

# Network Protocols

When we communicate we use a range of **protocols**

These are “agreements” over what different sorts of communication means

e.g. a tone of voice, a “look”, a particular word or phrase used in context etc... These all provide meaning

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Protocols deal with things relating to communication such as:

- the format of data packets
- the addressing system to be used
- the transmission speed
- any error-checking procedures to be used
- reassembling data packets in the right order

# Network Protocols

There are **8 protocols** and **2 protocol families** you need to know:

HTTP - HTTPS - FTP - IMAP - SMTP

TCP - UDP

IP

Ethernet - WiFi

- Ethernet and Wi-Fi are families of related protocols (e.g. 802.11n for wi-fi)
- Wi-Fi is a trademark. A wireless network is a WLAN

# Network Protocols

Protocols work in four layers:

<b>A</b>	<b>Application layer</b>	HTTP - HTTPS - FTP - IMAP - SMTP
<b>T</b>	<b>Transport layer</b>	TCP - UDP
<b>I</b>	<b>Internet layer</b> (aka Network layer)	IP
<b>L</b>	<b>Link layer</b>	Ethernet - Wi-Fi

You need to know which protocols are in each layer and the order of the layers

This comes back next lesson...