Difference between HTTP1.1 vs. HTTP2

# HTTP:

HTTP refers to Hyper Text Transfer Protocol and is the basis for all the communication in a network. It is the protocol that dictates the communication between two points in a network. It is the method that the computers use to send and receive information. For example when a user wants to go Guvi.in, the client sends a HTTP request to the server hosting Guvi.in and in turn the server sends the information to the user.

# HTTP1.1 and HTTP2:

Since its inception there have been several versions of HTTP. One of the versions of HTTP is HTTP1.1. It is also the standard version that is used by most today. In 2015 a new version of HTTP was released called HTTP2, designed to be faster and more efficient than HTTP1.1.

# Differences between HTTP1.1 and HTTP2:

# PRIORITIZATION:

Prioritization is one of the biggest differences between HTTP1.1 and HTTP2. It refers to the order in which the contents are loaded. For example when a user goes to a site whether the photo loads first or whether the text loads first.

Prioritization affects the load time of the page. Certain resources may take some time to load and may block other contents from loading. Load time could be faster if the time intensive resource loads last.

In HTTP2, 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 HTTP1.1.

HTTP/2 offers a feature called weighted prioritization. This allows developers to decide which page resources will load first, every time. In HTTP/2, when a user makes a request for a webpage, the server sends several streams of data to the client at once, instead of sending one thing after another. This method of data delivery is known as multiplexing. Developers can assign each of these data streams a different weighted value, and the value tells the client which data stream to render first.

# Multiplexing:

Another Difference between HTTP1.1 vs. HTTP2 is data multiplexing. In HTTP1.1 it loads the resources one after the other. It cannot load all the resources all at once. If a resource stops loading it may block all the following resources from loading. This is eliminated in HTTP2 as it loads all the resources at once. It assigns a weighted priority to each resource and the resources get loaded in an order based on their weighted priority.

# Server push:

Typically, a server only serves content to a client device if the client asks for it. HTTP2 allows a server to push content to a client before the client asks for it. The server also sends a message letting the client know what pushed content to expect. This helps in loading a page faster.