**Day 1: Task  
  
1. Write a blog on Difference between HTTP1.1 vs HTTP2  
  
What is 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.

Key Features of HTTP/1.0:

* The concept of headers both for requests (from the client machine) as well as responses (from servers) was introduced. The use of headers such as GET, POST, HEAD added extended flexibility, none of which was possible with the earlier version.
* Version information was now included.
* It allowed a single request/response for every TCP connection.
* Status codes were used to indicate successful requests and to indicate transmission errors.
* The content-type header made it possible to send files other than plain HTML, including scripts and media.

**What is HTTP/2?**

In 2015, a new version of HTTP called HTTP/2 was created. HTTP/2 solves several problems that the creators of HTTP/1.1 did not anticipate. In particular, HTTP/2 is much faster and more efficient than HTTP/1.1. One of the ways in which HTTP/2 is faster is in how it prioritizes content during the loading process.

Key Features of HTTP/2:

* It introduces the concept of a server push where the server anticipates the resources that will be required by the client and pushes them prior to the client making requests. The client retains the authority to deny the server push; however, in most cases, this feature adds a lot of efficiency to the process.
* Introduces the concept of multiplexing that interleaves the requests and responses without head-of-line blocking and does so over a single TCP connection.

**Prioritization:** Prioritization refers to the order in which pieces of content are loaded. Prioritization affects a webpage's load time. For example, certain resources, like large JavaScript files, may block the rest of the page from loading if they have to load first. More of the page can load at once if these render-blocking resources load last. In HTTP/2, developers have hands-on, detailed control over prioritization. This allows them to maximize perceived and actual page load speed to a degree that was not possible in HTTP/1.1. HTTP/2 offers a feature called weighted prioritization. This allows developers to decide which page resources will load first, every time

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

“A JavaScript object is a collection of named values having state and behaviour (properties and method)”.

Objects, in JavaScript, is it’s most important data-type and forms 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).

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.

Objects in JavaScript may be defined as an unordered collection of related data, of primitive or reference types, in the form of “key: value” pairs. These keys can be variables or functions and are called properties and methods, respectively, in the context of an object.

Example of representing Objects :

Car Make: Honda

Car Model: City

Car Color: White

1)Objects:

The following code assigns a simple value (Honda)to a variable named car:

Var car = “Honda”;

objects can contain many values.

Var car = { Car Make : “Honda”, Car Model : “City” , Car Color : “Whilte”}

Syntax:

var <object-name> = {key1: value1, key2: value2,... keyN: valueN};