

Mobile Processor

- Brain of Smartphone
- Mobile processor receives commands, makes instant calculations, plays audio/video, stores information and sends signals throughout the device.
- Mobile processor has majorly two sub-processor:
 - Communication Processing Unit
 - Application Processing Unit
- Popular Mobile processors are:
 - Qualcomm Snapdragon 865
 - Apple A13 Bionic
 - Samsung Exynos 990 etc.

Communication Processing Unit

- It is responsible for making and receiving phone calls on a mobile handset. It works with 2 subunits:-
 - RF Transceiver
 - Audio Subsystem
- **RF Transceiver** : responsible for connecting SIM card to base station through radio signals. Its uses networks like 3G/4G/LTE etc.
- **Audio subsystem** : responsible for converting the voice signals(analog) to digital signals. The audio subsystem receives voice input through in-built mic and can produce audio output and send it to in-built speaker.

Application Processing Unit

- It is responsible for performing operations like making calculations, playing music, internet surfing, playing videos, connecting to other device, chat, screenshot, making videos, saving data etc.

Chat Protocol

- Popular Chat protocols are:
 - IRC
 - XMPP
- IRC (Internet Relay Chat) : IRC (Instant Relay Chat) is a chat protocol that has been around since 1988. It is a simple protocol and is quick to parse on the server side, requiring little resources. IRC does not require any user authentication, only that the connecting username must be unique in a channel.
- XMPP (Extensible Messaging and Presence Protocol): it is based on XML. It requires each user must have registered unique IDs. WhatsApp, Facebook, Google Talk chat is using this protocol. Its features are User Identity, Multiple logins, Persistent message, Popularity, Personal Message

Video Conferencing

- The **H.323 protocol** is one of the most widely deployed **protocols in video conferencing**.
- **Video conferencing** is a technology by means of which two or more parties situated in different geographical locations can watch and converse with each other by means of two-way transmission of video and audio data in near real-time.

Wi-Fi (802.11x protocol)

- ◉ **WIRELESS FIDELITY** : protocols allows devices to connect to the internet without a direct line from your Device to ISP (Internet Service provider). **Its maximum coverage area is 100 meters.** Transmission speed upto 54 mbps. **It is mostly used in LAN Application.** It uses Radio wave spectrum
- ◉ **Wi-Fi HOTSPOT** : a hotspot is a venue that offers Wi-Fi access. We can share out internet through Wi-Fi hotspot. We can set Hotspot with or without password. With mobile we can connect upto 10 devices with hotspot (However it depends upto type of device)

Wi-Max(802.16y protocol)

- Stands for wireless inter-operability for Microwave access.
- Wi-Max is used in MAN Applications
- Wi-Max network range to max 90kms
- Wi-Max transmission speed can be upto 70mbps

THANKS