HTTP/2

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What is HTTP/2?

- Protocol aiming to make web apps faster
  - Reduced latency via full request/response multiplexing
  - Efficient HTTP header field compression
  - Support for “server push”
- No changes required
  - All HTTP/2 changes are “behind the scenes”

SPDY vs HTTP/2

- SPDY = experimental protocol by Google
- HTTP/2 = official protocol from the HTTP Working group

- SPDY is now used for features, HTTP/2 implements and ships features

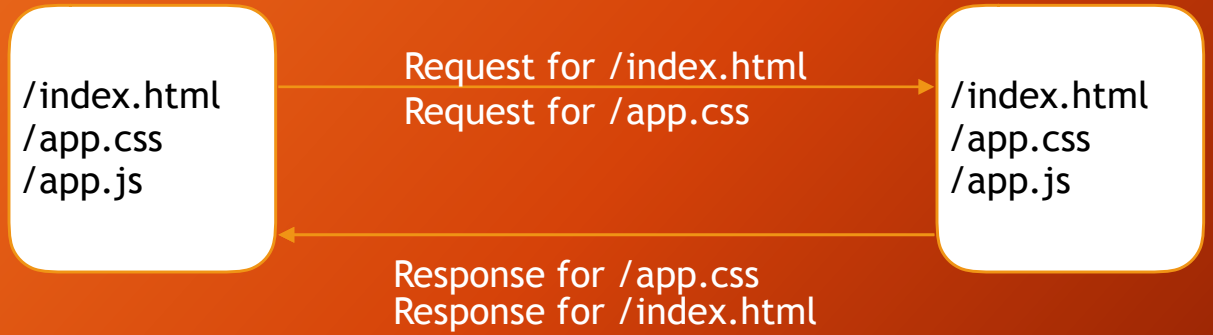
HTTP1.1 vs HTTP/2

- HTTP1.1 uses parallel TCP connections
  - Each request = new TCP connection
  - Biggest issue: resource blocking
  - “Solution”: ’keepalive’

- Sprite images
- Concatenation (“bundle.js”)
- Inline CSS/JS
- data-uri

HTTP1.1 vs HTTP/2

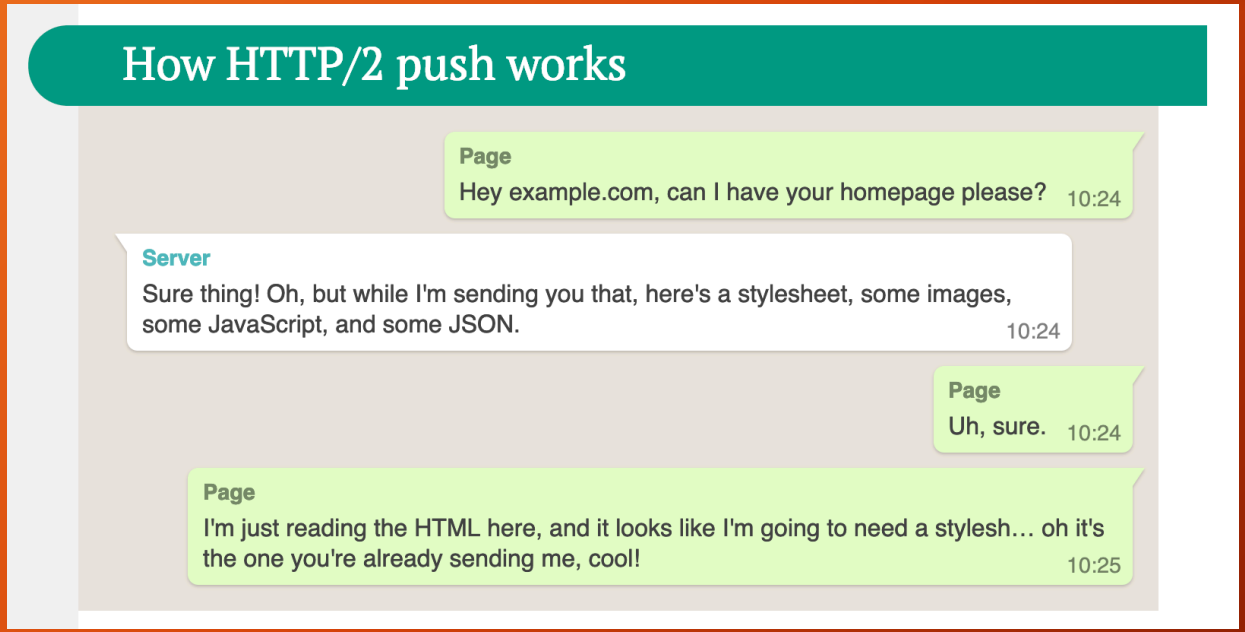
- HTTP/2 uses a single TCP connection
  - independent, bi-directional sequences
  - No blocking resources
  - Always **HTTPS!**



HTTP/2 - Push

- Sends additional catchable information
- Multiple responses for a single request
  - Great for future requests
- Warning: Push can push resources already cached
  - Potentially waisting bandwidth

HTTP/2 Push



https://jakearchibald.com/2017/h2-push-tougher-than-i-thought/