

# HTTP1.1

- Introduced in 1997
- Internet landscape was constantly changing with website become more dynamic and heavy.
- Features like CORS, keep-live (most important one) was introduced in this update.
- HOL – Head of line Blocking
- Repeatition of Header data
- More focus on gzip, minifying CSS/JS, caching etc.

## TCP CONNECTION

- Request for index.html
- TCP Connection gets blocked till the response is received.
- Six type of TCP connections.

## HTTP REQUEST

- **Request Header:**  
**User-agent: xxx**  
**Cookie: xxx**  
**Cache-control: xxx**  
**.....**

**Header Information is repeated with every request**

## **TCP CONNECTION**

**Keep-alive option enable re-using of the same TCP connection for multiple HTTP request.**

# **HTTP 2.0**

- Introduced in 2015
- HTTP 2 is an HTTP 1.1 connection with some additional features.
- One secured TCP connection is setup in which HTTP request are transferred in form of streams.

## **FEATURES OF HTTP 2.0**

- HPACK: Header data is separate from Request data and can be zipped.
- HPACK also enable reuse of header data which is repeated in every request.
- HPACK reduces HTTP request size.
- PUSH: push frames enable us to send mandatory resources in advance along with an HTTP response
- PUSH frames should be used with care as this can lead to increase in size of the HTTP response.

- **You can keep on using gzip, leverage browser caching, minify CSS/JS, etc. to further improve the speed.**
- **Almost all the modern web servers support this.**
- **Don't worry about losing users as users old browsers with support of HTTP 1.1 will be served the website over HTTP 1.1 only.**