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https://github.com/Rbrasil72/reading-notes/blob/main/Class%201%20notes

This topic matters for what I'm studying because it is the fundamental ground to understand how networks work.

### OSI Model

1. What does “OSI” stand for?
   1. OSI stands for open system interconnect
2. List the 7 layers of the OSI model and what each one is responsible for.
   1. The 7 layers of the OSI model are:
      1. Physical
      2. Datalink
      3. Network
      4. Transport
      5. Session
      6. Presentation
      7. Application
3. Distinguish which layers are the “hardware layers”, and which layers are the “software layers”. What does that even mean?
   1. The physical, datalink and network are the hardware layers because they are the ones that need a physical device to give an ip or a mac address. The session, presentation and application are the software layers because they are what the normal user interacts with.
4. How can the OSI model be used in troubleshooting?
   1. The OSI model can be used to identify where troubleshooting is needed, for example, Is my network cable plugged in? (physical), can you ping your DNS server? (network).

### Wireshark

1. What is Wireshark?
   1. Wireshark is a network protocol analyzer that captures packets from a network connection.
2. What is a packet?
   1. A packet is a unit of data being sent from one computer to another.
3. What 3 high-level things does Wireshark accomplish? How could these be used for nefarious purposes? For benevolent purposes?
   1. The 3 high level things that wireshark can accomplish is analyze network traffic