

Chapter 7 - social networking & E-Governance

E-mail (Electronic mail):-

The most popular way of communication on the Internet is the electronic mail (e-mail). E-mail is a method of sending messages, voice, video, and graphics over digital communication links, such as the Internet, anywhere in the world at a very cost-effective rate.

E-mail (Electronic mail):-

इंटरनेट पर कम्प्यूनिकेशन का सबसे लोकप्रिय तरीका इलेक्ट्रॉनिक मेल (ई-मेल) है। ई-मेल, दुनिया में कहीं भी बहुत ही कम लागत पर डिजिटल कम्प्यूनिकेशन लिंक, जैसे कि इंटरनेट, के माध्यम से संदेश (**Message**), आवाज (**voice**), वीडियो और ग्राफिक्स भेजने का एक तरीका है। 1971 में रे टॉमलिंगसन ने इलेक्ट्रॉनिक मेल का आविष्कार किया।

Structure of E-mail:-

An e-mail message is made up of binary data, usually in the American Standard Code for Information Interchange (ASCII) text format.

There are five sections of an e-mail message:

- E-mail address
- Header
- Body
- Signature
- Attachment

E-mail Address:-

An **email address** identifies an email box to which messages are delivered

There are some important point in e-mail address-

1. E-mail address is composed of Two separate parts
2. First part of e-mail address is User Name
3. Second part of e-mail address is Domain Name
4. The user name and domain are separated by an @ (at) symbol
5. Maximum character of User name is 64
6. Maximum character of domain is 254
7. User name is always unique
8. E-mail address is case sensitive
9. Correct format of e-mail address is User@Domain
10. There are no spaces in the address
11. E-mail address is not allowed in special character (eg. (), ; , / , [,])
12. **Example :- info@olevelnotes.com or nielitexam2019@gmail.com**

Header:-

The header of the e-mail message is the upper-most section. It displays information regarding the status of the message. Headers are present in both outgoing (sent) and incoming (received) message.

There are some Header fields in e-mail:

- **To:-** E-mail address of primary recipient
- **CC (Carbon Copy):-** e-mail address of secondary recipient to whom copy needs to be sent.
- **BCC (Blind Carbon Copy):-** e-mail address of secondary recipient to whom copy needs to be sent, but the primary recipient does not know about the dispatch of mail to these addressees.
- **Subject:-** A summary of the message for the one-line display.
- **Date & Time:-** Date & time the message was sent

Body:-

The body of e-mail message is the primary focus because it contains the actual message. Although there is no limit to the size (number of characters) of an e-mail message, many ISPs do limit the size of an e-mail message.

Signature:-

The signature for an e-mail message is the personal information which automatically appears at the bottom of the outgoing message.

A signature block is a personalized information or text automatically added at the bottom of an e-mail message. It includes a signature which is used to provide the recipient with a name, e-mail address and information.

Attachments:-

ईमेल अटैचमेंट का मतलब है, ईमेल के साथ भेजी जाने वाली फ़ाइल। ईमेल में किसी भी तरह की फ़ाइल अटैच की जा सकती है, जैसे कि document, Images, वीडियो, Presentation, डेटाबेस आदि। ईमेल अटैचमेंट भेजने का मकसद, लोगों के बीच जानकारी साझा करना होता है।

ईमेल अटैचमेंट के बारे में कुछ और बातें:

1. ईमेल अटैचमेंट भेजने के लिए, ईमेल क्लाइंट की फ़ाइल स्वीकार करने की सीमा का ध्यान रखना होता है **आम तौर पर, यह सीमा 25 एमबी होती है।**
2. अगर अटैचमेंट का साइज सीमा से ज़्यादा है, तो ईमेल सर्वर, अटैचमेंट को Google ड्राइव लिंक में बदल देता है।
3. ईमेल अटैचमेंट भेजने के लिए, .doc, .pdf, .jpeg, .xls जैसे फ़ॉर्मेट का इस्तेमाल किया जा सकता है।

Bounce Mail:-

Bounced mail is an e-mail message that has failed to reach its destination and therefore such e-mail messages are returned to the sender. The message "bounces" back to its sender from the mail server after the server fails to locate the message recipient address.

The bounced message alerts you that your e-mail has gone undelivered and that you must again send the message with the correct address in order to ensure that your message reaches its recipient.

Opening E-mail Account:-

Before you actually settle down to send a mail, you will first need to create an e-mail account. There are various sites in the Internet by which you can create free e-mail account. Some of the sites are given below:

- yahoo.com
- rediffmail.com
- google.com
- msn.com
- hotmail.com

Mail box:-

Mailbox is the container which contains all the email sent & received to a certain email account. It has a lot of folders which differentiate the email sent, received, junk, spam or deleted.

• Inbox:-

Inbox is the place where all the incoming emails are stored and can be accessed through. It lists the email received into a relational table sorted according to the date.

• Outbox:-

Outbox is place where all the sent data are stored until it is not fully sent.

• Draft:-

It is place where messages composed but not sent and even not queued to be sent. In other words, whatever messages we compose and save it is stored.

• Junk:-

It is place where fake and spam kind of mail which contain virus, malware, spyware or do stealing data kind of activity, is stored.

• Sent items:-

It is a place where all delivered mails are listed.

• Trash (deleted items):-

It is the place in mailbox where all the deleted emails are stored to which you can reuse, send, forward or print, depends.

E-mail Protocol:-

If a user sends a message across a local network to another user running the same message system, the process is relatively simple. But if you want to send a message to a user running a different messaging program, some translation may be necessary.

There are some e-mail protocols-

- SMTP
- POP3
- IMAP
- MIME

SMTP:-

SMTP stands for Simple Mail Transfer Protocol. It is a TCP/IP (Transmission Control Protocol/Internet Protocol) that specifies how computers exchange electronic mail. It works with post office protocol.

SMTP is used to upload mail directly from the client to an intermediate host, but only computer constantly connected, such as Internet Service Providers (ISP), to the Internet can use SMTP to receive mail.

POP3:-

It is a simple protocol used for opening remote e-mail boxes. **Post Office Protocol version 3 (POP3)** provides mechanisms for storing messages sent to each user and received by SMTP in a receptacle called a mailbox. A POP3 server stores messages for each user until the user connects to download and read them using a POP3 client.

IMAP4:-

Internet Message Access Protocol (IMAP) is a protocol for accessing email or bulletin board messages from a mail server or service. IMAP allows a client e-mail program to access remote message stores as if they were local. Email stored on an IMAP server can be manipulated from a workstation at the office, a desktop computer at home or a notebook computer while traveling, without requiring the transfer of messages or files back and forth between these computers.

MIME:-

Multipurpose Internet Mail Extensions (MIME) is an extension of the original Internet e-mail protocol that extends the limited capabilities of email, and in particular allow documents (such as audio, video, images, as well as the ASCII text handled in the original standard) to be inserted in a message. In addition, MIME supports messages in character sets other than ASCII.

Social Networking:-

A social networking service is an online service, platform, or site that focuses on building and reflecting of social networks or social relations among people.

Social networking is the use of Internet-based social media sites to stay connected with friends, family, colleagues, customers, or clients. Social networking can have a social purpose, a business purpose, or both, through sites like Facebook, Twitter, LinkedIn, and Instagram.

Facebook:-

Facebook is a **social networking site** that makes it easy for you to **connect and share** with family and friends online. Originally designed for college students, Facebook was created in 2004 by **Mark Zuckerberg** while he was enrolled at Harvard University. By 2006, **anyone** over the **age of 13** with a valid email address could join Facebook. Today, **Facebook is the world's largest social network.**

Twitter:-

Twitter is a free social networking and micro-blogging service that has changed the way people communicate with each other.

Twitter is a 'microblogging' system that allows you to send and receive short **posts called tweets. Tweets can be up to 140 characters long** and can include links to relevant websites and resources.

Twitter users follow other users. If you follow someone you can see their tweets in your twitter 'timeline'. Registered users can post, like, and retweet tweets, but unregistered users can only read them. **Audio and video tweets remain limited to 140 seconds for most accounts.**

Twitter was created by Jack Dorsey, Noah Glass, Biz Stone, and Evan Williams in March 2006 and launched in July of that year.

LinkedIn:-

LinkedIn is an American business and employment-oriented online service that operates via websites and mobile apps. Launched on May 5, 2003, the platform is mainly used for professional networking, and allows job seekers to post their CVs and employers to post jobs. It is also popular as a way of marketing a business, because business owners can interact with those who are interested in their services by answering questions, participating in discussions and more.

Instagram:-

Instagram is an online photo sharing social web service that lets you share your life and experiences with friends and others through a series of pictures captured with a mobile devices. It also supports video uploads. It was created by Kevin Systrom and Mike Krieger, and launched in October 2010 on iOS. A version for Android devices was released in April 2012, and apps for windows 10 Mobile and Windows 10 in April 2016 and October 2016, respectively.

Instant Messaging:-

Instant Messaging (IM) is a form of real-time direct text-based communication between two or more people using personal computers or other devices, along with shared clients. More advanced instant messaging software clients also allow enhanced modes of communications, such as live voice or video calling.

It is a type of online chat that offers video calling features such as voice over Internet Protocol (VoIP) and Web conferencing services over the Internet.

There is some important Instant messaging application

- Whatsapp
- Telegram
- Facebook Messenger

Whatsapp:-

Whatsapp is the most popular instant messaging app which allows you to communicate with friends using text, phone call, video, sharing of files, in group or personal and other media. It is basically an alternative way to send free SMS text messages using internet connection.

Whatsapp was founded by Jan Koun and Brian Acton. It is one of the best and fastest growing freeware cross platform messaging and Voice over IP (VoIP) service. It provides service for text and audio messaging, free voice calls and exchanging photos or videos and even for sharing of limited types of documents. The desktop app works in exactly the same way as WhatsApp web. The new desktop app is available for windows 8 and above and is synced with WhatsApp on your mobile device. Additionally, it can also be used with Chrome, a web-based browser.

Telegram:-

Telegram is a cloud-based instant messaging and voice over IP service developed by the Russian Entrepreneur Pavel Durov and his brother Nikolai in 2013. It can be used on smartphones, tablets, laptops and desktop computers. It is also available for Android, iOS, Windows Phone, Windows NT, MacOS and Linux. Users can send messages and exchange files up to 1.5 GB.

Facebook Messenger:-

Facebook Messenger is known as **Messenger**. It is a messaging app that enables chat, voice and video communications between the social media site's web-based messaging and smart Phones. It is also available for iOS, Android Windows 10 devices. Users can send messages and exchange photos, videos, stickers, audio and files. The service also supports voice or video calling. Users can send messages and exchange photos, videos, stickers, audio, and files, as well as react to other user's messages and interact with bots. The service also supports voice and video calling.

E-Commerce:-

E-commerce (EC), an abbreviation for electronic commerce is the buying and selling of goods and services or the transmitting of funds or data, over an electronic network, primarily the internet. These business transactions occur either as B2B, B2C, C2C or C2B.

Basics of E-Commerce:-

E-commerce allows consumers to electronically exchange goods and services with no barriers of time or distance. It has expanded rapidly over the past five years and is predicted to continue at this rate, or even accelerate.

Electronic commerce draws on such technologies as electronic funds transfer, supply chain management, Internet marketing, online transaction processing, Electronic Data Interchange, Inventory management systems, and automated data collection system.

Types of E-Commerce:-

- **Business-to-Business (B2B)**

Business-to-Business (B2B) e-commerce encompasses all electronic transactions of goods or services conducted between companies. Producers and traditional commerce wholesalers typically operate with this type of electronic commerce.

- **Business-to-Consumer (B2C)**

The Business-to-Consumer type of e-commerce is distinguished by the establishment of electronic business relationships between businesses and final consumers. It corresponds to the retail section of e-commerce, where traditional retail trade normally operates.

- **Consumer-to-Consumer (C2C)**

Consumer-to-Consumer (C2C) type e-commerce encompasses all electronic transactions of goods or services conducted between consumers. Generally, these transactions are conducted through a third party, which provides the online platform where the transactions are actually carried out.

- **Consumer-to-Business (C2B)**

In C2B there is a complete reversal of the traditional sense of exchanging goods. This type of e-commerce is very common in crowdsourcing based projects. A large number of individuals make their services or products available for purchase for companies seeking precisely these types of services or products.

Introduction to Blogs:-

A blog is type of website that is updated regularly with new content. It is an online journal or informational website displaying information in the reverse chronological order with latest posts appearing first. The content of a blog typically includes text, pictures, videos, animated GIFs and journals of hard copy documents. Since a blog can exist for personal use, sharing information with an exclusive group or to engage the public, a blog owner can set her/his blog for private or public access.

Netiquette:-

Netiquettes are the rules for correct behavior on the Internet. They distinguish the Internet from traditional forms of communications, such as telephonic conversation, face-to-face meetings, and paper-based letters. It helps you avoid misunderstandings that may arise during communication accomplished through any Internet services, especially e-mail, chat and mailing lists, and so on.

E-Governance:-

E-Governance refers to the utilization of the Internet and the World Wide Web for delivering government information and services to the citizen. In the past all the services provided by government of India, such as postal services, railway ticket booking, applying for passport, etc. Now the government has taken many services on information technology platform, better known as e-governance.

Railway Reservation:-

e-Governance is also playing a very important role in the railway reservation system. It facilitates the passengers to enquire about the trains available on the basis of source and destination, booking and cancellation of tickets and the status of the booked ticket, etc.

Reservation and cancellation of train tickets can be done using the official website of Indian Railways Catering and Tourism Corporation Limited (IRCTC), which is www.irctc.co.in

Internet ticketing:-

Internet ticketing operations of IRCTC were launched on 3 august, 2002 in collaboration with CRIS, the Centre for Railway Information Systems. Tickets for Rail journeys in Indian can be booked including Tatkal tickets on the Internet on the website www.irctc.co.in, by any user after registering at the site.

Passport:-

The passport of India has taken many initiatives to lead in the era of e-Governance, and to improve the delivery of public services. The National e-Governance Plan (NeGP) includes many high impact e-Governance projects that focus on reforming Passport services in India.

The Ministry of External Affairs is responsible for issuance of Passport to Indian citizens through a network of 37 Passport Offices and 180 Indian Embassies and Consulates abroad.

A Passport is essential for those who are traveling abroad for education, tourism, pilgrimage, medical attendance, business purposes and family visits.

E-Hospital:-

Information Technology has been playing an important role in improving facilities provided to patients in hospitals. Online Registration System (ORS) is online Registration Framework Portal for taking OPD appointment in the Government Hospitals across the country. It is an Aadhaar based online registration and appointment system, where counter based OPD registration and appointment system through Hospital Management Information System (HMIS) has been digitalized.

Types of E-Governance:-

- **G2B (Government to Business):-**

G2B model includes permissions, monitoring, evaluation, payment of taxes, procurement of goods and services by the government, etc. the business community prefers to carry out its activities online such as permissions, returns, sales, procurement, and hiring through electronic means.

- **G2C (Government to Citizen):-**

G2C facilitates citizen interaction with government, which is the primary goal of e-Governance. This attempts to make transactions, such as information search, land and property records, and payment of taxes, renewing licenses, applying for domain benefits, etc. which are less time consuming and easy to carry out.

- **G2E (Government to Employees):-**

G2E model is specifically inter and intra-departmental instantaneous communication tools for government units, either national, state or local government. Purpose of G to E model is to increase the efficiency of public agencies internal performance.

- **G2G (Government to Government):-**

G2G involves sharing data and conducting electronic exchanges between various governmental agencies. One benefit of this is cost savings, which is achieved by increasing the speed of the transactions, reduction in the number of personnel necessary to complete a task, and improving the consistency of outcomes.

UMANG APP:-

The full form of UMANG is Unified Mobile Application for New-age Governance. This app has been developed by National e-Governance Division (NeGD) and the Ministry of Electronics and Information Technology (MeitY) and **launched in November 2017** with the aim of driving mobile governance in India. It is also designed to provide individuals with access to a range of central, state and local government services using only a single platform.

The government of India is providing all-in-one single unified secure multi-channel freeware mobile app for accessing over 1200 central and state government services in different Indian language over Android, iOS, Windows. It supports services such as AADHAR, DigiLocker, Bharat Bill Payment System, PAN, EPFO services, PMKVY services, AICTE, CBSE, tax and fee or utilities bills Payments, education job search, tax business, health, agriculture, travel, birth certificates, e-District, passport, etc.

This e-Governance service can be accessed through multiple channels, such as mobile app, IVR, website, and so on. The app supports 13 Indian languages and is available for Android, iOS and Windows.

Digilocker:-

DigiLocker is a digital locker service operated by the Department of Electronics and Information Technology (DeitY) Govt. of Indian. It enables Indian citizens to store certain official documents on the cloud. The service is aimed towards reducing the need to carry physical documents. **You can store data up to 1 GB** like store identification card issued by Government agencies, education certificates, PAN cards, driving license, vehicle document, and so on.

DigiLocker or digital locker provides access to authentic virtual documents. It is a digital document wallet where you can store your documents such as driving licence, PAN card, Voter ID, policy documents, etc. You can upload the documents and keep these safe when you sign up for a DigiLocker account. **You get a dedicated cloud storage space that is linked to your Aadhaar number.** The beta version of the service was rolled out in **February 2015, and launched by Prime Minister Narendra Modi on 1 July 2015.** The storage space provided was 100 MB initially, and was later increased to 1 GB. **The individual file size for upload cannot exceed 10 MB.**