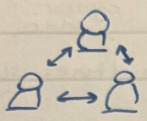
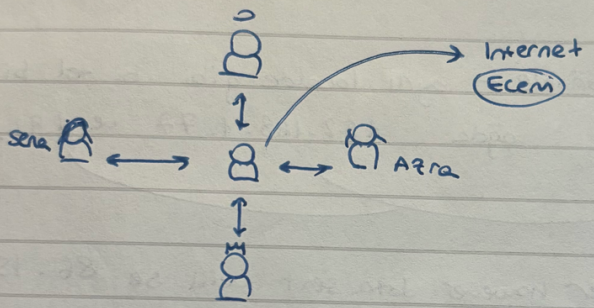
What is Networking



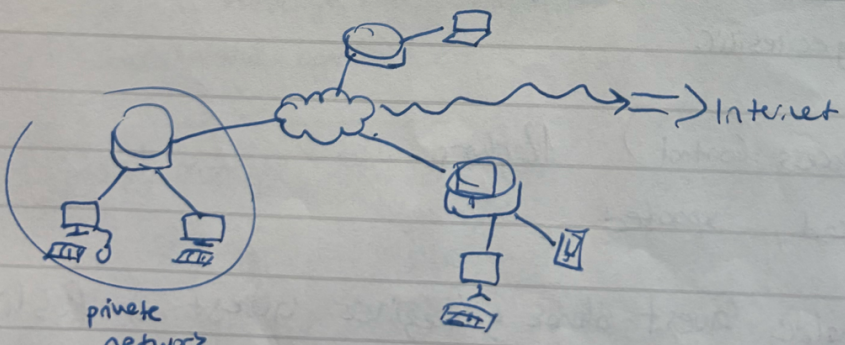
=> Network
2 ya da daha fazla insanın iletişim kurduğu ağ
değişebilir

- Internet
  - Giant Network



forms a new network
Azra ve Sena'nın iletişimini sağlıyo
ben ikisiyle de aynı dili konuşabiliyorum.

- ilk deneme ARPANET 1960s sonları US Defans Departm.
- 1989 WWW Tim Berners Lee



- Identifying Devices

isminiti değiştirebiliriz ama pcnet izinsiz hayır
isim = IP address IP = Internet protocol
pcnet = MAC

IP = identifying host of a network for a period of time where that IP address can be associated w another device without the IP adress changing.

IP addressing & subnetting for another day

- IP can change from device to device but cannot be active simultaneously (aynı anda) more than once within the same network
- IPs follows protocols → backbone of networking force many devices to commun. in the same language. devices can be on both a private and public network depending on where they are will determine what type of IP address they have public or private

public → on internet 86.157.52.21 private → aynı localde gibi bi tel bi PC aynı ağda 192.168.1.77 ve 192.168.1.74

able 2 comm w each other however data sent will be 86.157.52.21

public IPs are given by ISP (Internet Service Provider)

IPv4 kullanıyoruz ve on ve IP addres sayısı giderek artıyo bitcek abi bu yüzden IPv6'e geçilebilir.

M.A.C (Media Access Control) 12 chars
they can be faked, spoofed

otel, kafeler genelde Guest olarak girileceğince Guest or Public

ödil veiolor

— END OF INFOSEC —

— Intro to Networks —

nodes : endpoint devices , indv. devices connected to a network

Links : comm. pathways that connects nodes. (wired or wireless)

Data sharing : primary purpose

2 primary types → LAN local area → within building. small area speed ↑
→ WAN wide area → slower media → fiber optics, satelite

LANs can connect to WANs

LAN —〰— WAN (modem) (ISP)

↓ modulator demulator

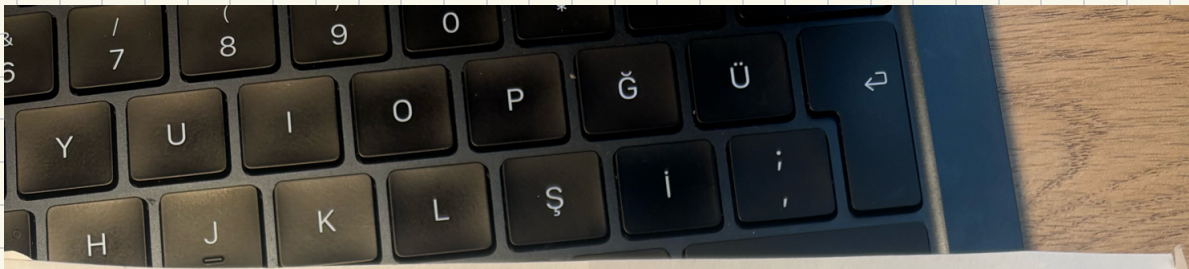
modem converts digital signals to suitible transmission over various media like telephone lines fiber optics

- Network Concepts -

- Open System Interconnection (OSI) model

conceptual framework that standardizes the funcs. of a telecomm. or computing systems into 7 abstract layers. This model [illegible]

1. Physical	Ethernet cables ...
2. Data link	switches, MAC ...
3. Network	Router, IP ...
4. Transport	TCP, UDP ...
5. Session	APIs, session protocols ...
6. presentation	Encryption protoc. ...
7. Application	HTTP, SMTP, DNS ...



cat/etc/issue

- "ping"

ICMP (Internet Control message protocol) to determine performance btwn devices

- The time taken for ICMP packets travelling btwn devices is measured by ping
- measuring is done by ICMP's echo packet and ICMP's echo reply from the target device