

CSCI 525 - Networking 1

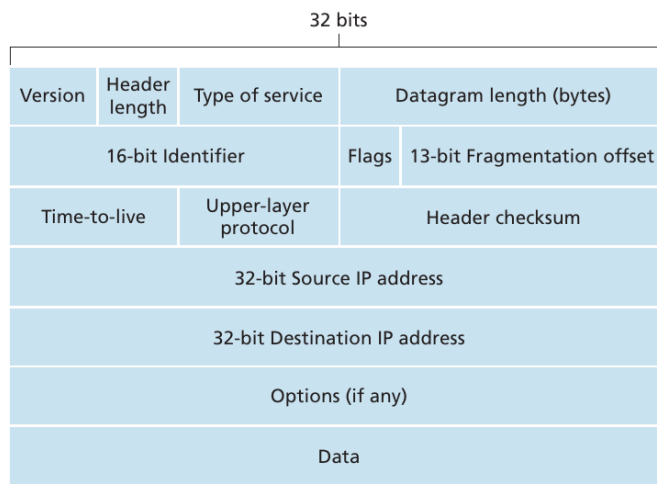
Project 2

Due on: 05/05/2020 11:55 PM (Thursday)

We learned different protocols on network layer and transport layer, IP, TCP, and UDP.

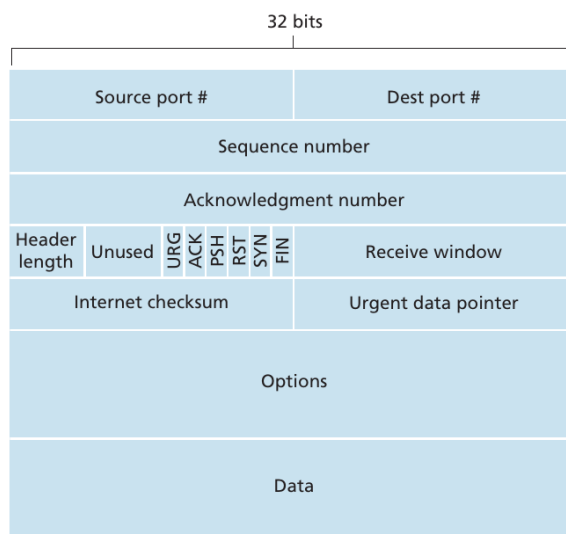
IP Header

The IP header contains the source IP address, the destination IP address, and the protocol number of the protocol in the IP packet's payload.



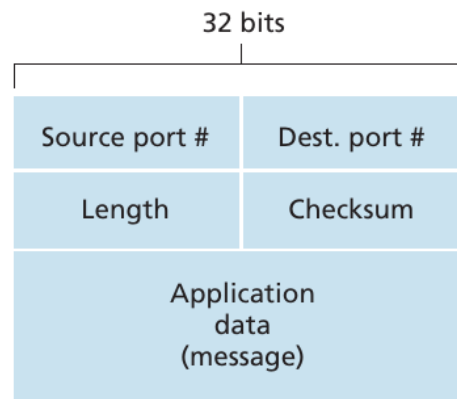
TCP Header

The TCP header contains the source port, destination port, a sequence number, and several other fields.



UDP Header

The UDP header contains the source port, destination port, length, and checksum.



Requirement

In this project, you will need to write a program to:

1. (10%)to capture the **IP**, TCP, **UDP** packets
2. (60%)print out the following fields in the packets:
 - IP: Version, IP Header Length, TTL, Protocol, **Source Address**, Destination Address;
 - TCP: Source Port, Destination Port, Sequence Number, Acknowledgement, TCP header length;
 - UDP: **Source Port**, Destination Port, Length, and Checksum.
3. (30%)present your project by providing a video recording (don't make the recording too long, 3 mins is enough); upload your source code to D2L.

Students can implement this project using any high level language like C/C++, Java, Python, etc.