

# Lec7: Network Principles, Internet, WWW, Dr. Sedeeq Al-khazraji 2024-2025

## COMPUTER NETWORK

### ❖ What is a Computer Network?

- A computer network is a collection of computers that are linked together so that one computer can connect with another and share resources, data, and applications.
- It also refers to the interconnectivity of two or more computers that enables them to communicate and share their resources.

### ❖ Computer Network Types

Network types depends on how large they are and how much an area they cover geographically.

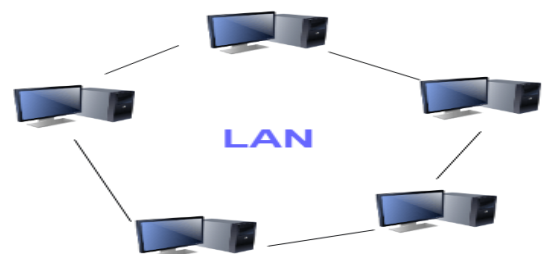
The following are the most popular **Computer Network Types**:

- **PAN (Personal Area Network)** is a computer network that use on a *personal level*. It is generally used in transferring small files and uses wireless technology such as Bluetooth.



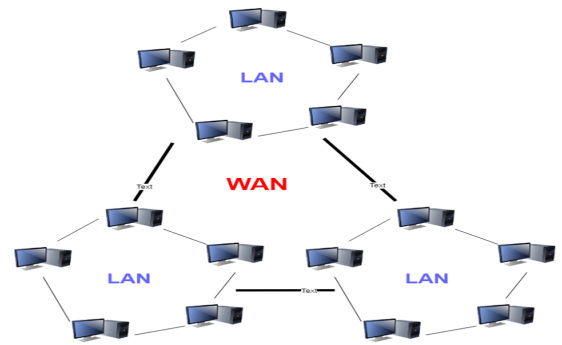
*Personal Area Network (PAN)*

- **LAN (Local Area Network)** is a group of computer and peripheral devices, which are connected in a *limited area* such as school, laboratory, home, and office building.



*Local Area Network (LAN)*

3. **WAN (Wide Area Network)** is a computer network that extends over a *large geographic area*. It is also referred to as the *connectivity of multiple LAN*.



*Wide Area Network (WAN)*

4. **MAN (Metropolitan Area Network)** is computer network that *connects multiple LANs across a large area but is smaller than a WAN*. It consists of a computer network across an entire city, college campus, or a small region.



*Metropolitan Area Network (MAN)*

## ❖ INTERNET

### What is the Internet?

The **Internet** is a global wide area network that connects computer systems across the world. It enables the users to send, receive, collect, store, update, delete, and many other operations of the data across the world.

### What we can do in the Internet?

- **Email** is one of the oldest and most universal ways to communicate and share information on the Internet, and billions of people use it.
- **Social media** allows people to connect in a variety of ways and build communities online.
- Keep up with **news** or **shop for anything** online.
- Pay your **bills**, **manage your bank accounts**, **meet new people**, **watch TV**, or **learn new skills**.

# WORLD WIDE WEB (WWW)

## What is the Web?

The **World Wide Web**: usually called the **Web** for short, is a collection of **websites** you can access through the Internet.

- A **website** comprises related text, images, and other resources.
- Websites can resemble **other forms of media**—like newspaper articles or television programs—or they can be interactive in a way that's unique to computers.

The **purpose of a website** can be almost anything:

- a news platform
- an advertisement
- an online library
- a forum for sharing images
- or an educational site, and a lot more.

## WEB BROWSER

### What is a Web Browser?

A **web browser** is an application software that allows you to access and view websites on the Internet.

There are many different web browsers, but some of the most common web browser includes:

- **Google Chrome, Internet Explorer, Safari, Microsoft Edge, Opera and Mozilla Firefox.**



## URLs and the Address Bar

Each website has a unique address, called a **URL** (short for **Uniform Resource Locator**).

- Also known as an internet address or web address is a tool used to find a website.

- It's like a street address that tells your browser where to go on the Internet.
- When you type a URL into the browser's **address bar** and press **Enter** on your keyboard, the browser will load the page associated with that URL.

