved in sending and receiving emails and will give you a better understanding of working of email system:

- Suppose person A wants to send an email message to person B.
- Person A composes the messages using a mailer program i.e. mail client and then select Send option.
- The message is routed to Simple Mail Transfer Protocol to person B's mail server.
- The mail server stores the email message on disk in an area designated for person B.

Userid and Password

A computer system uses userids and passwords together to grant access to the system. You need the correct combination of userid and password, to access your account.

Userid

The userid identifies you to the computer. Userids are typically some form of your name. (Your last name, for example). A userid must be unique throughout the computer system. This allows the computer to distinguish between you and some other person. One confusing issue is that different systems refer to a userid (the thing that identifies you to the computer) with different names. Some that you may run across are:

Login ID Username Userid

But, they all refer to that special name that identifies you to that particular computer system.

Your userid is also used for communication with other people through electronic mail. Since the userid identifies you to the computer, it is natural for it to be used to identify you to other computer systems. For example: The person Joe B. User could have this userid, "jbu3470". The userid is made up of the person's initials and the digits of some personal identification number.

Password

To prevent other people from using your account via your userid, you are required to have a password. A password allows you and only you to access the computer system through your userid. It basically proves to the computer system that you are who you say you are. So it should be obvious that you **DO NOT GIVE YOUR PASSWORD TO ANYONE!!!**

User ID and Password Rules

Please review the User ID and Password guidelines below before selecting a User ID or selecting or changing your Password.

User ID:

User IDs must be 7-14 characters

User IDs must contain at least one letter; numbers are allowed, but not required User IDs cannot contain spaces

User IDs cannot contain your Social Security Number, Tax Identification Number, or Customer Access Number

No special characters are allowed, such as: ! @ # \$ % ^ & Use of an underscore is allowed but not required:

—

Do not use your Password as your User ID

Password:

Passwords must be 7-14 characters

Passwords must include at least one letter and one number Passwords cannot contain spaces Semicolons cannot be part of a Password Passwords are case-Sensitive

Do not use your User ID as your Password If you forget your User ID or Password, you can retrieve them through the "User ID & Pass- word Help" link.

Note: You cannot change your User ID once it is established.

Email components

- Message envelope
- Message header
 - Control information: Originator address, Destination address
 - Descriptive information: Subject header field, Submission date/time stamp
- Message body
- Originally ASCII text only was used
- Evolved to MIME (Multipurpose Internet Mail Extension)
- Standardised internationalized email addresses using UTF-8 (dominant character encoding scheme in the Internet, Operating Systems, and Programming Languages.)
- Current standard defined by RFC 5322

JUMP START: BROWSING AND PUBLISHING

Coast-to-Coast Surfing:

The Web provides a means of accessing an enormous collection of information, including text, graphics, audio, video, movies, and so on. One of the most exciting aspects of the Web is that information can be accessed in a nonlinear and experimental fashion. Unlike reading a book by flipping to the next page in sequential order, you can “jump” from one topic to another via hyperlinks. This nonlinear approach to information gathering, or browsing is sometimes referred to as “coast-to-coast surfing”.

Web Page Installation:

In order to view web pages, one needs to install them on the Web Server. A Web Server is a program, located on a computer with internet access that responds to a browser’s request for a URL.

Basic Principles

Basic principles for web page installation are:

- You need to have Web pages to publish.
- A Web Server where the files must be placed must be available to you.
- The permissions on the files need to be set so that any user anywhere can read them.
- When someone requests your web page, the server has to deliver it.

Web Page Setup:

Web pages are created with the help of HTML (Hyper Text Markup Language). The pages are set up with the help of the tags available in HTML. Some of them are:

- **Head tag** The <HEAD> tag has no attributes. Several other tags can be included inside it.
- **Basefont tag** The <BASEFONT> tag defines the font size to be used in the HTML document and may be included in the head of the document.
- **Base tag** The <BASE> tag is useful for setting some global parameters of an HTML document and may be included in the head of the document. A global parameter is an attribute that has an effect on the entire document.
- **Meta tag** etc. The <META> tag is used to include additional information about a document and can be used to pass additional information to a browser. There is no ending for a <META> tag and a document can have multiple <META tags.

UNIT-2

INTERNET:

The Internet is a global system of interconnected governmental, academic, corporate, public, and private computer networks. It is based on the networking technologies of the Internet Protocol Suite.

The Internet is a worldwide collection of computer networks, cooperating with each other to exchange data using a common software standard. Through telephone wires and satellite links, Internet users can share information in a variety of forms. The size, scope and design of the Internet allow users to:

- connect easily through ordinary personal computers and local phone numbers;
- exchange electronic mail (E-mail) with friends and colleagues with accounts on the Internet;
- post information for others to access, and update it frequently;
- access multimedia information that includes sound, photographic images and even video; and
- Access diverse perspectives from around the world.

Working of the Internet

• Where to Begin? Internet Addresses

Because the Internet is a global network of computers each computer connected to the Internet must have a unique address. Internet addresses are in the form nnn.nnn.nnn.nnn where nnn must be a number from 0 - 255. This address is known as an IP address. (IP stands for Internet Protocol)

The picture below illustrates two computers connected to the Internet; your computer with IP address 1.2.3.4 and another computer with IP address 5.6.7.8.

Protocol Layer	Comments
Application Protocols Layer	Protocols specific to applications such as WWW, email, FTP, etc.
Transmission Control Protocol Layer	TCP directs packets to a specific application on a computer using a port number.
Internet Protocol Layer	IP directs packets to a specific computer using an IP address.
Hardware Layer	Converts binary packet data to network signals and back. (E.g. ethernet network card, modem for phone lines, etc.)

Internet Congestion:

Internet congestion occurs when a large volume of data is being routed on low bandwidth lines or across networks that have high latency and cannot handle large volumes. The result is slowing down of packet movement, packet loss and drop in service quality.

Internet Culture:

The Internet offers the hope of a more democratic society. By promoting a decentralized form of social mobilization, it is said, the Internet can help us to renovate our institutions and liberate ourselves from our authoritarian legacies. The Internet does indeed hold these possibilities, but they are hardly inevitable. In order for the Internet to become a tool for social progress, not a tool of oppression or another centralized

broadcast medium or simply a waste of money, concerned citizens must understand the different ways in which the Internet can become embedded in larger social processes. **Business Culture on Internet:**

Today's business environment is influenced greatly by market, economical, societal and technological factors creating a lot of competition. Also these factors are unpredictable that they may change unexpectedly at any time. Such changes in the business world have been defined as business pressure. The various environmental business pressures on companies today can be grouped into three categories:

- **Market**
- **Societal**
- **Technological**

Strength of Internet business over traditional business can be made more clear by the comparison of both. Online purchasing and selling through e-business offers opportunities and advantages to the companies of all sizes engaged in different portfolios. Some of these advantages are:

- Sampling of products such as books, recorded lectures, and music cassettes is possible on Web for business promotion.
- Business houses selling their goods through catalogues can reach additional global customers at lower cost.
- For items subjected to frequent changes e.g. shares and bonds etc. the changes in rates/quotations can be known instantly.
- Customer's knowledge can be enhanced on topics such as news about local event, market research, industrial report, software etc., which can be distributed easily over the Internet.
- A closer relationship can be developed amongst business sellers whose customer base is on the Internet.

Introduction to World Wide Web:

The World Wide Web, abbreviated as WWW and commonly known as the Web, is a system of interlinked hypertext documents accessed via the Internet. With a web browser, one can view web pages that may contain text, images, videos, and other multimedia and navigate between them via hyperlinks. To use the Web, in addition to an Internet connection, a user needs a special piece of software called a Web Browser (such as Internet Explorer). The browser acts as the graphical interface between the user and The Web is based on:

- HTML
- HTTP (Hyper Text Transfer Protocol)
- CGI (Common Gateway Interface)

Some common Features of web browsers are listed below:

Personal Preferences: Most browsers have a number of options that you can set. These are:

1. Cookies you can ask to be notified before cookie is written and you can then decide whether or not to allow the cookie to be written.
2. Disk Cache you can set the size of your cache
3. Fonts you can select a font specification and also set a default font size.
4. Helper applications
5. Home page location

Searching the World Wide Web:

- Directories
- Search engines
- Metasearch engines
- Search Fundamentals
- Search Strategies

Web directories (also known as indexes, web indexes or catalogues) are broken down into categories and sub-categories and are good for broad searches of established sites.

Search engines:

Search engines ask for keywords or phrases and then search the Web for results. Some search engines look only through page titles and headers.

Metasearch engines:

These (such as Dogpile, Mamma, and Metacrawler) search other search engines and often search smaller, less well known search engines and specialized sites.

Search Fundamentals:

The Internet contains a vast collection of information, which is spread out in every part of the world on remote web servers.

Search Strategies:

Search engines are good for finding sources for well-defined topics. Typing in a general term such as "education" or "Shakespeare" will bring back far too many results, but by narrowing your topic, you can get the kind (and amount) of information that you need. **Example:**

- Go to Google (a search engine)
- Type in a general term ("education")
- Add modifiers to further define and narrow your topic ("rural education Indiana")
- Be as specific as you can ("rural education Indiana elementary school")
- Submit your search.

Know Boolean operators:

Most search engines allow you to combine terms with words (referred to as Boolean operators) such as "and," "or," or "not." Knowing how to use these terms is very important for a successful search. Most search engines will allow you to apply the Boolean operators in an "advanced search" option.

AND

AND is the most useful and most important term. It tells the search engine to find your first word AND your second word or term.

For example, if you'd like information about the basketball team Chicago Bulls and type in "Chicago AND Bulls," you will get references to Chicago and to bulls. Since Chicago is the center of a large meat packing industry, many of the references will be about this since it is likely that "Chicago" and "bull" will appear in many of the references relating to the meat-packing industry.

OR

Use OR when a key term may appear in two different ways. For example, if you want information on sudden infant death syndrome, try "sudden infant death syndrome OR SIDS." OR is not always a helpful term because you may find too many combinations with OR.

NEAR

NEAR is a term that can only be used on some search engines, and it can be very useful. It tells the search engine to find documents with both words but only when they appear near each other, usually within a few words.

For example, suppose you were looking for information on mobile homes, almost every site has a notice to "click here to return to the home page." Since "home" appears on so many sites, the search engine will report references to sites with the word "mobile" and "click here to return to the home page" since both terms appear on the page. Using NEAR would eliminate that problem. At the time of the last handout update, Altavista is the only major search engine to allow "NEAR" searches.

NOT

NOT tells the search engine to find a reference that contains one term but not the other. This is useful when a term refers to multiple concepts. For example, if you are working on an informative paper on eagles, you may encounter a host of websites that discuss the football team the Philadelphia Eagles, instead. To omit the football team from your search results, you could search for "eagles NOT Philadelphia."

UNIT - 3 What

is Telnet?

Telnet is a network protocol used to virtually access a computer and to provide a two-way, collaborative and text-based communication channel between two machines.

It follows a user command Transmission Control Protocol/Internet Protocol (TCP/IP) networking protocol for creating remote sessions. On the web, Hypertext Transfer Protocol (HTTP) and File Transfer Protocol (FTP) simply enable users to request specific files from remote computers, while, through Telnet, users can log on as a regular user with the privileges they are granted to the specific applications and data on that computer.

An abstract example of the syntax for a Telnet command request is as follows:

The result of this request would be an invitation to log on with a user ID, and then the program would prompt the user for a password. If accepted, the user is granted access to the remote host.

Telnet is most likely to be used by program developers and anyone who has a need to use specific applications or data located at a remote machine.

How Telnet works:

Telnet is a type of client-server protocol that can be used to open a command line on a remote computer, typically a server. Users can utilize this tool to ping a port and find out whether it is open.

Uses of Telnet

Telnet can be used for a variety of activities on a server, including editing files, running various programs and checking email.

Security

Telnet is not a secure protocol and is unencrypted. By monitoring a user's connection, anyone can access a person's username, password and other private information that is typed over the Telnet session in plaintext.

SSH and related protocols

Some modern systems enable only command-line connections using Secure Shell (SSH), an encrypted tool similar to Telnet, or through a virtual private network (VPN). Because of security concerns, many professional organizations require use of SSH, PuTTY or other options instead of Telnet. SSH is the most commonly used alternative, largely because it encrypts all the traffic that passes over the communication channel.

FTP: ○ FTP stands for File transfer protocol. ○ FTP is a standard internet protocol provided by TCP/IP used for transmitting the files from one host to another.

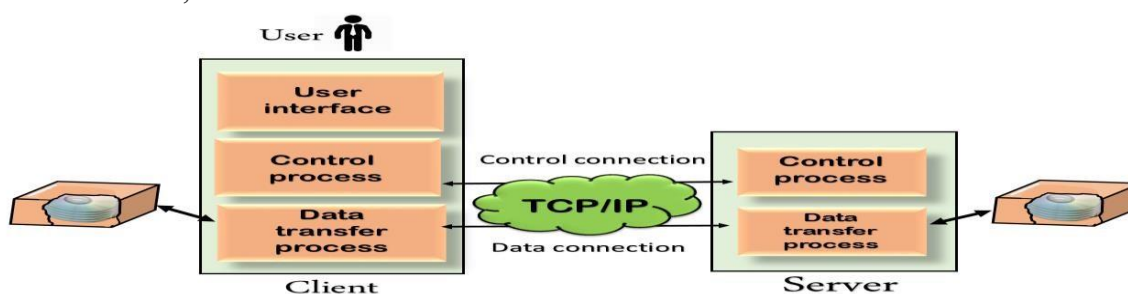
- It is mainly used for transferring the web page files from their creator to the computer that acts as a server for other computers on the internet.
- It is also used for downloading the files to computer from other servers.

Objectives of FTP

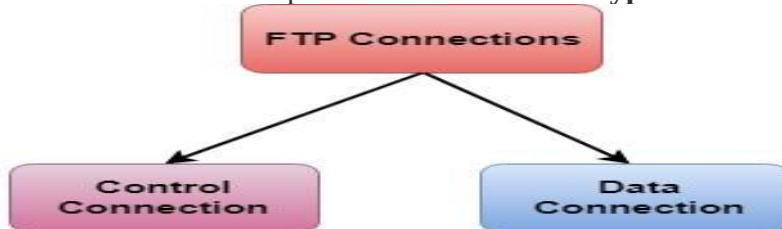
- It provides the sharing of files. ○ It is used to encourage the use of remote computers.
- It transfers the data more reliably and efficiently.

Why FTP?

Although transferring files from one system to another is very simple and straightforward, but sometimes it can cause problems. For example, two systems may have different file conventions. Two systems may have different ways to represent text and data. Two systems may have different directory structures. FTP protocol overcomes these problems by establishing two connections between hosts. One connection is used for data transfer, and another connection is used for the control connection. **Mechanism of FTP**



The above figure shows the basic model of the FTP. The FTP client has three components: the user interface, control process, and data transfer process. The server has two components: the server control process and the server data transfer process. **There are two types of connections in FTP:**



- **Control Connection:** The control connection uses very simple rules for communication. Through control connection, we can transfer a line of command or line of response at a time. The control connection is made between the control processes. The control connection remains connected during the entire interactive FTP session.
- **Data Connection:** The Data Connection uses very complex rules as data types may vary. The data connection is made between data transfer processes. The data connection opens when a command comes for transferring the files and closes when the file is transferred.

FTP Clients ○ FTP client is a program that implements a file transfer protocol which allows you to transfer files between two hosts on the internet.

- It allows a user to connect to a remote host and upload or download the files.
- It has a set of commands that we can use to connect to a host, transfer the files between you and your host and close the connection.
- The FTP program is also available as a built-in component in a Web browser. This GUI based FTP client makes the file transfer very easy and also does not require to remember the FTP commands.

Advantages of FTP:

- **Speed:** One of the biggest advantages of FTP is speed. The FTP is one of the fastest way to transfer the files from one computer to another computer.
 - **Efficient:** It is more efficient as we do not need to complete all the operations to get the entire file.
 - **Security:** To access the FTP server, we need to login with the username and password. Therefore, we can say that FTP is more secure.
 - **Back & forth movement:** FTP allows us to transfer the files back and forth. Suppose you are a manager of the company, you send some information to all the employees, and they all send information back on the same server.
- Disadvantages of FTP:**
- The standard requirement of the industry is that all the FTP transmissions should be encrypted. However, not all the FTP providers are equal and not all the providers offer encryption. So, we will have to look out for the FTP providers that provides encryption.

- FTP serves two operations, i.e., to send and receive large files on a network. However, the size limit of the file is 2GB that can be sent. It also doesn't allow you to run simultaneous transfers to multiple receivers.
- Passwords and file contents are sent in clear text that allows unwanted eavesdropping. So, it is quite possible that attackers can carry out the brute force attack by trying to guess the FTP password.
- It is not compatible with every system. **HTML Basics:**

In this article, we will see the **HTML Basics** by understanding all the basic stuff of HTML coding. There are various tags that we must consider and include while starting to code in HTML. These tags help in the organization and basic formatting of elements in our script or web pages. These step-by-step procedures will guide you through the process of writing HTML.

Basic HTML Document: Below mentioned are the basic HTML tags that divide the whole document into various parts like head, body, etc.

- Every HTML document begins with a HTML document tag. Although this is not mandatory, it is a good convention to start the document with this below-mentioned tag. Please refer to the [HTML Doctypes](#) article for more information related to Doctypes.
- **<html>** : Every HTML code must be enclosed between basic HTML tags. It begins with **<html>** and ends with **</html>** tag.
- **<head>**: The head tag comes next which contains all the header information of the web page or documents like the title of the page and other miscellaneous information. This information is enclosed within the head tag which opens with **<head>** and ends with **</head>**. The contents will of this tag will be explained in the later sections of the course.
- **<title>**: We can mention the title of a web page using the **<title>** tag. This is header information and hence is mentioned within the header tags. The tag begins with **<title>** and ends with **</title>**.
- **<body>**: Next step is the most important of all the tags we have learned so far. The body tag contains the actual body of the page which will be visible to all the users. This opens with **<body>** and ends with **</body>**. All content enclosed within this tag will be shown on the web page be it writings or images or audio or videos or even links. We will see later in the section how using various tags we may insert mentioned contents into our web pages. The whole pattern of the code will look something like the below code example.

Example: This example illustrates the **HTML basic** structure.

```
<html>
<head>
  <!-- Information about the page -->
  <!--This is the comment tag-->

  <title>GeeksforGeeks</title>
</head>
<body>
  <!--Contents of the webpage-->
</body>
</html>
```

HTML Headings: These tags help us to give headings to the content of a webpage. These tags are mainly written inside the body tag. HTML provides us with six heading tags from <h1> to <h6>. Every tag displays the heading in a different style and font size. Most HTML heading tag that we use :-

- Heading 1
- Heading 2
- Heading 3

What is Web Graphics:

Web graphics in any websites is as significant as the content of the site. An excellent designed graphics can give better and creative ideas to customer of what they are looking for. Web graphics helps designers to enhance the website design by adding colors, visual appeals and helps in providing artistic professional touch to their creativity. The websites that don't have web graphics don't appeal to visitors. Successes of web graphics depend upon the effective and efficient placement on the websites. The appropriate placement of graphics not only attracts end-users but also makes website well turnedout.

The appropriate use of Photoshop, Flash, Dream weaver and Fireworks tools assist in designing and creating unique graphics. These professionally created graphics reflects the creativity of web designer and enhances the website quality. Usually, graphics are used for explaining things and ideas that are not expressed by words. For instance shopping and e-commerce website uses great deal of graphics so as to illustrate their products pictures.

The pictorial language of anything gives details of particular products and easily understands by people. The related graphics of products simplifies the content and helps in easy interpretation. Suppose, if you have product descriptions on your web site, you should have the related graphic depiction next to them. It is better to use logos, cartoons, graphs and charts where they make a reasonable sense.

Basics Tips of Graphic design are:

Clarity in web page: In a clear web design the things should be placed according to their importance so that the related things must look relevant with the content.

Imagery: Image plays vital role in web designing so it is advisable to try the level best to use an appropriate image for best impact on the visitors.

Color: Every color has its own language. Colors and its combinations stimulate people's interest in different things. That's why colour combination is also very important aspects of web designing. Without colours web pages look dull and unattractive. While using balanced colour scheme web pages can look attractive, dynamic and inviting to users.

Color Contrast: It is very important to use adequate colour contrast between text and background. So it is necessary to use colour contrast relevant and must be according to the nature of website and graphics used. The appropriate use of colour contrast gives a pleasing look and appeal to websites.

Readability: Font sizes used in website plays vital role and work as great differentiators. The font size depicts something important or a new section. It is suggested to use sans-serif face for all body copy.

Through using underlines, bold and italics important things can be emphasized but use them in sparing fashion.

Effective text: HTML text is used more often in web designing. It is more effective than the other graphic word. In the web environment, text has enormous strengths. In many situations using text delivers far better results than graphics.

Page Layout: The way elements are arranged on screen carries lots of meaning that we interpret when decoding web pages. The relative position implies relationships on lots of different levels. So it is necessary to take extreme provision while creating page layouts. The sequencing of contents, graphics and images play important in conveying messages regarding products and services.

Alignment: Alignment should have to directly visible on web pages. It looks clear and easily visible. Left-aligned text is easier to read than right-aligned text. So, while web designing it is suggested to follow web alignment standard.

3D Effect on the graphic design: 3D creates a sense of space between different text and elements. 3-D illusion effects are powerful mode that can achieve great results. They can also be adding to overall page file size.

Navigation Buttons: Navigation buttons help the visitors to navigate through web site. The navigation button should be placed on the top of the page under company logo or down the left side. If it is difficult to find links visitors get irritated as they will not be able to access the information they were looking for in website.

UNIT – 4

BASIC AND ADVANCED HTML:

Presenting and Arranging Text Using Paragraphs and Line Breaks

<P> tag starts a new paragraph and
 tag allows you to skip to the next line of text. For example:

```
<HTML>
```

```
<HEAD>
```

```
<TITLE>
```

Using the < P > and < BR > tags

```
</TITLE>
```

```
</HEAD> <BODY>
```

Here is a line of text.

```
<BR>
```

Using the < BR > tag skips to the next line. <P>

On the other hand, using the < P> tag starts a new paragraph.

```
</P>
```

```
</BODY>
```

```
</HTML>
```

The results are shown in the figure given below:

sing <DIV> and

Two important formatting elements are the <DIV> and elements. These elements will become very useful when working with style sheets (to be covered later). Using <DIV> (which stands for division) and , you can specify a range of text and style it as you want it.

<DIV> is used to select a block of text and to select text inline. Here is an example using the <DIV> tag with its ALIGN parameter to set the alignment of text without using the <P> tag:

```
<HTML>
```

```
<HEAD>
```

```
<TITLE>
```

```
Using the &lt;DIV&gt; tag
```

```
</TITLE>
```

```
</HEAD>
```

```
<BODY>
```

```
<DIV ALIGN="LEFT">
```

```
Manager
```

```
<BR>
```

```
SlowPoke Products Inc.<BR> USA
```

```
</DIV> <P>
```

```
Dear You:
```

```
<DIV ALIGN="CENTER" STYLE="color: red; font-style: italic"> When are you going to ship my  
order? </DIV>
```

```
<DIV ALIGN="RIGHT">
```

```
<P>
```

```
President
```

```
<BR>
```

```
NeedItNow, Inc.
```

```
<BR>
```

```
Speedy, CO
```

```
</DIV>
```

```
</BODY></HTML>
```



On the other hand can be used to mark sections of text inline or text in the midst of the other text. For example:

```
<HTML>
```

```
<HEAD><TITLE>Using the &lt;SPAN> tag</TITLE></HEAD> <BODY>
```

```
This is <SPAN STYLE="font-style: italic">not</SPAN> going to do!
```

```
</BODY>
```

```
</HTML>
```

NEWSGROUPS:

- A newsgroup is an Internet-based discussion around an individual, entity, organization or topic. Newsgroups enable remotely connected users to share, discuss and learn about their topic of interest by exchanging text messages, images, videos and other forms of digital content.
- Newsgroups are also referred to as usenet newsgroups.
- Newsgroups were initially created in 1979 by some university students to exchange messages.
- Users can subscribe for free by submitting an email address, and the group generally consists of several topics/categories based around a main theme.
- The user/subscriber can post a message in a particular topic/category, which is either automatically visible in open newsgroups, or can only be viewed by approved members in moderated groups.
- All subscribers participating or following a particular topic/newsgroup will be notified of new messages and updates.
- Moreover, news/stories/topics in the newsgroup can be read through a downloadable newsreader application.
- A newsgroup is a continuous public discussion about a particular topic. You can join a newsgroup at any time to become part of a huge conversation between hundreds or even thousands of people
- A newsgroup is a discussion about a particular subject consisting of notes written to a central Internet site and redistributed through Usenet, a worldwide network of news discussion groups. Usenet uses the Network News Transfer Protocol (NNTP).

Newsgroups are organized into subject hierarchies, with the first few letters of the newsgroup name indicating the major subject category and sub-categories represented by a subtopic name. Many subjects have multiple levels of subtopics. Newsgroups are divided into categories. The categories help to determine what kind of group and what kind of postings you will find there. Some major subject categories are:

- news,
- rec (recreation),
- soc (society), • sci (science),
- comp (computers), and so forth (there are many more).
- Alt
- talk

Use of Newsgroups We can use newsgroups for various purposes, for example:

- Newsgroups are an excellent way to find out web sites to visit in your particular area of interest or just pick up detailed information about area of interest.
- You can buy and sell stuff. People often advertise things for sale in some newsgroup. Users can post to existing newsgroups, respond to previous posts, and create new news- groups.

Newcomers to newsgroups are requested to learn basic Usenet netiquette and to get familiar with a newsgroup before posting to it. A frequently-asked questions is provided. The rules can be found when you start to enter the Usenet through your browser or an online service. You can subscribe to the postings on a particular newsgroup.

Some newsgroups are moderated by a designated person who decides which postings to allow or to remove. Most newsgroups are unmoderated.

MAILING LISTS:

A mailing list is a set of email addresses. Here, a list of Email addresses are identified by a sin- gle name, for example –Work. When an Email message is sent to the mailing list name (= Work), it is automatically forwarded to all the email addresses in the list. Here Work is a mailing list name.

Most e-mail clients support mailing lists, which enables you to broadcast e-mail messages to groups that you define. You can go through following link to make your own mailing list in Gmail.

<http://www.wikihow.com/Make-a-Mailing-List-in-Gmail>

A mailing list may be utilized to send advertisements or other relevant infor- mation to individuals included on the list. For example, a company may acquire a mailing list that only includes people that do the majority of their shopping over the Internet. Some companies rent mailing lists for a designated cost and some create their own list through business interactions. A magazine publisher has a list of the mailing addresses of all the subscribers to the magazine.

There are two types of mailing lists:

- ☐ Announcement lists
- ☐ Discussion Lists

Announcement Lists

An announcement mailing list transmits one-way messages, with no direct replies to the group. Announcement lists are used so that one person or group can send announcements to a group of people. If you send product notifications, press releases, policy announcements or newsletters, a mailing list does everything you need. **Discussion Lists**

A discussion mailing list automatically emails everyone in a group and transmits all replies to the entire group. With a discussion mailing list, list members share their thoughts and receive feed- back from the group.

Usually, anyone on the list can start a new discussion. In some cases, a list member can receive messages without being able to send them to the list.

A discussion list is used to allow a group of people to discuss topics of their interest. This discus- sion may also be moderated, so only selected posts are sent on to the group as a whole, or only certain people are allowed to send to the group.

- On the Internet, mailing lists include each person's e-mail address rather than a postal address
- There are an estimated 30,000 mailing lists that you can subscribe to
- The email server does all the hard work
- List users benefit from sharing the brainpower of the people in the group

- Mail lists allow people to join (subscribe) or leave (unsubscribe) them at any time
- A mailing list is a collection of names and addresses used by an individual or an organization to send material to multiple recipients. The term is often extended to include the people subscribed to such a list, so the group of subscribers is referred to as "the mailing list", or simply "the list".

Types of mailing lists:

- At least two types of mailing lists can be defined:
- An announcement list is closer to the original sense, where a "mailing list" of people was used as a recipient for newsletters, periodicals or advertising. Traditionally this was done through the postal system.
- With the rise of email, the electronic mailing list became popular. The second type allows members to post their own items which are broadcast to all of the other mailing list members. This second category is usually known as a discussion list.

More definitions:

- When similar or identical material is sent out to all subscribers on a mailing list, it is often referred to as a mailshot.²¹ or a blast. A list for such use can also be referred to as a distribution list.
- In legitimate (non-spam) mailing lists, individuals can subscribe or unsubscribe themselves.
- Mailing lists are often rented or sold. If rented, the renter agrees to use the mailing list for only contractually agreed-upon times. The mailing list owner typically enforces this by "salting" (known as "seeding" in direct mail) the mailing list with fake addresses and creating new salts for each time the list is rented. Unscrupulous renters may attempt to bypass salts by renting several lists and merging them to find the common, valid addresses.
- Mailing list brokers exist to help organizations rent their lists. For some organizations, such as specialized niche publications or charitable groups, their lists may be some of their most valuable assets, and mailing list brokers help them maximize the value of their lists.
- A mailing list is simply a list of e-mail addresses of people that are interested in the same subject, are members of the same work group, or who are taking class together. When a member of the list sends a note to the group's special address, the e-mail is broadcast to all of the members of the list. The key advantage of a mailing list over things such as web-based discussion is that as new message becomes available they are immediately delivered to the participants' mailboxes.

UNIT – 5 ELECTRONIC PUBLISHING:

Electronic publishing is the process for production of typeset quality documents containing text, graphics, pictures, tables, equations etc. it is used to define the production of any that is digitized form. It uses new technology allowing publishers to deliver documents and other contents quickly and efficiently as well. Electronic Publishing can be represented as

Electronic Publishing = Electronic Technology + Computer Technology + Communication Technology + Publishing this wholly electronic publication defines electronic publishing this way “the term E-publishing refers more precisely to the storage and retrieval of information through electronic communications media. It can employ a variety of formats and technologies, some already in widespread use by businesses and general consumers and others still being developed. E-publishing technology can be classified into two general categories:

Those in which information is stored in a centralized computer source and delivered to the users by a telecommunications systems, including online database services and videotext represents the most active area in E publishing today”, and Those in which the data is digitally stored on a disk or other physically deliverable medium.

Models of Electronic Publishing Electronic

Books (E-Books)

Publishing a book electronically is to achieve quick publishing and dissemination of information. A book may not have contemporary value that a journal has but it certainly has an archival and reference value. A number of encyclopedias do come out on CD-ROM. It is felt that the Internet is not a satisfactory platform for publishing full text of documents but CD-ROM is appropriate medium for publishing books. Book length E-text is also available on Floppy disc and CD-ROM, although distribution by floppy disc is decreasing due to the convenience and growing popularity of CD-Rom. Most E-Texts published on CD-ROM are public domain works including encyclopedias. Using the E-publishing language on Internet like SGML presented and published attractively with multimedia effect especially for documents like Yearbooks, Encyclopedias.

Electronic Periodicals: This new media is a vehicle of scientific communication and purely a product of scientific research. This category includes electronic journals, newsletters, magazines, zines and discussion lists. Perhaps no other area in E-publishing has received more study than the area of E-journals, particularly as they apply to scholarly research.

Electronic Database: With the emergence of computers & communication technologies the strength of information system in the development of modern database has taken new shape. Information originating from a database has become a large segment of Electronic publishing that provides a base for procedures such as retrieving information, drawing conclusions, and making decisions.

The holding of the library database consisting of books, periodicals, reports & theses can be converted to electronic form that allows access for public use through digital networks. The online electronic library card catalog (OPAC) shows how information could be published and that enable user to search the document with various access points like author, title, subjects.

The six major developments that have taken place since the 1960s that have squared the use of databases are: -

Networking and co-operative arrangements.

Leasing arrangements for information access.

Establishment of scientific information dissemination centers. Increased online access (remote access via terminals).

Emergence of the online retailers (i.e. Dialog, Lexus etc). Improved distribution (via CD-ROM or other means).

Various electronic databases publishers today account for publishing information both bibliographic and full text on CD-ROMs as well as making them available for online retrieval. The prominent online publishers include DIALOG, BRS, and EBSCO host etc.

An excellent example of electronically published databases, the ERIC (Educational Resource Information Centre) database is the largest educational database in the world that contains more than 800,000 records per year. ERIC is available in CD-ROM format as well as on the net free of charge. **Electronic Publishing on CD-ROM**

CD-ROM has provided new dimension for information storage and retrieval. Publishing information mainly abstracting sources are quite common in CD-ROM. Although much of the work on e-journals has concentrated on distribution via the Internet, there has been some work on CD-ROM as well.

The advantages of CD-Rom are-

More material can be included, both in terms of quantity (650+megabytes) and type (multimedia resources).

Full text searching is relatively easy to include. Print-on-Demand (POD)

Print-on-Demand is a new method for printing books (and other content) that allows books to be printed one at a time, or on demand. This method helps free publishers from the process of doing a traditional print run of several thousand books at a time.

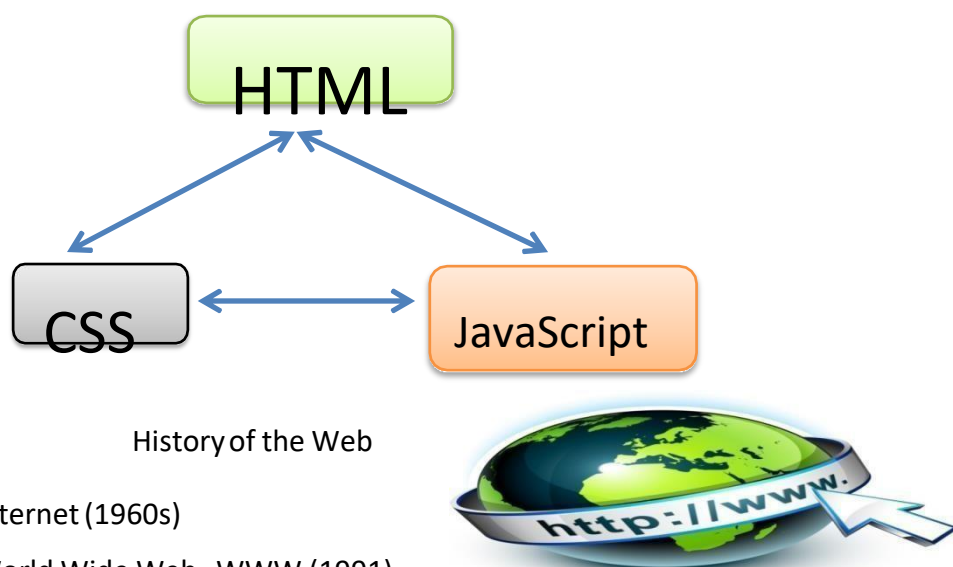
Digital Content : Digital Content generally refers to the electronic delivery of fiction that is shorter than book-length, nonfiction, and documents and other written works of shorter length. Publishers of digital content deliver shorter sized works to the consumer via download to handheld and other wire- less devices. Technology used for delivering digital content includes Adobe PDF, XML, HDML, WAP (Wireless Application Protocol) and other technologies..

Electronic Ink: Electronic Ink is a developing technology that could have a huge impact on the media and publishing industries. Electronic Ink could be used to create a newspaper or book that updates itself. In addition, this content could be programmed to change at any time. For example, you could have a billboard that rotates different ads, or you could receive a coupon in the mail that is frequently updated with the latest offer. For media companies, the possibilities are almost endless. Someday your electronic newspaper will simply update itself every day. E- Ink Corporation, a new company with major investors, and Xerox are two companies currently developing this technology.

Email Publishing: Email publishing, or newsletter publishing, is a popular choice among readers who enjoy the ease of receiving news items, articles and short newsletters in their email box. The ease of delivery and production of email newsletters has led to the development of a massive number of available email newsletters, mailing lists and discussion lists. Newsletters are also widely used by media companies to complement their web and print offerings.

Publishing: Web publishing is not a novel practice any longer, but it continues to change and develop with the introduction of new programming languages. HTML is still the most widely used web programming language, but XML is also making headway. XML is valuable because it allows publishers to create content and data that is portable to other devices.

Web programming:



History of the Web

- Internet (1960s)
- World Wide Web - WWW (1991)
- First Web Browser - Netscape, 1994
- Google, 1998

- Facebook, 2004
- Smartphones (iPhone), 2007