Services on internet

About the Course Unit

- **Objective**: The objective of the unit is to help the students to get the conceptual knowledge of Services on internet.
- **Learning Outcome :** After completion of this unit, students will be able to:
  Understand the significance of internet Service.
  Familiar with communication service protocols.
  Understand World Wide Web

Services on Internet

1. INFORMATION RETRIEVAL SERVICES
2. COMMUNIVATION SERVICES
3. WORLD WIDE WEB
4. WEB SERVICES

Information Retrieval Services

- File Transfer Protocol(FTP)
- Archie
- Gopher

Communication Services

- Electronic Mail
- Telnet
- Newsgroup
- Internet Relay Chat (IRC)
- Mailing Lists
- Instant Telephony (VoIP)
- Instant Messaging
- World Wide Web (WWW)
- Web Services

World Wide Web

• **WWW** stands for **World Wide Web.**

- Technically the World Wide Web can be defined as “All the resources and users on the Internet that are using the Hypertext Transfer Protocol (HTTP)”.

- The World Wide Web, or simply web, is a way of accessing information over the medium of the internet.

- The World Wide Web is the universe of network-accessible information.

Facts about WWW

WWW is also known as W3.

Tim Berners-Lee invented the World Wide Web in 1989. While working at CERN, he wrote the code for WWW using a NeXT computer, to share documents among researchers across the world using hyperlinks.

The World Wide Web (WWW) was conceived in 1989 at the CERN lab in Geneva, Switzerland, as a way for scientists to share knowledge.

There are more than 1.9 billion websites online today on internet.

Advantages

- Mainly free information
- Low cost of initial connection
- Rapid interactive communication
- Facilitates the exchange of huge volumes of data
- Accessible from anywhere
- Has become the global media

Disadvantages

- Danger of overload and excess information
- Difficult to filter and prioritize information
- No guarantee of finding
- what one is looking for No regulation
- No quality control over available data

Conclusion

- World Wide Web is the largest source of information in an open platform.

- Maximum availability and reachability was considered so that lot of people will have access to it.

- Web has got several functions and lot of contributions are

Involved in its development.

• Information is the good for sale.

Communication on Internet

COMMUNICATION ON INTERNET

• Online communication is a kind of communication between organization or individuals that starts and ends on the Internet

Different Ways to Communicate Online

- **Video Calls and Conferencing**
- **Social Networking Apps**
- **Smart phone messaging apps**
- **Chat Room**
- **Instant Messaging Services**
- **VoIP**

Video Calls & Conferencing

• **Video conferencing** is a visual communication session between two or more users regardless of their location, featuring audio and video content transmission in real time

Social Networking Apps

• Tools that enable people to connect with and follow posts from a chosen group of associates, sharing updates about their lives, careers or musings throughout the day.

Chat Rooms

• Chat rooms are designated areas or forum on the internet where users communicate with one another through text-based messages.

Instant Messaging Services

• Instant messaging is the exchange of near real time messages through a standalone application or embedded software.

• Unlike chat rooms with many users engaging in multiple and overlapping conversations, IM sessions usually take place between two users in a private, back-and-forth style of communication

Voice over IP (VoIP)

• VoIP is Voice over Internet Protocol.
• more specially for phone services over internet.

Other ways for Online Communication

- **Email**
- **WWW**
- **Internet Relay Chat**
- **Early days of Usenet**
- **Audio Conferencing**
- **Forum**

World Wide Web

Internet Service Provider

• An **Internet service provider** (**ISP**) is an organization that provides services for accessing, using, or participating in the Internet.
• Internet services typically provided by ISPs include Internet access, Internet transit, Domain name registration, web hosting, and Usenet Service.

Types of ISPs

• Dial-up services
• Broadband high-speed Internet
• Digital Line Subscribers (DSL)

Connection Types

• Dial-up Connection
• Integrated Service Digital Network (ISDN)
• Digital Subscriber Line (DSL)
• Cable TV Internet Connection
• Satellite Internet Connection
• Wireless Internet Connection

Dial-up Connection

• „Dial-up" connection is also known as Level Two connection. This provides connection to Internet through a dial-up terminal connection.

ISDN

• **ISDN** is acronym of **Integrated Services Digital Network.** It establishes the connection using the phone lines which carry digital signals instead of analog signals

DSL

• **DSL** stands for **Digital Subscriber Line.** It is a form of broadband connection as it provides connection over ordinary telephone lines.

• Several versions of DSL technique available today:
- Asymmetric DSL (ADSL)
- Symmetric DSL (SDSL)
- High bit-rate DSL (HDSL)
- Rate adaptive DSL (RDSL)
- Very high bit-rate DSL (VDSL)
- ISDN DSL (IDSL)

ADVANTAGES OF DSL

• One-to-one or one-to-many communications
• Cheapest and fastest mail services
• We can send any type of data through mail idea, image, text, audio, video to anyone.
• Physical presence of receiver is not required
• Same email can be send to one or more users
• Email can be read anywhere in the world
• Instant communications
• Physical presence of recipient is not required
• Most inexpensive mail services, 24-hours a day and seven days a week
• Encourages informal communications

DISADVANTAGES OF DSL

• Expensive
• Distance Dependence

Cable TV Internet Connection

Key Points:
• A cable modem is used to access this service, provided by the cable operator.
• The Cable modem comprises of two connections: one for internet service and other for Cable TV signals.
• Since Cable TV internet connections share a set amount of bandwidth with a group of customers, therefore, data transfer rate also depends on number of customers using the internet at the same time.

Advantages

• Always Connected
• Bandwidth
• File Transfer Capabilities
• Signal Integrity
• Routing
• Rely on Existing Connections

Disadvantages

• Cable internet technology excels at maintaining signal strength over distance.
• Bandwidth equals money, so cable"s advantage in throughput comes with a price.

Satellite Internet Connection

• Satellite Internet connection offers high speed connection to the internet.

Wireless Internet Connection

• Wireless Internet Connection makes use of radio frequency bands to connect to the internet and offers a very high speed.

• Can be obtained either by
- Wi-Fi or Bluetooth
- VSAT