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

**HTTP**

* HTTP stands for **hypertext transfer protocol** & it is used in client-server communication. By using HTTP user sends the request to the server & the server sends the response to the user.

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| **HTTP/1.1** | **HTTP/2** |
| HTTP 1.1 version was introduced in 1997. The is the major version of HTTP network protocol used by the World Wide Web. | HTTP 2 is the new version of HTTP 1.1. The protocol introduced back in February 2015 by the Internet Engineering Task Force (IETF) Http working group. |
| It used to work 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 in lining 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. |
| HTTP1.1 is slower and less reliable compare to HTTP2 | **HTTP2** is much faster and more reliable than HTTP1.1 |
| It provides faster delivery of web pages and reduces web traffic if you compare it to Http 1.0. However, there is an increased risk of network congestion. | The Http 2 version utilizes multiplexing and server pushes to effectively reduce the page load time by a greater margin along with being sensitive to network delays. |
| Some of the optimizations used is Http 1.1 version are sprinting, inlining, domain shrading, and concatenating. | This protocol version removes the need for unnecessary optimization hacks. |
| This protocol introduces a warning header field to carry additional information about the status of a message. It can define 24 status codes; error reporting is quicker and more efficient. | It brings the fundamental semantics of HTTP like headers, and status code remains the same. |
| Protocol Http 1.1 is much secured than Http 1.0 because it uses digest authentication and NTLM authentication. | The security concern in Http 2 version is also good and almost same as Http 1.1. Rather Http 2 is better equipped to deal with security threats because of the new features it brings. |
| his version, SSL or secure sockets layer is not required but recommended. Digest authentication is an improvement over Http 1.0 which is now being used in Http 1.1. Moreover, Https uses SSL/TLS for secure encrypted communication. | In Http 2 protocol, security is not at all recommended. It is because the security is encrypted since all almost all clients demand traffic to be encrypted. It also has minimum standards and minimum key size for encryption. |