Q1. Write a blog on Difference between HTTP1.1 vs HTTP2

Answer:

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| S.NO | HTTP1.1 | HTTP2 |
| 1. | HTTP/1.1 loads resources one after the other, so if one resource cannot be loaded, it blocks all the other resources behind it. | HTTP/2 is able to use a single TCP connection to send multiple streams of data at once so that no one resource blocks any other resource. |
| 2. | Multiplexing is not possible since it loads resources one by one. | Multiplexing is possible. |
| 3. | HTTP/1.1 compress HTTP messages to make them smaller to speed up web performance. | HTTP/2 uses a more advanced compression method called HPACK that eliminates redundant information in HTTP header packets. |
| 4. | HTTP/1.1 does have prioritization features, but not actual page load speed is comparatively lower than HTTP/2. | HTTP/2 offers a feature called weighted prioritization. This allows developers to decide which page resources will load first, every time. |
| 5. | Introduces a warning header field to carry additional information about the status of a message. | It has the same warning header field as in HTTP/1.1 |
| 6. | Can define 24 status codes, error reporting is quicker and more efficient. | Can define 24 status codes, error reporting is quicker and more efficient. |
| 7. | It uses digest authentication, NTLM authentication for secure Authentication Mechanism. | It is better equipped to deal with the secure Authentication due to new TLS features like connection error of type Inadequate Security. |
| 8. | HTTP/1.1 provides the caching support by using additional headers like cache-control, conditional headers like If-Match and by using entity tags. | HTTP/2 does not change much in terms of caching. With the server push feature if the client finds the resources are already present in the cache, it can cancel the pushed stream. |
| 9. | HTTP/1.1 provides faster delivery of web pages and reduces web traffic as compared to HTTP/1.0 but there is an increased risk of network congestion. | HTTP/2 utilizes multiplexing and server push to effectively reduce the page load time by a greater margin along with being less sensitive to network delays. |
| 10. | Server Push concept is barely found since very few amounts of data can be cached by using HTTP/1.1. | 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. |