Basic TCP lecture notes

Stuff we're not covering today:
  coalescing data (silly window syndrome, Nagle's algorithm, etc.)
  TCP congestion control

TCP vs. UDP
  UDP is unreliable, connectionless
  TCP is reliable, connection-oriented

TCP abstraction - Figure 3.8 on page 205 (missing send and receive buffers)

Pipelining, sliding window

Vint Cerf and Robert Kahn invented TCP/IP in 1974, development of TCP ties to UNIX and Berkeley to some degree, TCP/IP started as one protocol but then was split

End-to-end argument

TCP header, Figure 3.29 on page 234

Three-way handshake: SYN, SYN/ACK, ACK

Round-trip time, page 239

TCP implementations differ

Single timer, double timeout interval for each time a given segment is lost

Fast retransmit – re-send after 3 duplicate ACKs

Flow control – receive window (not to be confused with congestion window)