

2ES109: Basics of Web Technology

Practical-1

AIM: To study the basics of Web Technology.

➤ **Prepare a short summary on following**

- **NETWORK:**

- The Network is a Collection of computer system and that are connected together.
- Connection type: wired and wireless

- a. **Types of Computer network:**

- **Local Area Network (LAN)**

A local area network is a computer network that interconnects computers within a limited area such as a residence, school, laboratory, university campus or office building.

- **Wide Area Network (WAN)**

A wide area network is a telecommunications network that extends over a large geographic area for the primary purpose of computer networking.

- **Metropolitan Area Network (MAN)**

A metropolitan area network is a computer network that interconnects users with computer resources in a geographic region of the size of a metropolitan area.

- **Personal Area Network (PAN)**

A personal area network is a computer network for interconnecting electronic devices centered on an individual person's workspace.

b. Topology:

- Network topology is the arrangement of the elements of a - communication network

- There are five types of topology :
 - Mesh
 - Hybrid
 - Ring
 - Star
 - Bus

● Internet & Its Applications

Internet is a network of computers linking many different types of computers all over the world. It is a network of networks sharing a common mechanism for addressing (identifying) computers, and a common set of communication protocols for communications between two computers on the network.

Applications

- Sending and receiving email.
 - Searching and browsing information archives.
 - Copying files between computers.
 - Conducting financial transactions.
 - Navigating (in your car, smart scooter, smart bike, or other)
 - Playing interactive games.
 - Video and music streaming.
 - Chat or voice communication (direct messaging, video conferencing)

- **www(World Wide Web)**
 - World Wide Web is collection of software and corresponding protocols used to access the resources over the network.

- The World Wide Web contains of documents images and other resources which can be accessed using the hyperlink.

- **Domain Name**

- A domain name is an identification string that defines a realm of administrative autonomy, authority or control within the Internet.

- **HTTP**

- The Hypertext Transfer Protocol is an application layer protocol for distributed, collaborative, hypermedia information systems.
 - That is secure.

- **HTTPS**

- Hypertext Transfer Protocol Secure is an extension of the Hypertext Transfer Protocol. It is used for secure communication over a computer network, and is widely used on the Internet.
 - That is more secure then HTTP.

- **Webpage**

- A web page is a specific collection of information provided by a website and displayed to a user in a web browser.
 - We can make webpage using HTML

- **Website**

- Website is collection of webpage.
 - When webpage connect to each other using hyperlink that call website

- **Web server**

- A web server is server software, or hardware dedicated to running this software, that can satisfy client requests on the World Wide Web. A web server can, in general, contain one or more websites

- **URL**

- A Uniform Resource Locator, colloquially termed a web address, is a reference to a web resource that specifies its location on a computer network and a mechanism for retrieving it.

- **protocol**

- A communication protocol is a system of rules that allow two or more entities of a communications system to transmit information via any kind of variation of a physical quantity.

- **IP Address**

- An Internet Protocol address is a numerical label assigned to each device connected to a computer network that uses the Internet Protocol for communication.

- **Browser**

- Browser is software application .
That accesses information world wide web .

- **ISP**

- An ISP is an organization that provides services for accessing, using or participating in the Internet. ISPs can include Internet access, Internet transit, domain name registration, web hosting, Usenet service and colocation.

