

Lecture 7: September 26, 2018

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7.1 HTTP 2.0

- Based on Google SPDY
- Major protocol version because of a new binary framing that is not compatible with HTTP 1.0
- HTTP 2.0 decreases latency to improve page load speed in web browsers by considering
 - Data compression
 - Multiplexing asynchronous requests and responses (streams and frames) over a single TCP connection
 - Stream prioritization
- Fixes head-of-line blocking
- Still based upon TCP

7.2 HTTP 2.0 Multiplexing

- HTTP 2.0 creates a virtual connection in a single TCP connection called a stream
- Streams support bi-directional data transfer
- Frames are the unit of HTTP 2.0 that are physically put into the socket
- Multiple frames form a message
- A message is either a HTTP request or Response
- Binary Framing reduces size
- Framing allows for multiplexing
- Headers are compressed and split across different frames. Headers can be compressed by leaving out certain fields that are implicit
- Headers and Data are split across different frames