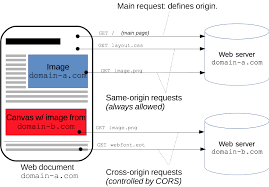
**Difference between HTTP 1.1 and HTTP 2.O**

* **HTTP 1.1 -**
  + 1997
  + Internet landscape was rapidly changing with websites becoming more dynamic and heavy
  + Features like CORS, Keep alive was introduced in this update
    - **CORS** -

Cross-Origin Resource sharing, and is a mechanism that allows resources on a web page to be requested from another domain outside their own domain.

The opposite of cross-origin requests is same-origin requests. This means that a web page can only interact with other documents that are also on the same server. This policy enforces that documents that interact with each other must have the same origin (domain).



* **Keep Alive** - is an instruction that allows a single TCP connection to remain open for multiple HTTP requests/responses. By default, HTTP connections close after each request. Enabling the keep-alive header allows you to serve all web page resources over a single connection. Reusing the same TCP connection for multiple http requests.

* Flaws in HTTP 1.1

1. **HOL - Head of line blocking - in** HTTP terms is often referring to the fact that each browser/client has a limited number of connections to a server and doing a new request over one of those connections has to wait for the ones to complete before it can fire it off.
2. **Repetition of header data** - headers cannot be compressed sent with each http request.
3. More focus on gzip, minifying css/js, caching, etc.

* **HTTP 2.O -**
  + 2015
  + It is http 1.1 connection with some extra features
  + One secured TCP connection is set up in which http requests are transferred in the form of streams.
  + Faster no need to create many connections\
  + **HPACK** - Header data is separate from request data and can be zipped/compressed
  + HPACK also enables reuse of header data which is repeated in every request.
  + HPACK reduces http request size
  + **PUSH** - set up at server side, push frames enables us to send mandatory resources in advance along with an http response.

Example - You requested index.html, server will automatically send the required css/js files also along with index.html response. No need to specially request for css/js again.