**1.DIFFERENCE BETWEEN HTTP1.1 AND HTTP2.**

**HTTP 1.1 :**

**➤It keeps all the requests and responses in plain text format.**

**➤With HTTP/1.1, each transfer of information had to be processed one at a time.**

**➤HTTP/1.1 is a one-lane road.**

**➤➤HTTP1.1 is less slower than the HTTP2.**

**HTTP2:**

**➤ It uses the binary framing layer to encapsulate all messages in binary format.**

**➤HTTP/2 allows for multiplexing, which processes multiple requests simultaneously—resulting in substantial page load improvements.**

**➤HTTP/2 is a major highway.**

**➤HTTP/2 is faster than HTTP1.1**

**2.HTTP version history**

**Invented by Tim Berners-Lee at CERN in the years 1989–1991, HTTP (Hypertext Transfer Protocol) is the underlying communication protocol of World Wide Web.**

**HTTP functions as a request–response protocol in the client–server computing model.**

**HTTP has four versions**

**HTTP/0.9(1991)**

**HTTP/1.0(1996)**

**HTTP/1.1(1997) and**

**HTTP/2.0(Developing)**

**Today the version in common use is HTTP/1.1 and the future will be HTTP/2.0.**

## **HTTP/0.9 — The One-line Protocol**

* **Initial version of HTTP — a simple client-server, request-response, telenet-friendly protocol.**
* **Methods supported: GET only.**
* **Response type: hypertext only.**
* **Connection nature: terminated immediately after the response.**

## **HTTP/1.0 — Building extensibility**

* **Browser-friendly protocol.**
* **Response: not limited to hypertext(Content-Type header provided ability to transmit files other than plain HTML files — e.g. scripts, stylesheets, media).**
* **Methods supported: GET , HEAD , POST.**
* **Connection nature: terminated immediately after the response.**

# **HTTP/1.1 — The standardized protocol**

* **This is the HTTP version currently in common use.**
* **Methods supported: GET , HEAD , POST , PUT , DELETE , TRACE , OPTIONS**
* **Connection nature: long-lived.**

**3. JAVASCRIPT NodeJS**

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| **1. Javascript can only be run in the browsers.** | **1.NodeJS code can be run outside the browser.** |
| **2. It is basically used on the client-side.** | **2. It is mostly used on the server-side.** |
| **3. Javascript is used in frontend development.** | **3. Nodejs is used in server-side development.** |
| **4. Javascript is capable enough to add HTML and play with the DOM.** | **4. Nodejs does not have capability to add HTML tags.** |
| **5. Javascript can run in any browser engine as like JS core in safari and Spidermonkey in Firefox.** | **5. Nodejs can only run in V8 engine of google chrome.** |

**4.what happen when you type a URL in the address bar in the browser?**

**WHEN you enter a URL into a web browser. The browser looks up the IP address for the domain name via DNS(Domain Name System). The browser sends a HTTP request to the server. The server sends back a HTTP response.**

**EXPLANATION:**

1. **You enter a URL into a web browser.**
2. **The browser looks up the IP address for the domain name via DNS.**
3. **The browser sends a HTTP *request* to the server.**
4. **The server sends back a HTTP *response.***
5. **The browser begins rendering the HTML.**
6. **The browser sends requests for additional objects embedded in HTML (images, css, JavaScript) and repeats steps 3-5.**
7. **Once the page is loaded, the browser sends further async requests as needed.**

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