Networking week 7

TCP/IP Stack

Reminds me OSI

Application: Chunk of data, encodes the data that is being sent.

Transport: UDP(User Datagram Protocol) header is added (title for packet/Port numbers).UDP data

Inernet/network: IP header & IP data. This is where it adds IP addresses to where it is going and where it is from.

Link: frame header & footer, frame data. This adds MAC address to specify the device in which the message came from and the device it is going to.

The data is in XML(Extensible Markup Language)

Application: formats the data in the appropriate format so that the application which is using it will be able to understand it. This could be for many different protocols the most common one HTTP.

Transport: this divides the message into packets, the headers are added into th packets which will show how many packets are being sent to the recipient.

Internet/network: so this will have 2 headers now the transport header with the port # and packet # and a network header this is where the IP address of the sender and receiver is attached. The recipient also sends a conformation message to the IP that sent it so it knows that they were not lost.

Link layer adds a 3rd header in which the MAC addresses of the sender and receiver goes as this specifies the device directly. Same way in the internet/network

TCP – when sending data needs conformation and if they failed they will resent until all packets have been confirmed. Mainly used where content is important such as web pages and files downloaded through the internet.

UDP – no conformation is need lost packets are lost. Used for gaming, VOIP and streaming where there is a constant flow of data.