Class Notes:

8/15/18: Encapsulation, 5 Layer networking model

* Encapsulation: adding headers as we move down the stack
* De-encapsulation: removing those headers as we move up the stack

Chapter 2: Application Layer –

* Simple: network apps exchange messages
* Socket: source IP, dest IP, sending port ID, dest port ID
* Local machine (OS) assigns source port number
* API: Application Program Interface (process uses API)
* UDP: User Datagram Protocol
  + “unreliable”
  + A lot less overhead
* URL: Uniform Resource Locator – three things (hostname/path/filename)
* RTT = round trip time (client to server to client)
  + Total = 2\*RTT + file transmit time

HTTP:

* Cookie: opaque piece of data
  + If there is no cookie on the computer, then one is created (in a local folder) with an identification code. This code is then sent to the server with a HTTP message and then the server access its backend database to show to the client the data stored in the cookie on the server side (shopping cart, recently viewed items, etc.)