STUDY MATERIAL FOR B.COM AND

BANKING & FINANCE

INTERNET AND ITS APPLICATIONS

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INDEX

INTERNET AND ITS APPLICATIONS

Unit I: Internet Concepts

Introduction – Internet Connection Concepts – Connecting to Dial-up Internet Accounts – High Speed Connections : ISDN, ADSL, and Cable Modes – Intranets : Connecting LAN to the Internet.

Unit II: E-mail Concept

E-mail Concepts – E-mail Addressing – E-mail Basic Commands – Sending and Receiving Files by e-mail – Controlling e-mail Volume – Sending and Receiving Secure email.

Unit III: Internet Services

Online Chatting and Conferencing Concepts – E-mail Mailing Lists – Usenet Newsgroup Concepts – Reading Usenet Newsgroups – Video Conferencing.

Unit IV: Web Concepts and Browsers

World-Wide-Web Concepts – Elements of Web – Clients and Servers – URL and TP – Web Browsers – Netscape Navigator and Communicator-Microsoft Internet Explorer.

Unit V: Search Engines

Search Engines – Web Directories – Microsoft Internet Explorer – Searching for Information – Bigfoot, Info space, Who were, Yahoo- Subscriptions and Channels – Web Sites-Making use of Web Resources – New and Weather, Sports, Personal Finance and Investing – Entertainment – Shopping – Travel, Kids, Teems, Parents and Communities, Health and Medicine, Religion and Spirituality.

UNIT – I

INTERNET CONCEPTS

Introduction to Internet

Computers and their structures are tough to approach, and it is made even extra tough while you want to recognize phrases associated with the difficulty this is already utilized in regular English, Network, and the net will appear to be absolutely wonderful from one some other, however, they may seem like identical.

A network is a group of two or more computer systems (Multiple gadgets, additionally called hosts), which are related through a couple of channels for the motive of sending and receiving data (records/media) in a shared environment. The community also can consist of serval gadgets/mediums that resource communique among or extra machines; those gadgets are called Network devices and consist of routers, switches, hubs, and bridges, amongst others.

Internet is a group of computer systems connected from all around the world. The Internet protocol suite is a framework defined through the Internet standards. Methods are divided right into a layered set of protocols on this architecture. The Internet gives a huge variety of statistics and communique offerings, which includes forums, databases, email, and hypertext. It is made of the neighbourhood to global personal, public networks connected through plenty of digital, wireless, and networking technologies.

The Internet is a worldwide interconnected network of hundreds of thousands of computers of various types that belong to multiple networks.

Working of the internet: The internet is a global computer network that connects various devices and sends a lot of information and media. It uses an Internet Protocol (IP) and Transport Control Protocol (TCP)-based packet routing network. TCP and IP work together to ensure that data transmission across the internet is consistent and reliable, regardless of the device or location. Data is delivered across the internet in the form of messages and packets. A message is a piece of data delivered over the internet, but before it is sent, it is broken down into smaller pieces known as packets.

IP is a set of rules that control how data is transmitted from one computer to another via the internet. The IP system receives further instructions on how the data should be transferred using a numerical address (IP Address). The TCP is used with IP to ensure that data is transferred in a secure and reliable manner. This ensures that no packets are lost, that packets are reassembled in the correct order, and that there is no delay that degrades data quality.

Internet Connection Concepts

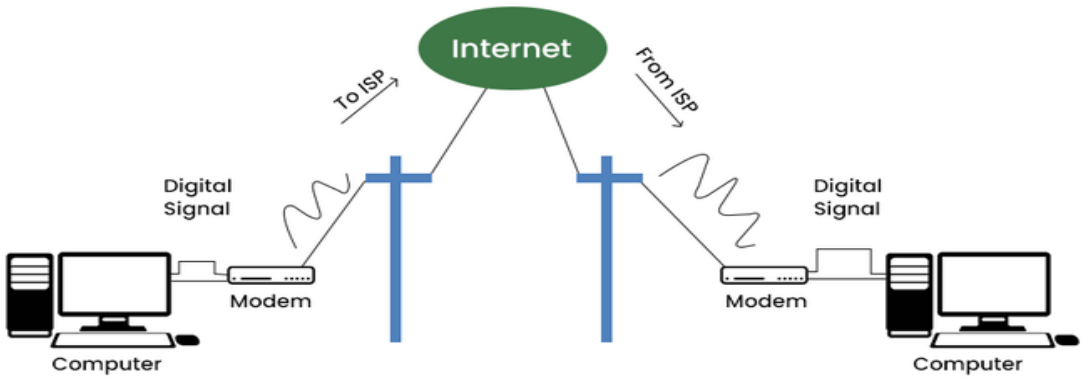
There are many connections that can be used for internet access. All the connections have their own speed range that can be used for different purposes like for home, or for personal use.

Dial-Up Connection

A dial-up connection is established between your computer and the ISP server using a modem.

A dial-Up Connection is a cheap and traditional connection that is not preferred these days as this type of connection is very slow.

To access the internet connection in the dial-up connection we need to dial a phone number on the computer and that's why it requires a telephone connection. It requires a modem to set up a dial-up connection, which works as interference between your computer and the telephone line. In this connection, we can use either an internet connection or telephone at a time.

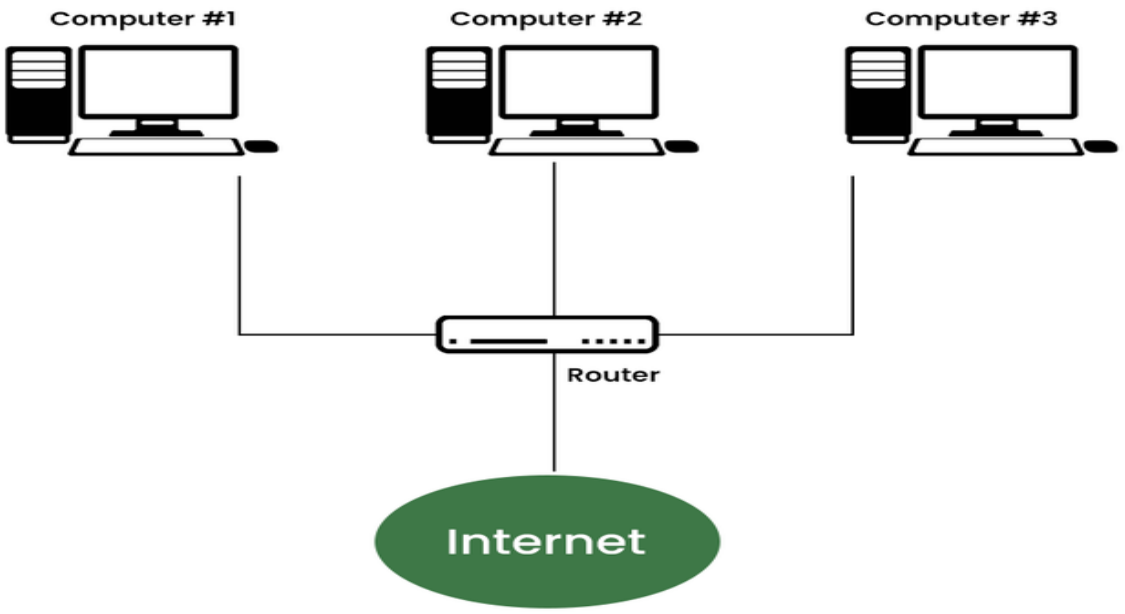


Broadband Connection

Broadband refers to high-speed internet access that is faster than traditional dial-up access. It is provided through either cable or telephone composition. It does not require any telephone connection that's why here we can use telephone and internet connection simultaneously. In this connection, more than one person can access the internet connection simultaneously.

It is a wide bandwidth data transmission that transports several signals and traffic types. In this connection, the medium used is coaxial cable, optical fiber cable, radio, or twisted pair

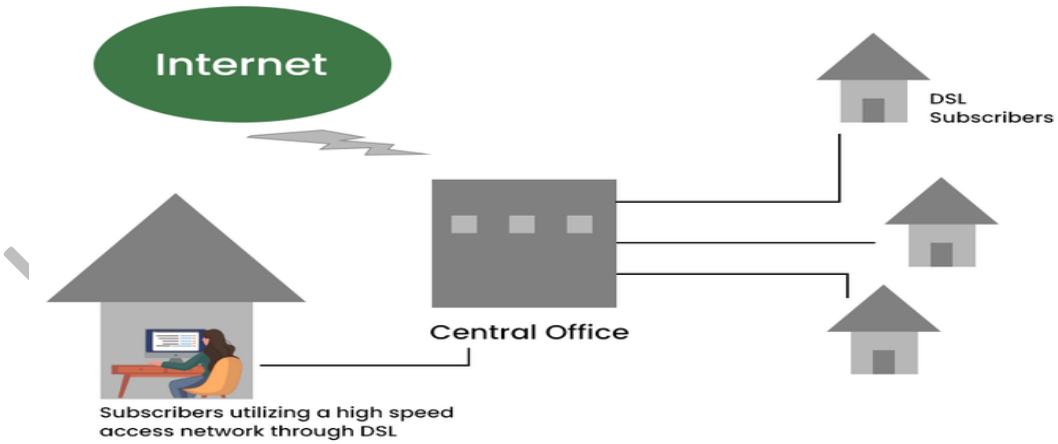
cable.



DSL

DSL stands for Digital Subscriber Line. It provides an internet connection through the telephone line (network). DSL is a form of broadband communication that is always on, there is no need to dial a phone number to connect. DSL connection uses a router to transport data and the speed of this connection range between 128k to 8Mbps depending on the service offered. A DSL connection can translate data at 5 million bytes per second, or 5mbps.

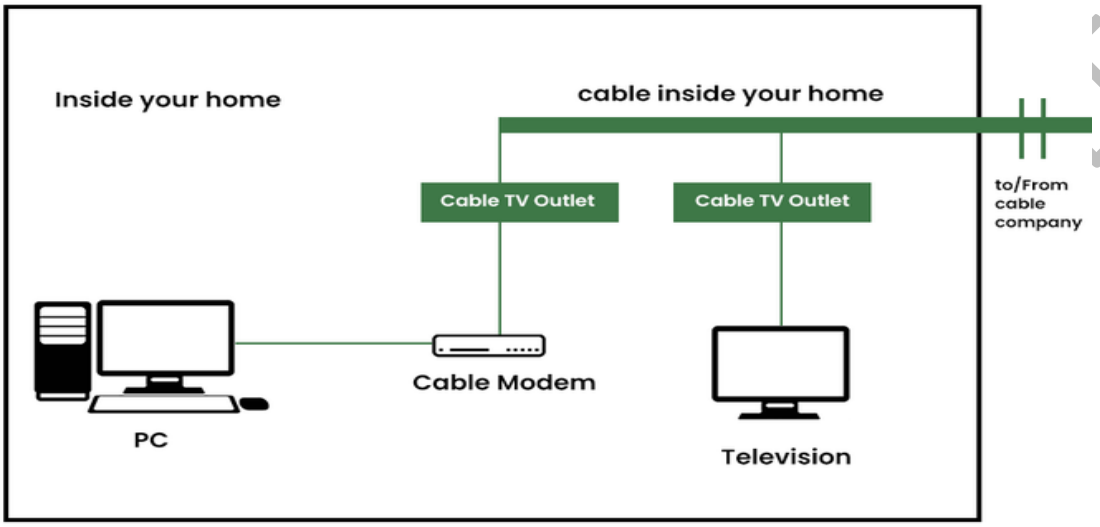
DSL service can be delivered simultaneously with wired telephone service on the same telephone line due to high-frequency bands for data.



Cable

It is a form of broadband access cable modem that can provide extremely fast access to the internet. The speed of this connection varies which can be different for uploading data transmission or downloading.

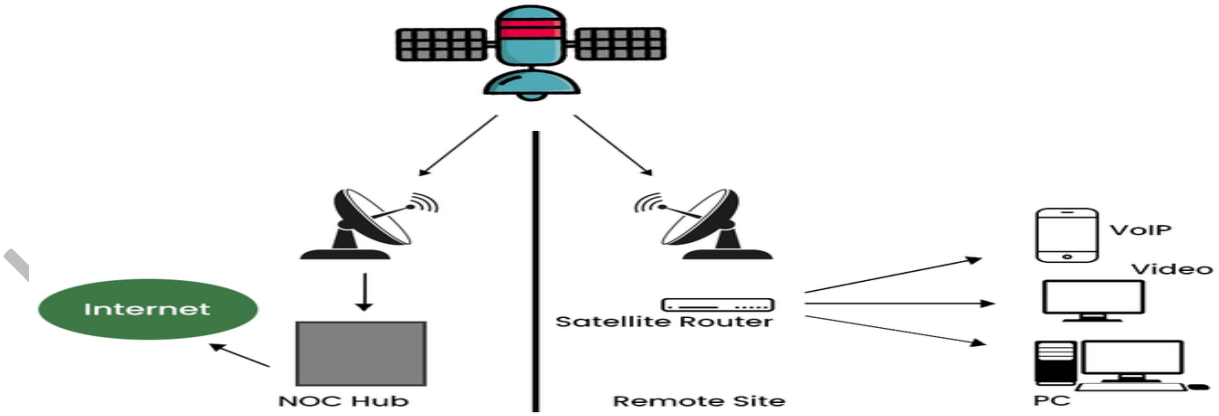
It uses a cable modem to provide an internet connection and operates over cable TV lines. The speed of cable connection ranges from 512k to 20Mbps.h



Satellite Connection

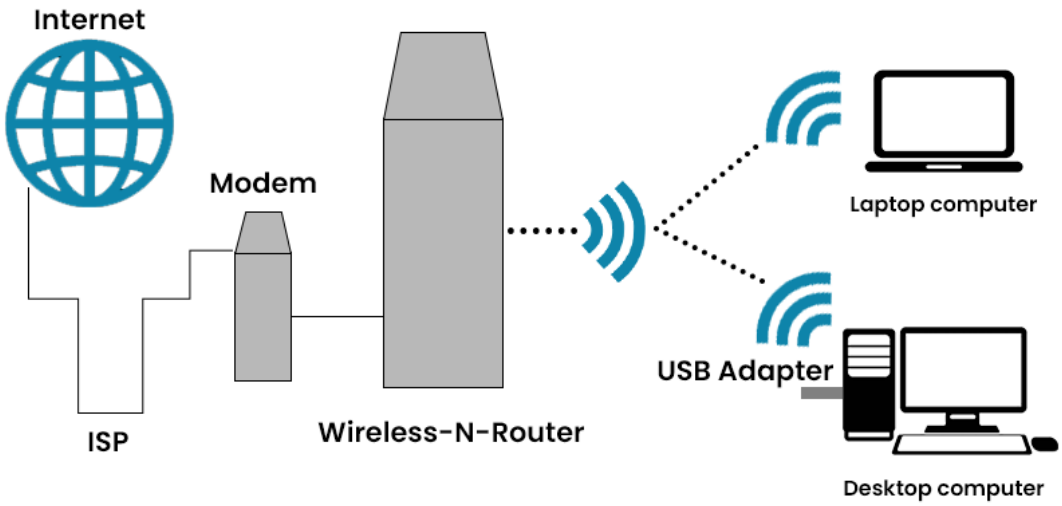
This type of connection is provided mainly in rural areas where a broadband connection is not yet offered. It accesses the internet via a satellite that is in Earth's orbit.

The signal travels from a long distance that is from earth to satellite and back again which provides a delayed connection. Satellite connection speeds range from 512k to 2.0Mbps.



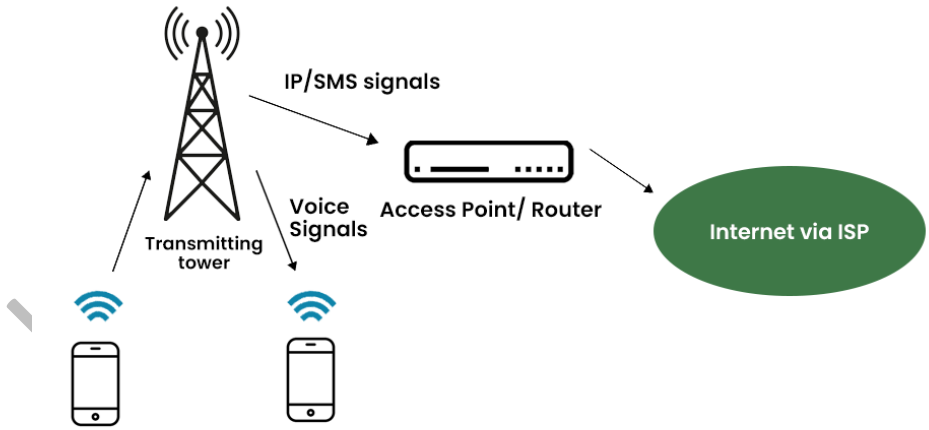
Wireless Connection

As the name suggests wireless connection does not use telephone lines or cables to connect to the internet. The wireless connection uses a radio frequency band to connect to the internet. It is also an always-on connection and this connection can be accessed from anywhere and speed may vary for different locations. It ranges from 5Mbps to 20Mbps.



Cellular

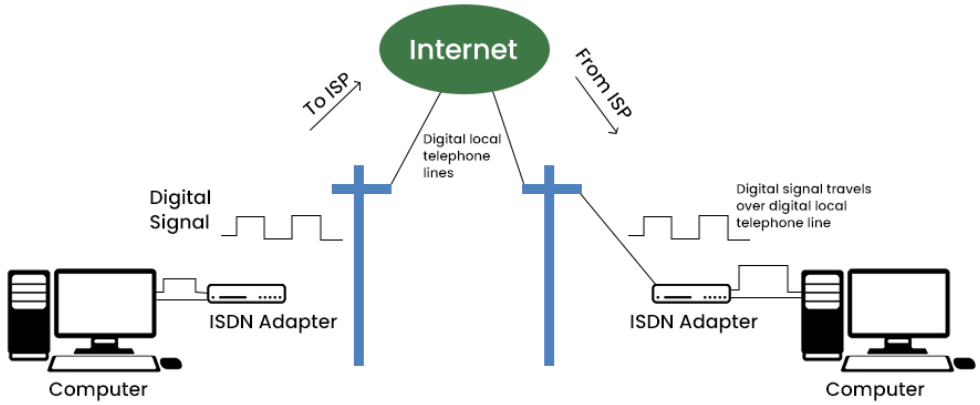
Cellular technology provides wireless Internet access through cell phones. Speed may vary depending on the service provider. The most common are 3G and 4G which means from 3rd generation and 4th generation respectively. The speed of the 3G cellular network is around 2.0Mbps and the 4G cellular network is around 21Mbps the goal of the 4G network is to achieve peak mobile speeds of 100Mbps but the current speed of the 4G network is about 21Mbps.



ISDN

ISDN stands for Integrated Service Digital Network and it is a circuit-switched telephone network system, but it also provides access to packet-switched networks that transmits both voice and data over a digital line. It provides a packet-switched connection for data in increments of 64 kilobit/s.

ISDN connection provides better speeds and higher quality than traditional connections. It provided a maximum of 128kbit/s bandwidth in both upstream and downstream directions.



Dialup connection:

In dialup connection, the services connect to the internet through a phone line connection. It is established between two or more communication devices in which it uses Public Switched Telephone Network (PSTN) to connect to the internet. It has a data transfer rate (DTR) up to 56kbps.

Intranet

Typically, an intranet includes connections through one or more gateway computers to the outside internet and external resources. To access their company intranet, employees must have a special network password and be connected to the company LAN.

Intranets uses

Organizations use intranets in a variety of ways depending on their needs. These include the following:

- **Central repository -** Intranets become the main repository where important information and company data are stored.
- **Collaboration -** These internal networks provide a way to share information that makes it easier for employees to work together.

- **Personalization -** Intranets provide personalized content to employees based on their role within the company.
- **Communication -** They make employee directories, company news and organization charts readily available, improving internal corporate communications.
- **Easy access to information -** Intranets provide easy access to information about company policies, benefits and updates.
- **Social elements -** Social media features let employees create an account, post content and status alerts and browse a newsfeed.
- **Project management -** To-do lists, employee directories, status updates and other resources aid users in project management.
- **Automation -** Intranets streamline everyday activities by helping to automate repeatable tasks.

How do intranets, the internet and extranets differ?

The internet, intranets and extranets are different types of networks with some similarities and overlapping aspects.

Internet

The internet works on a public network that anyone can access. There are no limits on who can access the internet, other than users must have access to a computing device that's connected to the internet. The public internet can have unlimited users at any one time, but it is more vulnerable to attackers than an intranet.

Intranet

An intranet works on a private network of computers. Only authorized people and systems can access it. They also must connect to the intranet via the required LAN or VPN. An intranet typically can host a specific number of users.

Extranet

An extranet is an intranet that grants access to those outside of an organization to certain information and applications. Third parties such as customers, vendors and partners are given access to certain parts of the organization's intranet.

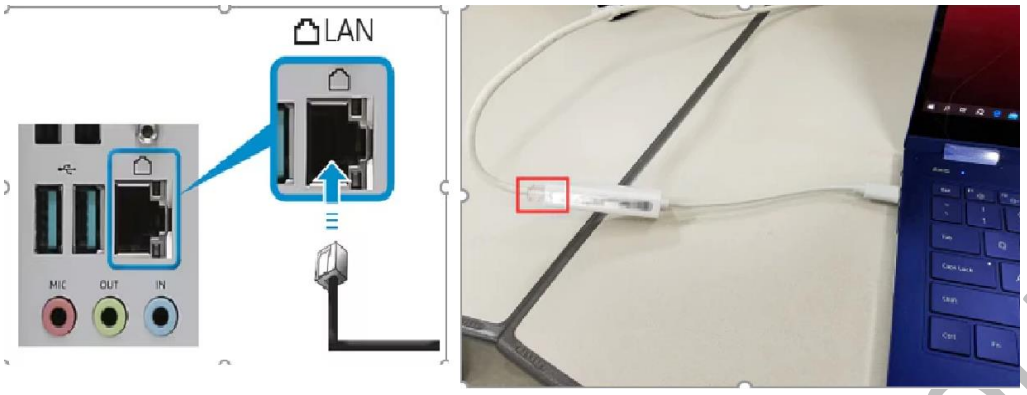
Examples of intranets

Intranet platforms are available from large vendors and smaller start-ups. They include the following:

- Axero
- Blink
- Facebook Workplace
- Happeo
- HCL Connections
- HyperOffice Atlas
- Jostle
- Microsoft SharePoint
- Microsoft Yammer
- Passageways OnSemble
- Samepage
- Simpplr
- Staffbase
- Workvivo
- Zoho Connect

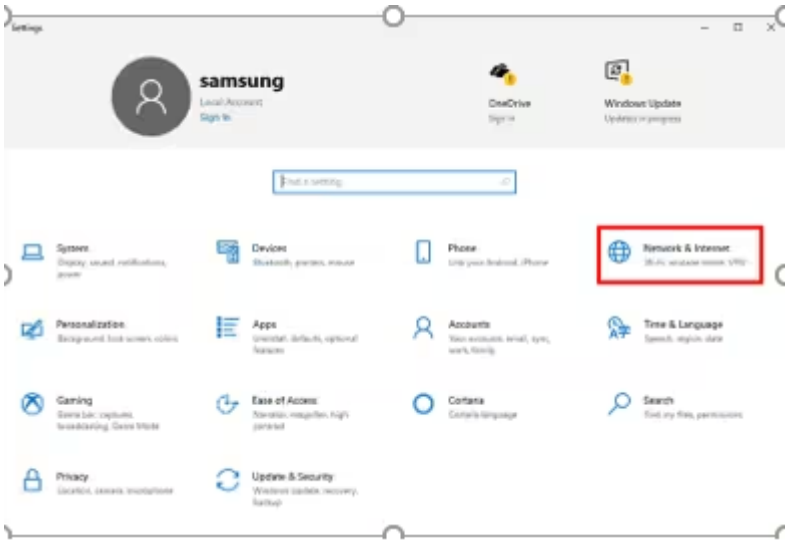
Connecting to a wired LAN

1. Connect a LAN cable to the PC's wired LAN port.

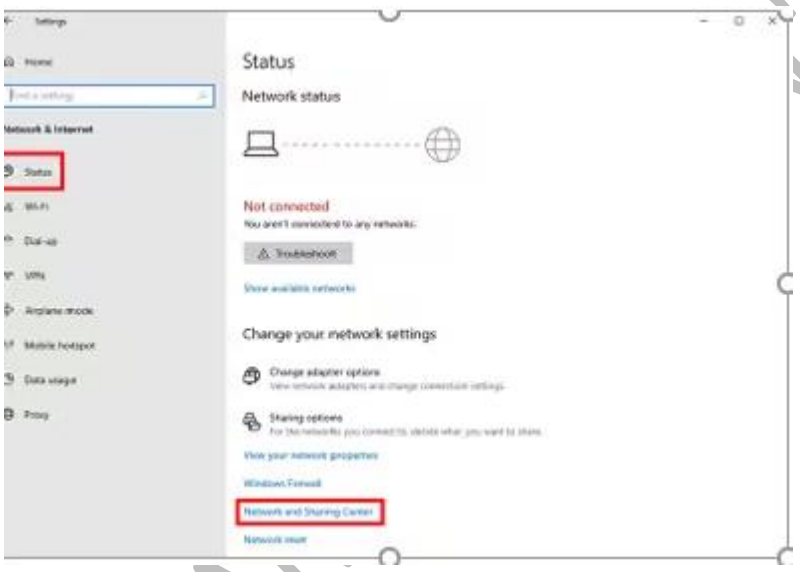


2. Click the **Start** button on the taskbar and then click **Settings.**

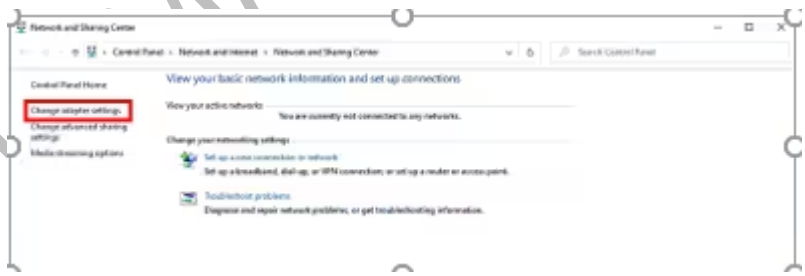
3. Click **Network and Internet.**



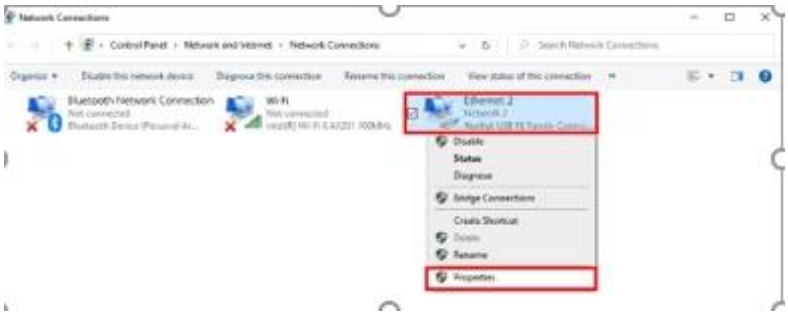
4. In **Status,** click **Network and Sharing Center**



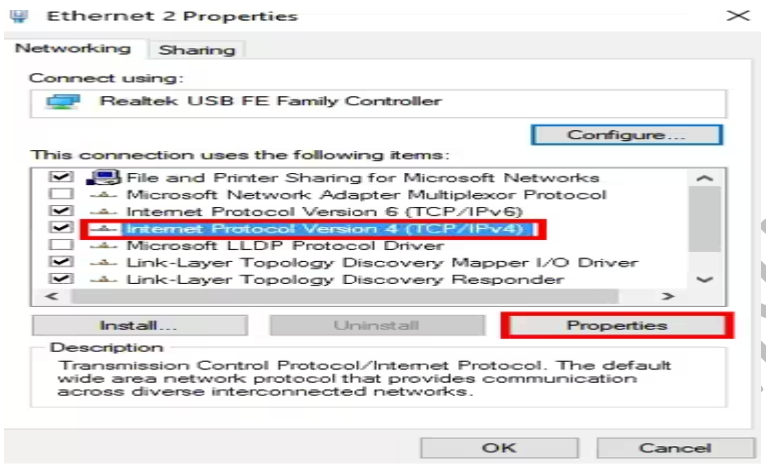
5. Choose **Change adapter settings** at the upper left.



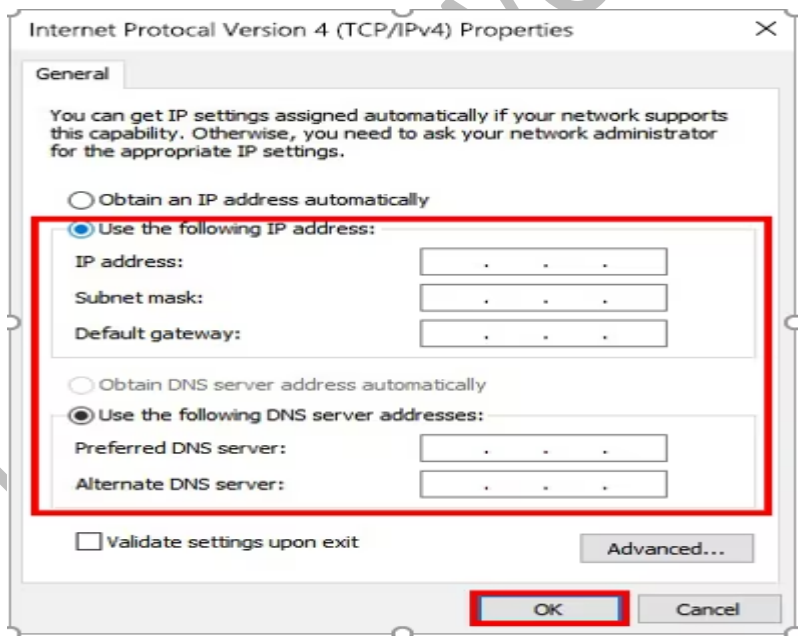
6. Right-click **Ethernet** and then choose **Properties.**



7. Select **Internet Protocol Version 4 (TCP/IPv4),** then click **Properties**



8. Set up the IP to use, then click **OK** to save your settings.



UNIT – II

E-MAIL CONCEPTS

Introduction:

Electronic mail, commonly known as email, is a method of exchanging messages over the internet. Here are the basics of email:

1. An email address: This is a unique identifier for each user, typically in the format of name@domain.com.
2. An email client: This is a software program used to send, receive and manage emails, such as Gmail, Outlook, or Apple Mail.
3. An email server: This is a computer system responsible for storing and forwarding emails to their intended recipients.

To send an email:

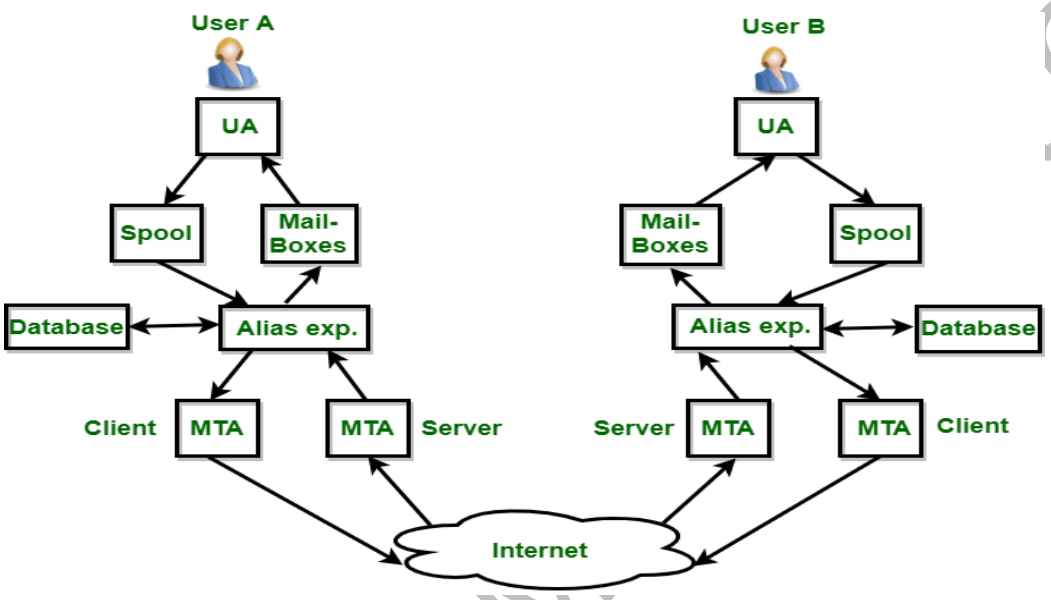
1. Compose a new message in your email client.
2. Enter the recipient's email address in the "To" field.
3. Add a subject line to summarize the content of the message.
4. Write the body of the message.
5. Attach any relevant files if needed.
6. Click "Send" to deliver the message to the recipient's email server.
7. Emails can also include features such as cc (carbon copy) and bcc (blind carbon copy) to send copies of the message to multiple recipients, and reply, reply all, and forward options to manage the conversation.

Electronic Mail (e-mail) is one of most widely used services of Internet. This service allows an Internet user to send a **message in formatted manner (mail)** to the other Internet user in any part of world. Message in mail not only contain text, but it also contains images, audio and videos data. The person who is sending mail is called sender and person who receives mail is called recipient. It is just like postal mail service.

Components of E-Mail System: The basic components of an email system are: User Agent (UA), Message Transfer Agent (MTA), Mail Box, and Spool file. These are explained as following below.

1. **User Agent (UA):** The UA is normally a program which is used to send and receive mail. Sometimes, it is called as mail reader. It accepts variety of commands for composing, receiving and replying to messages as well as for manipulation of the mailboxes.

2. **Message Transfer Agent (MTA) :** MTA is actually responsible for transfer of mail from one system to another. To send a mail, a system must have client MTA and system MTA. It transfer mail to mailboxes of recipients if they are connected in the same machine. It delivers mail to peer MTA if destination mailbox is in another machine. The delivery from one MTA to another MTA is done by Simple Mail Transfer Protocol.

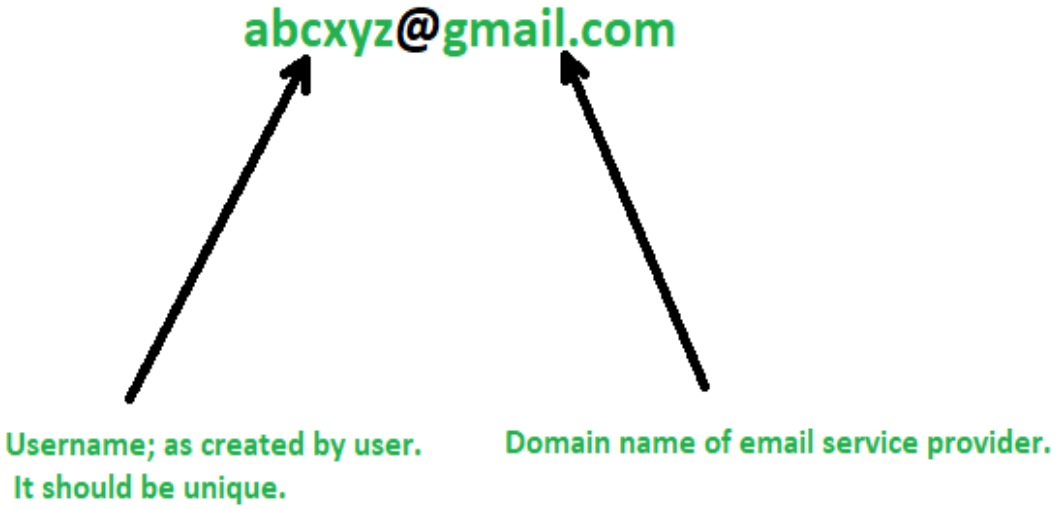


3. **Mailbox:** It is a file on local hard drive to collect mails. Delivered mails are present in this file. The user can read it delete it according to his/her requirement. To use e-mail system each user must have a mailbox. Access to mailbox is only to owner of mailbox.

4. **Spool file:** This file contains mails that are to be sent. User agent appends outgoing mails in this file using SMTP. MTA extracts pending mail from spool file for their delivery. E-mail allows one name, an alias, to represent several different e-mail addresses. It is known as mailing list, whenever user have to send a message, system checks recipient's name against alias database. If mailing list is present for defined alias, separate messages, one for each entry in the list, must be prepared and handed to MTA. If for defined alias, there is no such mailing list is present, name itself becomes naming address and a single message is delivered to mail transfer entity.

E-mail Addressing

Email addresses are always written in a standard format that includes a username, the @ (at) symbol, and the email provider's domain.



E-Mail Basic Commands

Task	Command Address	Response
Get the list of email commands	<listname-help@example.org>	Responds by sending you an email containing a list of all available commands. The list may or may not accept every one of these commands based on configured list rule and the sender's list user level.
Get info	<listname-info@example.org>	Responds by sending you an email containing information about the list.
Get FAQ	<listname-faq@example.org>	Responds by sending you an email containing the list's Frequently Asked Questions, if any are available.
Subscribe	<listname-subscribe@example.org>	Responds by sending you an email asking you to confirm the subscription request. You must send a reply from this same email address before a subscription will be added. This prevents others from subscribing you via email without your permission. This request adds you as a regular subscriber, so you receive each message sent to the list as a separate email. If you would rather receive messages in digest

Task	Command Address	Response
		form, see Subscribe to digest. If you want to subscribe under a different email address, see Subscribe alternate address. Unless this is a public list, this command will probably be rejected unless you are already a digest subscriber.
Unsubscribe	<listname-unsubscribe@example.org>	Responds by sending you an email asking you to confirm the request to unsubscribe. You must send a reply from the same email address before the subscription will be removed. This prevents others from unsubscribing you via email without your permission. If you want to unsubscribe a subscription you hold under a different email address, see Unsubscribe alternate address. You can initiate the subscription to another address through this command, but the confirmation request will go to the other account This request only works if you are a regular subscriber, if you are a digest subscriber, see Unsubscribe from digest. You can also unsubscribe by clicking on the 'List-Unsubscribe' link in any list message. Most lists accept this command, even those that don't accept the Subscribe request.
Subscribe to digest	<listname-digest-subscribe@example.org>	Responds by sending you an email asking you to confirm the subscription request. You must send the confirmation from this same email address before a subscription will be added. This prevents others from

Task	Command Address	Response
		subscribing you via email without your permission. Unless this is a public list, this command will probably be rejected unless you are already a regular subscriber.
Unsubscribe from digest	<listname-digest-unsubscribe@example.org>	Responds by sending you an email asking you to confirm the request to unsubscribe. You must send this confirmation from the same email address before the subscription will be removed. This prevents others from unsubscribing you via email without your permission. You can also unsubscribe by clicking on the 'List-Unsubscribe' link in any list message. Most lists accept this command, even those that don't accept the Subscribe to digest command.
Subscribe alternate address	<listname-subscribe-username=host.tld@example.org>	You can use this address command to initiate a subscription for a different address than the one from which you send the email containing the command, but the confirmation request will be sent to the account being subscribed before a subscription will be added. This prevents others from subscribing you via email without your permission. The command begins with the familiar 'listname-subscribe' command address described previously, but you also need to provide the address of the alternate account. Just add a hyphen and your address (substituting an equal sign ('=') instead of an at sign ('@')) after the command.

Task	Command Address	Response
		Unless this is a public list, this command will probably be rejected.
Unsubscribe alternate address	<listname-unsubscribe-username=host.tld@example.org>	You can use this address command to remove an address from the subscription lists that is different than the one you use to send this command. The confirmation request will be sent to the account being unsubscribed before the subscription is removed to prevent others from unsubscribing you without your permission. The command begins with the familiar 'listname-subscribe' command address described previously, but you also need to provide the address of the alternate account. Just add a hyphen and your address (substituting an equal sign ('=') instead of an at sign ('@')) after the command. Most lists accept this command, even those that don't accept Subscribe commands.
Get archived messages by number	<listname-get.123_145@example.org>	To get archived messages, use the command listname-get. Just add a period ('.') and a range of numbers representing the IDs of the messages you'd like to see, using an underscore ('_') as a delimiter. A maximum of 100 messages can be retrieved per request. The list would respond to the above command by returning an email containing messages 123 through 145 (a total of 23 messages). If you send the email command from an unsubscribed address this command will usually be accepted only if this is a public list. Most lists accept archive retrieval

Task	Command Address	Response
		commands from subscribed addresses, but some do not. Some mailing lists don't have archives.
Get archive index	<listname-index.123_456@example.org>	To get a subject and author index of the archived messages retrieved in by the previous command, use the command listname-index, adding a period ('.') and the range of message IDs you'd like to have indexed, using an underscore ('_') as a delimiter. A maximum of 100 messages can be indexed per request. The Mailing List Manager would respond to the above command by returning an email containing a subject and author index for messages 123 through 145. If you send the email command from an unsubscribed address this command will usually be accepted only if this is a public list. Most lists accept archive retrieval commands from subscribed addresses, but some do not. Some mailing lists don't have archives.
Get archived messages by subject	<listname-thread.12345@example.org>	To get all messages that have the same subject as a particular message, use the command listname-index, adding a period ('.') and the message ID. The Mailing List Manager would respond to the above command by returning an email containing all messages with the same subject as message 12345. If you send the email command from an unsubscribed address this command will usually be accepted only if this is a public list. Most lists accept archive retrieval commands from subscribed addresses, but

Task	Command Address	Response
		some do not. Some mailing lists don't have archives.
Send email to listowner	<listname-owner@example.org>	If you want to send a message to the human owner of this list, send an email to this address. Remember to provide a human-readable subject and message (body).

10 simple (but inspiring) ways to reduce email volume

1. **Avoid email conversations**

Many people use email in lieu of conversations. They bounce messages back and forth when they really should walk down the hall or pick up the phone.

Email conversations are inefficient. Email is designed to transfer information. Complex and charged topics need to be discussed. An email conversation perpetuates the flawed expectation we need to be online all the time. After all, we don't want to ignore people who are trying to connect with us. But this constant stream of email prevents us from protecting blocks of time for focused work.

Use the Rule of Three to help gauge when you are slipping into email conversations. When an email has bounced back and forth three times, it is time to pick up the phone.

2. **Cut back on ccs**

One of the biggest pet peeves people have regarding email is being needlessly copied. This quickly turns into email overload when everyone on the team follows suit.

There are better ways to stay updated. Schedule regular status meetings and establish clear expectations about who is doing what. Foster trust among your colleagues and encourage them not to copy you simply to let you know something was completed. It's the equivalent of saying, "Look – I did what I said I was going to do!"

3. **Focus on fewer projects at a time**

Every project we are working on has associated emails. The math is simple here. The more projects we have on the go, the more emails we receive (and the more meetings we attend). Ironically, the more projects we try to tackle at once, the less we accomplish.

Focus on completing your top priority projects and then move on to the others. This approach will allow you to tackle more projects over the long term and better manage your email – and your time – in the process.

4. **Delegate more work**

If you have too much on your plate and you cannot defer some of the projects, invest in training someone to help (when possible). You will still need to be involved but to a lesser extent.

5. **Use the One-Touch Principle**

Avoid reading each email multiple times. This adds redundancy to your day, which can easily add up to several weeks each year. This also clogs your inbox, delays responses and leads to additional follow-up emails.

The One-Touch Principle is a huge time-saver when it comes to email. Adopting this habit may not change your email volume but it will change the perceived volume. Incoming emails are simply easier to stay on top of when we adopt this productivity principle.

Focus on processing your email sequentially, in batches. Commit to only reading any email one time. I describe this process in detail in The Email Warrior: How to clear your inbox and keep it that way. You can also learn more in The Email Warrior online course, available on-demand as part of the Own Your Time Productivity Series.

6. **Set up email rules**

Email rules can automatically filter specific types of emails into folders so you can batch process them. For example, emails from certain people or emails with specific subject lines can be automatically routed into folders to be processed later. A nice trick is to automatically route any emails you blind-copy yourself on into a “follow-up” folder.

Caution: rules are only helpful if you are disciplined about checking the associated folders. I used to have all sorts of blogs automatically routed into a “reading” folder. Guess what happened. I never checked the folder! Now I have all of the blogs come into my inbox. I try to quickly scan them during the day, delete if the topic doesn’t interest me or if the volume gets too much.

7. **Hold regular one-on-one meetings**

You need regular, one-on-one meetings with each of your team members. If you don’t have this protected time, they will have no choice but to email you more often. Make sure to protect enough time for your team. Encourage them to save what they can for your meetings (while still emailing you in between as needed).

8. **Avoid micromanaging**

Challenge your team to identify solutions and come to you only as a sounding board. Leave the ball in their court more often and you'll find you get fewer emails.

9. **Make use of internal sharing sites**

Many times, common documents are emailed back and forth between team members. This adds to inbox overload and creates confusion as to which version is the most current. It is much more efficient to have these documents saved on a central site for all to access. Most company servers offer this. Google Drive and Drop box are other options.

10. **Unsubscribe**

We need to question the value we are getting from all of our subscriptions. If you find yourself consistently hitting "delete", simply unsubscribe.

Send messages & attachments confidentially

Important: If you're using Gmail with a work or school account, contact your admin to make sure you can use confidential mode.

1. On your computer, go to Gmail.
2. Click Compose.
3. In the bottom right of the window, click Turn on confidential mode . **Tip:** If you've already turned on confidential mode for an email, go to the bottom of the email, then click **Edit.**
4. Set an expiration date and passcode. These settings impact both the message text and any attachments.
    - **If you choose "No SMS passcode,"** recipients using the Gmail app will be able to open it directly. Recipients who don't use Gmail will get emailed a passcode.
    - **If you choose "SMS passcode,"** recipients will get a passcode by text message. Make sure you enter the recipient's phone number, not your own.
5. Click Save.

Remove access early

You can stop your recipient from viewing the email before the expiration date.

1. On your computer, open Gmail.
2. On the left, click **Sent.**

3. Open the confidential email.
4. Click **Remove access.**

Open an email sent with confidential mode

If the sender used confidential mode to send the email:

- You can view the message and attachments until the expiration date or until the sender removes access.
- Options to copy, paste, download, print, and forward the message text and attachments will be disabled.
- You might need to enter a passcode to open the email.

UNIT-III

INTERNET SERVICES

Computer Conferencing Technologies

In computer conferencing. computers are connected by local area network (LAN) or internet. Access to computer conferencing is not limited by time and space, thus offering greater access to student in learning from distance. Computer conferencing allows learners to access information from the teacher and at the same time enables them to interact among themselves. Unlike the audio and videoconferences, computer conferences are mostly text based such as chat rooms and shared white boards. Following are two types of computer conferencing:

Internet videoconferencing

Internet Chat (Text only)

Internet Videoconferencing

In order to set up an internet video conference we need to have digital video camera, microphone. Digitizing card for audio & video, speakers, network card and conference software installed in the computers at both sides. Internet video conferencing usually results in a small image and quality of video depends on the band width availability i.e. speed of the internet connection. In most cases, a regular modem is far too slow to transmit effective video. With improvements in technology, it is possible to get better pictures and sound across internet that can be viewed full screen with better lip-sync i.e. synchronization between lips and sound.

Internet Chat

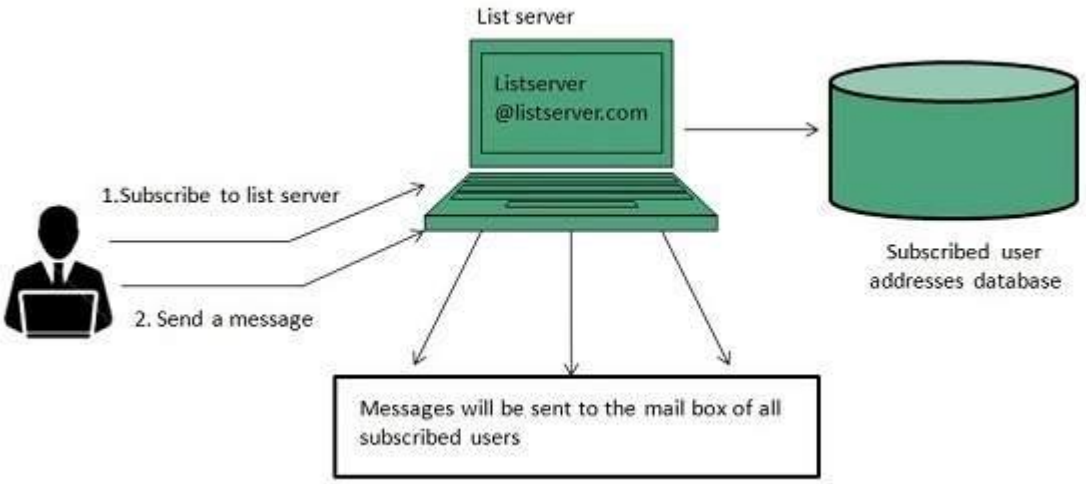
Internet Chat is a two-way, interactive exchanpe over the Internet in text mode. Tn chat mode, two or more people at remote computers connect to the same chat "room" and type messages. Typed messages can be seen by all participants on a shared screen. Online chat allows students and teachers to communicate in "real-time." In internet chat, student feels free to communicate in the absence of cameras/microphones but helshe may have to concentrate hard to express in text mode. Shared white boards can be used to communicate t/u-ouglz text a~d graphics with appropriate software tools. Advanced software even allows users at remote sites to share applications. The student and teacher will both be able to provide inputs and analyze the results. The advantages of online collaboration through chat or shared whiteboards are that the communications are synchronous and the feedback for the students is immediate. Need for similar software at both sites can be a disadvantage. Number of participants may be limited for simultaneous collaboration.

Email Mailing Lists:

A mailing list is a compilation of email addresses that are used to send email to multiple users simultaneously. Rather than individually sending an email to each user, mailing lists send email to specific user groups through a single email message.

How does mailing list work?

Before joining a mailing list, it is mandatory to subscribe to it. Once you are subscribed, your message will be sent to all the persons who have subscribed to the list. Similarly if any subscriber posts a message, then it will be received by all subscribers of the list.



Types of Mailing List

Following are the various types of mailing lists:

Response List

It contains the group of people who have responded to an offer in some way. These people are the customers who have shown interest in specific product or service.

Compiled List

The compiled list is prepared by collecting information from various sources such as surveys, telemarketing etc.

Announcements

These lists are created for sending out coupons, new product announcements and other offers to the customers.

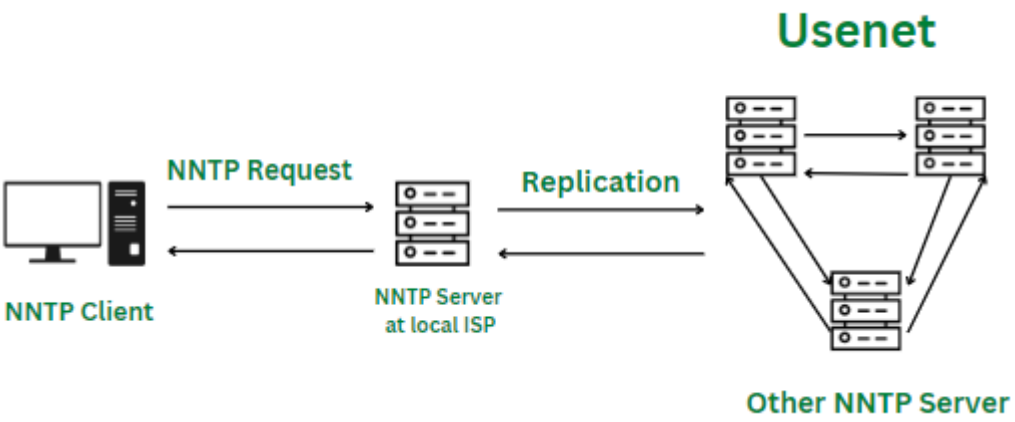
Discussion List

This list is created for sharing views on a specific topic such as computer, environment, health, education etc.

What is Usenet?

Usenet is the contraction of the User Network. It resembles just a Bulletin Board System where users can post articles or posts on various topics.

The Usenet of newsgroups is hierarchical and, similar to the Domain Name System (DNS). A usenet is a collection of user-submitted articles or posts on various topics/subjects that are posted to servers on worldwide network.



Working of Usenet

The Usenet is built on the Network News Transfer Protocol (NNTP), a standard Internet protocol in Request for Comments (RFC) 977 and has two components:

- A **client/server portion** that allows users running client software such as Google Chrome to interact with the news servers by downloading a list of available. Usenet newsgroups on the server, read existing messages in the newsgroups, reply to existing messages, or post new messages.
- A **server/server portion** that allows news servers to establish communication with each other, for the purpose of replicating messages from newsgroups. For example, Microsoft Exchange Server fully supports NNTP.

Mailing list vs. Newsgroup

S.N.	Mailing List	Newsgroup
1.	Messages are delivered to individual mailboxes of subscribed member of group.	Messages are not posted to individual mailboxes but can be viewed by anyone who has subscribed to that newsgroup.
2.	Working with mailing list is easier than newsgroup. It is easy to compose and receive emails.	Working with a particular newsgroup requires proper knowledge of that newsgroup.
3.	In order to send or receive mails, you required an email program.	It requires a newsgroup reader.
4.	Messages are delivered to certain group of people.	Messages are available to public.
5.	Mailing list does not support threaded discussion.	Newsgroup supports threaded discussion.
6.	Messages delivered to listed subscribers cannot be cancelled.	Article posted on a newsgroup can be cancelled.

Reading Newsgroups

To read the newsgroup, follow these steps:

1. Start pine just as if you were going to read your e-mail.
2. From the main menu, hit 'L' to see a list of your folders.
3. Hit the down arrow once to select "News" and hit enter. Use the arrow keys to highlight uwash.class.cse142.bboard and then hit enter. This will take you to a list of messages that have been posted to the newsgroup. This message looks similar to your inbox.
4. You can read and reply to messages, or even post new messages, in the same way you send and receive mail. Note that when you read a message and hit 'R' to reply, you will be given the choice of following up (which means your reply goes to the newsgroup) or

replying via e-mail (which means only the author of the original posting gets your reply). Please don't be afraid to reply via private e-mail if your response is not of general interest to the rest of the class. It will help keep down the volume of messages on the newsgroup, and the rest of the class will appreciate it.

Video conferencing:

Video conferencing is a meeting with two or more participants who are participating from different locations. They use a computer connection, audio, and video to connect. Video conferencing can be used for team meetings, webinars, product demos, job interviews, and more.

What kind of video conferencing equipment is needed?

Here are some of the most commonly used video conferencing equipment

1. **Displays:** laptop, desktop monitor, television screen
2. **Microphones and cameras:** built-in microphones and webcams, USB microphones and webcams
3. **Speakers:** built-in computer speaker, external speaker, VoIP (voice over IP) conferencing phone
4. **Internet Connection:** WiFi, ethernet
5. **Video Conferencing Software:** video conferencing tools and apps

Types of Video Conferencing Systems

Depending on your needs, there are different types of video conferencing systems you can choose from.

1. **Telepresence Video Conferencing System:** Multiple screens or monitors are used to make everyone feel like they're joining the meeting in person.
2. **Desktop Video Conferencing System:** All the video conferencing hardware and software is built-in to a computer or laptop.
3. **Room-Based Video Conferencing:** The video conferencing technology is built into the room itself.

UNIT-IV

WEB CONCEPTS AND BROWSERS

World Wide Web (WWW)

The **World Wide Web** is abbreviated as WWW and is commonly known as the web. The WWW was initiated by CERN (European library for Nuclear Research) in 1989.

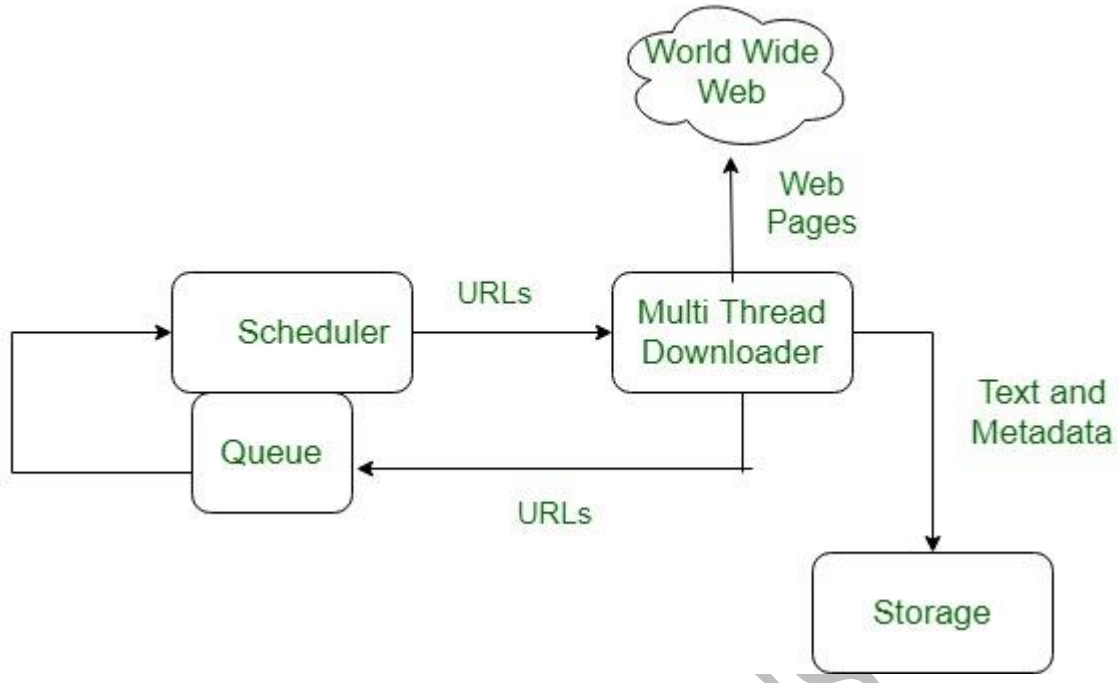
WWW can be defined as the collection of different websites around the world, containing different information shared via local servers (or computers).

History:

It is a project created, by Timothy Berner Lee in 1989, for researchers to work together effectively at CERN. Is an organization, named the World Wide Web Consortium (W3C), which was developed for further development of the web. This organization is directed by Tim Berner's Lee, aka the father of the web.

System Architecture:

From the user's point of view, the web consists of a vast, worldwide connection of documents or web pages. Each page may contain links to other pages anywhere in the world. The pages can be retrieved and viewed by using browsers of which internet explorer, Netscape Navigator, Google Chrome, etc are the popular ones. The browser fetches the page requested interprets the text and formatting commands on it, and displays the page, properly formatted, on the screen. The basic model of how the web works are shown in the figure below. Here the browser is displaying a web page on the client machine. When the user clicks on a line of text that is linked to a page on the abd.com server, the browser follows the hyperlink by sending a message to the abd.com server asking it for the page.



Here the browser displays a web page on the client machine when the user clicks on a line of text that is linked to a page on abd.com, the browser follows the hyperlink by sending a message to the abd.com server asking for the page.

Working of WWW:

The World Wide Web is based on several different technologies: Web browsers, Hypertext Mark-up Language (HTML) and Hypertext Transfer Protocol (HTTP).

A Web browser is used to access web pages. Web browsers can be defined as programs which display text, data, pictures, animation and video on the Internet. Hyperlinked resources on the World Wide Web can be accessed using software interfaces provided by Web browsers. Initially, Web browsers were used only for surfing the Web but now they have become more universal. Web browsers can be used for several tasks including conducting searches, mailing, transferring files, and much more. Some of the commonly used browsers are Internet Explorer, Opera Mini, and Google Chrome.

Features of WWW:

- HyperText Information System
- Cross-Platform
- Distributed
- Open Standards and Open Source
- Uses Web Browsers to provide a single interface for many services

- Dynamic, Interactive and Evolving.
- "Web 2.0"

Components of the Web:

There are 3 components of the web:

1. **Uniform Resource Locator (URL):** serves as a system for resources on the web.
2. **HyperText Transfer Protocol (HTTP):** specifies communication of browser and server.
3. **Hyper Text Markup Language (HTML):** defines the structure, organisation and content of a webpage.

Elements of a Webpage

Each website has its own set of web pages and they all differ from each other. However, each of them contains some common elements. Here is a list of these elements that make up a webpage.

1. The logo or website's name is at the top. The placement is not of importance. It defines the webpage that belongs to which website.

2. The search bar allows users to search for related information on a particular page or the whole website.

3. Under it are placed the breadcrumbs. These help the reader to locate where they are on the website and help them to locate the previous page or the home page.

4. The title or the heading of the webpage should be placed. It should be with the HTML <h1> tag.

5. Under it starts the content is divided into different paragraphs to maintain clarity. These paragraphs may be placed under different headings. These headings can be created with tags <h2> to <h6> according to their importance.

6. Many informative web pages include a link for feedback. A good webpage will always ask the reader if the information was useful or not.

7. In the end, comes the footer. The footer includes the name and any other information about the website.

8. The copyright and legal notice must be mentioned at the end of each website. This prevents the information available from any theft of content. This ensures the information provided remains unique.

What is a Web Client?

A Web client is an application installed on the user's device that they can use to surf the internet. Web clients request computer servers for a webpage but don't store them.

Without these clients, an ordinary user can't use the internet. When you search for a particular webpage through your browser, it retrieves the page from the appropriate server and displays the result. The client and server communicate via HTTP (Hypertext Transfer Protocol).

You can think of the HTTP protocol as the language of the web. It enables networked devices to send and receive traffic using a set of simple rules. However, there're other types of protocols, such as SSH (Secure Shell), FTP (File Transfer Protocol) and SMTP(Simple Mail Transfer Protocol).

What is a Web Server?

Firstly, a Web Servers are systems that are connected to the internet and store web pages. In addition it sends out requested data over the web using HTTP. In nutshell, like Apache– the Web Servers are just like libraries for web pages. They store, process and deliver the web resources to the client software.

Servers can also use other data transfer protocols such as SMTP and FTP. Mail servers use SMTP for transferring emails from one user to another. Additionally FTP server is used for high speed file transfer operations.

Older web servers used to serve the requested documents as is, without any modifications. These types of servers are known as static servers. Most modern servers today serve dynamic content instead. Dynamic web servers modify the requested content on the fly.

URL

URL stands for Uniform Resource Locator. A URL is nothing more than the address of a given unique resource on the Web. In theory, each valid URL points to a unique resource.

Web Browser

An application that supports the client side of the http and Internet Protocol for the www. We can use a web browser, also called web browser, to access content published on a web server.

Web browsers also appear in simpler devices such as internet connected cell phones, like many Nokia models.

The first graphical web browser was developed in 1993 by a group of students headed by Marc Andreessen at the National Center for Supercomputing Applications (NCSA). This browser was known as Mosiac and was distributed free.

Features of web browser

- Toolbar buttons for navigating forward and background through the tree of previously displayed pages for stopping the downloaded process, and for manually refreshing a page that loaded incompletely.

Facilities for displaying the underlying source code or html of a page, and even for edition and publishing web content.

Options for specifying a default home page from which to begin browsing, a default search engine for searching the web, and other default browsing options

Netscape

Netscape communicator is a complete suite of internet application, not merely a web browser.

Netscape communicator suite has so many components and some of them are as follows;

1. Html editor
2. Netscape navigator
3. Netscape messenger
4. Netscape conference
5. Net casting
6. Collabra & Usenet

Netscape navigator

The center piece of Netscape communicator is Netscape navigator, the web browser component to process and access html documents & other web server contents.

The latest version of Netscape Navigator has added some significant new features to the release, the most notable of which is an array of tools that together they call smart browsing

Functions of Netscape Navigator

Click the back and forward buttons to move between pages we have already visited in the current session.

Click the go menu to view a list of all the pages we have visited in the current session- our history list. Select a page to return to it.

To go to a specific web page, type its address in the location box. We can pull down a list from that box to see every page we have ever typed in directly.

Internet Explorer

This is a graphical browser. By using IE we can experienced the hypertext, photographs, sound, video etc. that are available on the World Wide Web.

It utilizes the "point and click" technology to select hypertext links.

It provides the helper applications "viewers" to display images, open files, hear sounds, view movie clips etc.

Component of Internet Explorer

- Title bar
- Menu bar
- Go menu bar
- Address bar
- Status bar

Title bar

The dark blue strip across the top of the Internet Explorer screen is known as the title bar. In the case of internet explorer it holds the title of the current web page followed by name of application.

In the title bar also include minimize, maximize and close options.

Menu Bar

If we have worked with windows applications for any amount of time. We will surely recognize many of the items on internet explorer's menu bar.

In the menu bar included file, edit, view, help etc.

Go menu bar

The go menu is a navigational aid helps us move from one application in the internet explorer suite to another.

In this bar included back, forward, stop, refresh, home, search, history, print etc.

Address bar

The address bar is a most important component of IE in which type the particular web site address.

Status bar

The strip across the bottom of the internet explorer screen is known as status bar. Status bar shows the status of web pages.

UNIT – V

SEARCH ENGINES

Search Engines

Search engines are powerful tools that play a fundamental role in navigating the vast expanse of the World Wide Web. These sophisticated software systems are designed to assist users in finding information by retrieving relevant data from an extensive database. The functioning of search engines involves intricate processes such as web crawling, indexing, and algorithmic ranking to deliver accurate and timely results.

Definition:

- A search engine is a software program designed to search for information on the World Wide Web.
- It uses algorithms to identify and retrieve relevant data in response to user queries.

Search Engine Components:

Crawling: Search engines use automated bots (spiders or crawlers) to browse the web and index web pages.

Indexing: The collected information is organized and stored in an index, making it easier for the search engine to retrieve relevant results quickly.

Ranking Algorithm: Algorithms are applied to the indexed data to determine the order in which results are presented to the user.

Popular Search Engines:

- **Google:** The most widely used search engine globally, known for its accurate and fast results.
- **Bing:** Microsoft's search engine, providing web search as well as image and video search.
- **Yahoo:** Offers search services and also aggregates content from other sources.

Search Directory

Search directories are classified collections of documents. They are good for searching with a context. These directories are good for browsing. In subject directories, documents are pre classified by a person. Librarians' Internet Index; Google Directory; Yahoo!; dmoz are some of the examples of subject directories.

There are two basic types of directories:

- Academic and Professional Directories: These are often created and maintained by subject experts to support the needs of researchers. INFOMINE, from the University of California, is a good example of an academic directory.
- Commercial Directories: These cater to the needs of general public. Directories of Yahoo! and Google are examples of commercial directories.

Microsoft Internet Explorer

As of my last knowledge update in January 2022, Microsoft Internet Explorer (IE) was largely considered outdated and less secure compared to modern web browsers like Google Chrome, Mozilla Firefox, Microsoft Edge, and others. Microsoft itself had moved away from Internet Explorer in favor of Microsoft Edge, a more modern and feature-rich browser.

Here are some key points about Internet Explorer and its historical significance:

1. **Introduction and History:**

- Internet Explorer was first introduced by Microsoft in 1995 and became the default web browser for Windows operating systems.
- Over the years, various versions of Internet Explorer were released, with the last major version being Internet Explorer 11.

2. **Competition and Decline:**

- Internet Explorer faced intense competition from other browsers, especially Mozilla Firefox and later Google Chrome.
- One of the main criticisms of Internet Explorer was its slower performance, lack of support for modern web standards, and security vulnerabilities.

3. **Security Concerns:**

- Internet Explorer had a reputation for being vulnerable to security threats and malware attacks.

- Microsoft's efforts to improve security led to the introduction of features like Protected Mode and Smart Screen Filter, but the browser continued to face security challenges.

4. **End of Support:**

- Microsoft officially ended support for Internet Explorer 11 on June 15, 2022.
- After this date, Microsoft recommended using Microsoft Edge as the default browser.

5. **Microsoft Edge:**

- Microsoft Edge is the successor to Internet Explorer and is built on a different engine (Chromium) for improved performance, security, and compatibility with modern web standards.
- Microsoft Edge became the default browser for Windows 10 and later versions.

6. **Legacy Use:**

- Some organizations and users continued to use Internet Explorer for compatibility reasons, especially for older web applications and websites that were designed to work with its unique features.

It's important to note that the information provided here is based on my last training cut-off in January 2022. Since then, there may have been further developments or changes. As of my last update, it's strongly recommended to use a modern, supported browser like Microsoft Edge, Google Chrome, Mozilla Firefox, or Safari for a more secure and optimized web browsing experience.

Searching for Information

However, I can provide some general information about the services you mentioned:

1. **Bigfoot:**

- Bigfoot is known for its email forwarding and contact management services.
- It was popular in the early days of the internet for its email directory.

2. **Info space:**

    - Info space was a search engine and online directory.
    - It provided various services, including people search, white pages, yellow pages, and more.

3. **Who were:**
    - Who where was a web directory and search engine that focused on finding people and businesses.
    - It provided services such as white pages, yellow pages, and email address searches.
4. **Yahoo Notes:**
    - Yahoo Notes was a feature within Yahoo Mail that allowed users to create and manage notes, similar to a digital notepad.
    - It was part of Yahoo's suite of communication and productivity tools.

Keep in mind that the status and popularity of online services can change over time, and some of the services mentioned may have evolved, merged, or been discontinued. As of my last update, the landscape of online services may have shifted, and new platforms or changes may have occurred.

If you're looking for the latest information on these services, I recommend checking the official websites or recent online sources for the most up-to-date details. Additionally, keep in mind that the relevance and availability of these services can change over time as technology and user preferences evolve.

Subscriptions and Channels

Subscriptions and channels play a significant role in the context of the internet, especially in the realm of content consumption, communication, and online services. Let's delve into the concepts and their applications.

Subscriptions:

1. **Content Subscriptions:**
    - **Streaming Services:** Platforms like Netflix, Hulu, and Spotify offer subscription-based models for on-demand streaming of movies, TV shows, and music.
    - **News and Magazines:** Subscribing to digital publications allows users to access premium content, often without ads.
    - **Online Courses:** Educational platforms such as Coursera and Skillshare provide courses through subscription plans.

2. **Software Subscriptions:**
    - **Cloud Services:** Many cloud providers offer subscription-based models for services like storage (Google Drive, Dropbox), computing (AWS, Azure), and software applications (Microsoft 365, Adobe Creative Cloud).
    - **Antivirus and Security Software:** Subscribing to services like McAfee or Norton ensures continuous protection against evolving threats.
3. **Subscription Boxes:**
    - **E-commerce: C**ompanies like Birch box and Blue Apron offer subscription boxes where users receive curated products regularly, ranging from beauty items to meal ingredients.
4. Membership Subscriptions:
    - **Online Communities:** Platforms like Patreon and Substack allow creators to offer exclusive content to subscribers.
    - **Gaming:** Services like Xbox Game Pass and PlayStation Plus provide access to a library of games for a recurring fee.

Channels:

1. **Communication Channels:**

    Social Media: Platforms like Facebook, Twitter, and Instagram serve as communication channels, enabling users to share content and connect with others.

    Messaging Apps: Channels for one-on-one or group communication, such as WhatsApp, Telegram, and Slack.

2. **Marketing Channels:**

    Email Subscriptions: Businesses use email as a channel to send newsletters, updates, and promotional content to subscribers.

    Affiliate Marketing: Websites and influencers act as channels for promoting products/services and earning commissions.

3. **Content Channels:**

    YouTube Channels: Creators publish videos on specific topics, creating a channel where users can subscribe for regular updates.

    Blogs and Vlogs: Content creators establish channels for written or video content, often supported by subscriptions or ads.

4. **Sales Channels:**
    - **E-commerce Platforms:** Websites like Amazon and eBay act as channels for buying and selling goods online.
    - **Marketplaces:** Apps like Etsy and Airbnb provide channels for individuals to sell handmade items or offer accommodation.

Applications:

1. **Personalization and User Experience:**
    - Subscriptions and channels allow for personalized content delivery, enhancing the user experience based on preferences.
2. **Monetization:**
    - Creators and businesses can generate revenue through subscription-based models, turning content or services into a sustainable income stream.
3. **Communication and Collaboration:**
    - Channels facilitate communication and collaboration in various contexts, from professional projects to social interactions.
4. **Data Analytics:**
    - Platforms use subscription data and channel engagement metrics for analytics, improving content recommendations and marketing strategies.
5. **Customer Loyalty:**
    - Subscriptions create a sense of loyalty by offering exclusive content, discounts, or early access, encouraging users to stay engaged.

Understanding subscriptions and channels in the internet landscape is crucial for content creators, businesses, and consumers alike, as they shape how information is distributed, accessed, and monetized in the digital age.

Web Sites

The internet is a vast network that hosts a multitude of websites, each serving a specific purpose or providing particular types of information. Here are some categories of websites and their common applications:

1. **Search Engines:**
    - **Google:** The most popular search engine used globally.

- **Bing:** Another widely used search engine.

2. **Social Media:**

   Facebook: Connect with friends and family, share updates, and join groups.

   Twitter: Microblogging platform for sharing short messages.

   Instagram: Focuses on sharing photos and videos.

   LinkedIn: Professional networking for business and career-related connections.

3. **E-commerce:**
   - **Amazon:** Online retail platform.
   - **eBay:** An auction and shopping website.
4. **News and Information:**
   - **BBC News:** Provides global news coverage.
   - **Wikipedia:** A collaborative encyclopaedia.
   - **Reddit:** A platform for discussions on various topics.
5. **Educational Platforms:**
   - **Coursera:** Offers online courses from universities and colleges.
   - **Khan Academy:** Provides free educational content.
6. **Blogging Platforms:**
   - **Word Press:** Popular for creating blogs and websites.
   - **Medium:** A platform for writing and publishing articles.
7. **Video Sharing:**
   - **YouTube:** Largest video-sharing platform.
   - **Vimeo:** Focuses on high-quality video content.
8. **Communication and Messaging:**
   - **Gmail:** Email service by Google.
   - **WhatsApp:** Instant messaging and voice/video calling.

9. **Forums and Communities:**
    - **Stack Overflow:** Q&A for programmers.
    - **Quora:** Platform for asking and answering questions.
10. **Cloud Services:**
    - **Google Drive, Dropbox, One Drive:** Cloud storage and file-sharing services.
11. **Financial Services:**
    - **PayPal:** Online payments and money transfers.
    - **Robin Hood:** Stock and crypto currency trading platform.
12. **Weather Services:**
    - **Weather.com:** Provides weather forecasts.
13. **Job Search:**
    - **LinkedIn Jobs, Indeed:** Platforms for job seekers and employers.
14. **Government Websites:**
    - **USA.gov, gov.uk:** Official websites for government information and services.
15. **Healthcare and Medical Information:**
    - **WebMD:** Provides health information.
    - **CDC (Centers for Disease Control and Prevention):** Offers health-related resources.
16. **Travel and Booking:**
    - **Booking.com, Expedia:** Platforms for booking flights, hotels, and rental cars.
17. **Gaming:**
    - **Steam:** Digital distribution platform for video games.
18. **Development and Programming:**
    - **GitHub:** Platform for version control and collaboration on software development.

These are just a few examples, and there are countless other websites catering to various needs and interests. As technology evolves, new types of websites and applications continue to emerge, contributing to the dynamic landscape of the internet.

Making use of web resources

Making use of web resources on the internet is a crucial aspect of modern computing and plays a vital role in various applications. Here are some ways in which web resources are utilized on the internet and their applications:

1. **Information Retrieval and Search Engines:**
    - **Application:** Search engines like Google, Bing, and others utilize web resources to index and retrieve information from the vast amount of data available on the internet.
    - **Usage:** Users can search for information, articles, images, and more through these search engines.
2. **Web Browsing and Content Consumption:**
    - **Application:** Web browsers like Chrome, Firefox, and Safari use web resources to render and display websites.
    - **Usage:** Users can access websites, read articles, watch videos, and interact with various online content.
3. **Social Media Platforms:**
    - **Application:** Platforms like Facebook, Twitter, Instagram, and LinkedIn use web resources to connect users, share content, and facilitate communication.
    - **Usage:** Users can post updates, share media, connect with friends, and engage in social interactions.
4. **Cloud Computing:**
    - **Application:** Cloud services such as AWS, Azure, and Google Cloud use web resources to provide scalable and on-demand computing resources.
    - **Usage:** Businesses and individuals can deploy applications, store data, and run services in the cloud.
5. **E-commerce:**
    - **Application:** Online shopping platforms like Amazon, eBay, and Shopify use web resources for product listings, transactions, and user interactions.
    - **Usage:** Users can browse products, make purchases, and track orders online.

6. **Collaborative Tools:**
    - **Application:** Tools like Google Workspace, Microsoft 365, and Slack use web resources for real-time collaboration, document sharing, and communication.
    - **Usage:** Teams can collaborate on documents, communicate seamlessly, and manage projects online.
7. **Streaming Services:**
    - **Application:** Platforms like Netflix, YouTube, and Spotify utilize web resources for content delivery, streaming, and user interactions.
    - **Usage:** Users can watch videos, listen to music, and consume media content online.
8. **Online Learning:**
    - **Application:** E-learning platforms like Coursera, Udacity, and Khan Academy use web resources for course delivery, assessments, and student engagement.
    - **Usage:** Students can access educational materials, participate in online courses, and track their progress.
9. **Web Development and APIs:**
    - **Application:** Developers use web resources to build websites and web applications, and APIs (Application Programming Interfaces) enable communication between different software systems over the web.
    - **Usage:** Developers can create interactive websites, integrate services, and build diverse applications.
10. **Internet of Things (IoT):**
    - **Application:** IoT devices use web resources to communicate, share data, and connect to the internet.
    - **Usage:** Smart home devices, wearables, and industrial IoT applications leverage web resources for remote monitoring, control, and data analysis.

In summary, making use of web resources in internet applications is integral to a wide range of activities, from accessing information to conducting business, socializing, learning, and much more. The internet serves as a vast repository of resources that applications leverage to provide diverse and valuable services to users.

News, weather, sports, personal finance, and investing

Certainly! Here's a breakdown of how web resources are utilized in various sectors like news, weather, sports, personal finance, and investing through internet applications:

News:

1. **Online News Portals and Websites:** Traditional news outlets like BBC, CNN, or The New York Times have their digital presence offering up-to-date news coverage.
2. **Social Media Platforms:** Platforms like Twitter, Facebook, and Reddit are used for real-time news updates and discussions.
3. **News Aggregator Apps:** Applications like Flipboard, Feedly, or Google News aggregate news from various sources based on user preferences.

Weather:

1. **Weather Websites and Apps:** Platforms like AccuWeather, The Weather Channel, or Weather.com offer detailed forecasts, radar imagery, and weather alerts.
2. **Mobile Apps:** Apps such as Dark Sky or Weather Underground provide hyper-local weather forecasts using GPS data.
3. **API Integration:** Many websites and apps use APIs from organizations like NOAA or the Met Office for accurate weather data.

Sports:

1. **Sports Websites and Apps:** ESPN, Bleacher Report, and Yahoo Sports offer news, scores, analysis, and live streaming of sports events.
2. **Fantasy Sports Platforms:** Websites like ESPN Fantasy or Yahoo Fantasy Sports engage users in managing virtual sports teams and competitions.
3. **Sports Betting Platforms:** Websites and apps facilitate betting and odds comparison for sports events.

Personal Finance:

1. **Banking Apps and Websites:** Most banks have mobile apps for managing accounts, transferring funds, and paying bills.
2. **Budgeting and Expense Tracking Apps:** Platforms like Mint, YNAB (You Need a Budget), or Pocket Guard help in tracking expenses and budget planning.
3. **Investment Tracking Apps:** Apps like Robin hood, E*TRADE, or Acorns enable users to invest, track stocks, and manage portfolios.

Investing:

1. **Online Brokerage Platforms:** Platforms like Fidelity, TD Ameritrade, or Charles Schwab allow users to buy and sell stocks, bonds, and other financial instruments.
2. **Investment Research Websites:** Websites like Seeking Alpha, Morningstar, or Bloomberg offer financial analysis, market news, and investment insights.
3. **Robo-Advisors:** Services like Betterment or Wealth front use algorithms to manage investments based on user preferences and risk tolerance.

These resources leverage the internet and its applications to provide users with real-time information, analysis, and tools for making informed decisions in various domains.

Entertainment

Entertainment on the internet has evolved significantly over the years, offering a vast array of applications and platforms that cater to various interests and preferences. Here are some notable aspects and applications of internet entertainment:

1. **Streaming Services:** Platforms like Netflix, Hulu, Amazon Prime Video, and Disney+ provide on-demand access to movies, TV shows, documentaries, and original content, allowing users to stream entertainment anytime, anywhere.
2. **Social Media Platforms:** Platforms such as TikTok, Instagram, YouTube, and Snapchat offer a diverse range of entertainment content, including short videos, vlogs, live streaming, and user-generated content.
3. **Gaming:** Online gaming has become a major form of internet entertainment, with platforms like Steam, PlayStation Network, Xbox Live, and mobile app stores offering a plethora of games, from casual to competitive eSports.
4. **Music Streaming:** Services like Spotify, Apple Music, and Pandora provide access to millions of songs, playlists, and podcasts, offering personalized music experiences.
5. **Live Streaming:** Platforms like Twitch and YouTube Live enable users to live stream various content, including gaming, music, podcasts, talk shows, and events, fostering real-time interaction between content creators and audiences.
6. **Virtual Reality (VR) and Augmented Reality (AR):** VR and AR technologies are increasingly being used in entertainment, offering immersive experiences in gaming, storytelling, and interactive simulations.

7. **Podcasts and Audiobooks:** Platforms like Apple Podcasts, Spotify, and Audible host a wide range of podcasts and audiobooks, allowing users to access and listen to content on various topics and genres.
8. **Online Events and Conferences:** The internet facilitates access to live events, conferences, and workshops, enabling people worldwide to participate in educational and entertainment-based activities virtually.
9. **Online Education and Tutorials:** Platforms like Khan Academy, Coursera, and YouTube provide educational content in various fields, combining learning with entertainment through engaging tutorials and courses.
10. **Fan Communities and Forums:** Websites and forums dedicated to specific interests, such as Reddit, fandom websites, and dedicated forums, allow users to discuss, share, and engage in conversations about their favourite entertainment topics.

These applications and platforms have revolutionized how people consume entertainment, offering convenience, accessibility, and a wide variety of content to suit diverse preferences. The internet continues to be a dynamic space for innovative entertainment experiences, constantly evolving with technological advancements and user demands.

Shopping

Absolutely! Shopping has been revolutionized by the internet and its applications across various domains. Here's a breakdown of how it impacts different aspects:

Travel:

1. **Booking Platforms:** Websites and apps allow users to compare prices, book flights, hotels, rental cars, and activities online.
2. **Reviews and Recommendations:** Travelers can access reviews and recommendations from other users, aiding in decision-making.
3. **Virtual Tours:** Some sites offer virtual tours of destinations or accommodations, providing a better understanding before booking.

Kids and Teens:

1. **Online Stores:** Websites dedicated to toys, clothes, and gadgets specifically for kids and teens, making shopping convenient for parents.
2. **Educational Materials:** Platforms offer a range of educational apps, books, and resources for kids and teens.

Parents and Communities:

1. **Parenting Forums:** Online forums and communities allow parents to share experiences, seek advice, and buy/sell second-hand items.
2. **Subscription Services:** Services providing baby products, food delivery, and educational materials on a recurring basis have become popular.

Health and Medicine:

1. **Online Pharmacies:** Websites and apps enable ordering prescription medications and health products.
2. **Telemedicine:** Services offer online consultations with healthcare professionals, providing convenience and accessibility.

Religion and Spirituality:

1. **Religious Goods:** Online stores offer religious items, books, music, and attire catering to various faiths.
2. **Online Sermons and Discussions:** Websites and social media platforms provide access to sermons, discussions, and spiritual content.

Internet Applications:

1. **Mobile Apps:** Shopping apps allow users to shop on-the-go, making purchases with just a few clicks.
2. **AI and Personalization:** Algorithms personalize shopping experiences, suggesting products based on browsing history and preferences.
3. **Secure Payment Systems:** Advanced encryption ensures safe transactions, encouraging online shopping.

The internet has significantly transformed how people shop, providing convenience, accessibility, and a wide array of choices across various domains.