

1. Write a blog on Difference between HTTP1.1 vs HTTP2

HTTP stands for Hypertext Transfer Protocol.

HTTP 1.1

- >The first usable version of HTTP was created in 1997.
- >Because it went through several stages of development this first version of HTTP was called HTTP/1.1.
- >This version is still in use on the web.
- >It loads resources one after the other, so if one resource cannot be loaded, it blocks all the other resources behind it

HTTP/2

- >It works on the binary framing layer instead of textual that converts all the messages in binary format.
- >It works on fully multiplexed that is one TCP connection is used for multiple requests.
- >HTTP/2 is a significant improvement over HTTP/1.1.
- > It offers a number of performance and efficiency improvements, as well as a number of new features.
- >you should enable it to improve your performance.

<u>HTTP/1.1</u>	<u>HTTP/2</u>
It works on the textual format.	It works on the binary protocol.
There is head of line blocking that blocks all the requests behind it until it doesn't get its all resources.	It allows multiplexing so one TCP connection is required for multiple requests.
It uses requests resource Inlining for use getting multiple pages	It uses PUSH frame by server that collects all multiple pages
It compresses data by itself.	It uses HPACK for data compression.

2. Write a blog about objects and its internal representation in Javascript

In JavaScript Objects are important data types in javascript. Objects are collections of key-value pairs, where keys are strings or symbols and values can be of any data type, including other objects. Objects are used to represent real-world entities, data structures, and more complex data types. JavaScript engines use various data structures to represent objects efficiently. Objects are different than primitive datatypes such as number, string, boolean etc...

Objects, in JavaScript, is most important data-type and forms in the building blocks for modern JavaScript. These objects are quite different from JavaScript's primitive data-types (Number, String, Boolean, null, undefined and symbol) in the sense that while these primitive data-types all store a single value each (depending on their types).

JavaScript Objects

- Booleans can be objects
- Numbers can be objects
- Strings can be objects
- Dates are always objects.
- Maths are always objects.
- Regular expressions are always objects.
- Arrays are always objects

For Eg. If your object is a student, it will have properties like name, age, address, id, etc
Objects are more complex and each object may contain any combination of these primitive data-types as well as reference data-types. An object, is a reference data type. Variables that are assigned a reference value are given a reference or a pointer to that value. That reference or pointer points to the location in memory where the object is stored. The variables don't actually store the value.