B39 Tamil – Session 1 Task – 9/8/2022 (Aug 9)

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

HTTP 1.1 is a initial version of HTTP and it works synchronously – to explain in details once the request is sent from client and server will provide the response. Once this cycle is completed then only the next request will be processed. Its like a queue or pipeline process, which will make the browser to consume more time to load and execute. In order to reduce the latency and optimize this process in all the expected way upgraded version has been introduced which is **HTTP 2.**

Let’s see the differences between them and in what way HTTP 2 is better in performance:

Multiplexing: HTTP 2 allows multiple requests to be handled by single TCP connection – TCP connection is simply a connection established between client and server to transfer the request and responses. So, simultaneously multiple request can be pushed to server and handled and response will be executed independently – Whereas in HTTP 1.1 if one bad request is still consuming time and next requests to be executed will also be stopped/blocked from executing.

Binary format: HTTP 1.1 gets the data as normal messages whereas HTTP 2 encodes them as binary format which will break down any huge data into small pieces and each section will be considered as request and can be handled simultaneously i.e multiplexed.

Header compression: HTTP 2 has a method for compressing the common or global data that needs to be used for every request. HPACK is the name. So whatever the repeating data or info that needs to passed into request will be compressed and only the explicit data will be sent as successive request as the common data will be already processed or being processed by the server – only explicit is sent in the successive request. This increases the performance by avoiding doing the same evaluation/process that to be done all the way from starting by the server.

Well, this is a glimpse and main features of HTTP 1.1 and HTTP 2 that makes them standout from each other.

1. **Objects and internal representation in JavaScript.**

Objects are important data types in javascript. Objects are different than primitive datatypes (i.e. number, string, boolean, etc.). Primitive data types contain one value but Objects can hold many values in form of Key: value pair. These keys can be variables or functions and are called properties and methods, respectively, in the context of an object.

Here is number of ways to create Javascript Objects , Please find few of it mentioned below:

***Way 1-***

const Guvi = new Object();

Guvi.course = 'Full Stack';

Guvi.stack= 'MERN';

***Way -2***

const Guvi = {

course: 'Full Stack',

stack: 'MERN'

};

That’s a glimpse on objects and their representation in JavaScript.