**3 W’s of HTTP:**

* First, let’s understand what is HTTP, by whom and why it is invented.
* HTTP is an acronym for Hypertext Transfer Protocol, which is a set of standards that allows users on the internet to exchange information.



* It is invented by Tim Berners-Lee.
* Until today, there have been various modifications or evolution of HTTP since its introduction in 1991.
* HTTP was invented alongside HTML to create the first interactive, text-based web browser: the original World Wide Web. Today, the protocol remains one of the primary means of using the Internet.

**Evolution of HTTP:**

* The HTTP standards were developed by the Internet Engineering Task Force (IETF) and World Wide Web Consortium (W3C).
* The first released version was HTTP/0.9 and then, it evolved as HTTP/1.0, HTTP/1.1, and HTTP/2.0. However, the most preferred version is HTTP/1.1 even today. Perhaps, in the future HTTP/2.0 can be ubiquitous.

1. **Difference between HTTP1.1 vs HTTP2**

**HTTP/1.1:**

* HTTP/1.1 was the third version of HTTP and the standardized protocol for over 15 years.
* It introduced persistent connections for improved performance and laid the foundation for standard requests, such as GET, HEAD, PUT, and POST.
* The content loading or delivery consumes more time when compared to HTTP/2.0
* In shorter, we can say, the response time is high.
* It uses the textual protocol.
* HTTP/1.1 does not compress headers by default
* **HTTP/1.1 with pipelining:** Each HTTP request over the TCP connection may be made immediately without waiting for the previous request's response to return. The responses will come back in the same order.
* **HTTP/1.1 without pipelining:** Each HTTP request over the TCP connection must respond, before making the next request.

**HTTP/2.0:**

* HTTP/2 was released in 2015 as a major revision to the HTTP/1.1 protocol.
* It was derived from the SPDY protocol as a way to improve the online experience by speeding up page loads (i.e speedier content delivery) and reducing round-trip time (RTT), especially on resource-heavy web pages.
* HTTP/2 offers built-in compression of the request headers (HPACK).
* HTTP/2 is binary instead of textual as HTTP/1.1.
* This protocol consumes less bandwidth and is more efficiently parsed & is less error-prone than the textual protocols.
* Attackers will no longer be able to manipulate the response headers by injecting whitespaces into the textual response because web browsers only support HTTP/2 via encrypted connections, increasing user and application security.

**2. objects and it’s internal representation in Javascript:**

* Objects are the most important data types in javascript and are different from the normal primitive datatypes like a number, string, Boolean, etc.,
* Primitive data types contain one value but Objects can hold many values in form of a Key: value pair.
* These keys can be variables or functions and are called properties and methods, respectively, in the context of an object.

**EXAMPLE REPRESENTATION:**

var guvi = Object();

guvi.name = ‘Divi’;

guvi.coursename = ‘FSD’;

guvi.batch = ‘43’;

say, if we want to access guvi object, we can call by their keys to access the value.

i.e.,

guvi.batch

Output:

43