INTRODUCTION TO NETWORKING

THE OSI 7 LAYER MODEL

APPLICATION LAYER   ex: HTML, Text, etc.

TRANSPORT LAYER   ex: TCP, UDP

ARP → NETWORK LAYER   ex: IP

LINK LAYER   ex: ETHERNET

PHYSICAL LAYER

] AT THESE LAYERS, THERE'S NO NOTION OF A "CONNECTION" — IT'S JUST PACKET FORWARDING!
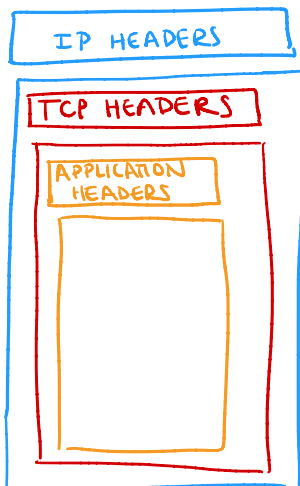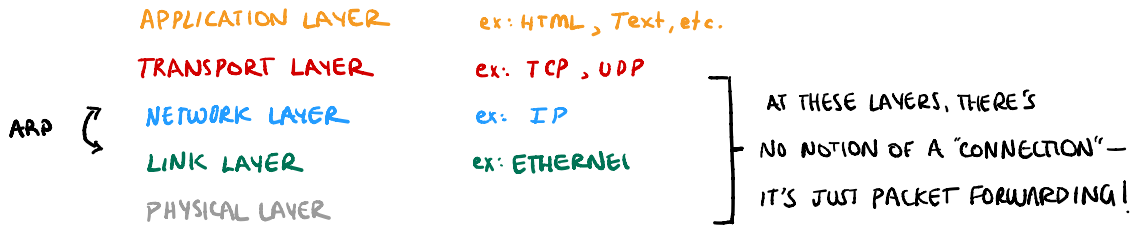
IP HEADERS — Source/Destination Addresses

TCP HEADERS — SOURCE/DESTINATION PORTS; SEQ/ACK #S

APPLICATION HEADERS — EX: HTTP PACKET HEADER

EX: JSON/STRING PAYLOAD

TCP ATTACKS
DATA INJECTION,
RST ATTACKS,
BLIND SPOOFING

OTHER IMPORTANT PROTOCOLS
- DHCP: connecting to a network for the first time
- DNS/DNSSEC: convert hostname to IP Addres
- ARP: Connects link layer to IP Laye

ATTACKS
DHCP SPOOFING

BAILWICK; KAMINSKY ATTACK

ARP SPOOFING