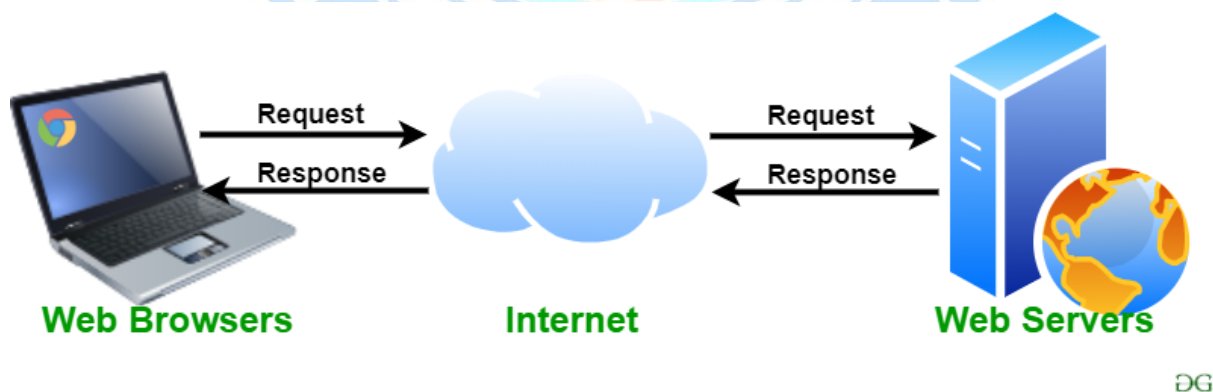## 2.1 INRODUCTION TO WEB SERVER

Web Server:

Web server is a program which processes the network requests of the users and serves them with files that create web pages. This exchange takes place using Hypertext Transfer Protocol (HTTP).

Basically, web servers are computers used to store HTTP files which makes a website and when a client requests a certain website, it delivers the requested website to the client. For example, you want to open Facebook on your laptop and enter the URL in the search bar of google. Now, the laptop will send an HTTP request to view the facebook webpage to another computer known as the webserver. This computer (webserver) contains all the files (usually in HTTP format) which make up the website like text, images, gif files, etc. After processing the request, the webserver will send the requested website-related files to your computer and then you can reach the website.

There are many web servers available in the market both free and paid. Some of them are described below:

- **Apache HTTP server:** It is the most popular web server and about 60 percent of the world's web server machines run this web server. The Apache HTTP web server was developed by the Apache Software Foundation. It is an open-source software which means that we can access

and make changes to its code and mold it according to our preference. The Apache Web Server can be installed and operated easily on almost all operating systems like Linux, MacOS, Windows, etc.

- Microsoft Internet Information Services (IIS): IIS (Internet Information Services) is a high performing web server developed by Microsoft. It is strongly united with the operating system and is therefore relatively easier to administer. It is developed by Microsoft, it has a good customer support system which is easier to access if we encounter any issue with the server. It has all the features of the Apache HTTP Server except that it is not an open-source software and therefore its code is inaccessible which means that we cannot make changes in the code to suit our needs. It can be easily installed in any Windows device.

- **Lighttpd:** Lighttpd is pronounced as 'Lightly'. It currently runs about 0.1 percent of the world's websites. Lighttpd has a small CPU load and is therefore comparatively easier to run. It has a low memory footprint and hence in comparison to the other web servers, requires less memory space to run which is always an advantage. It also has speed optimizations which means that we can optimize or change its speed according to our

requirements. It is an open-source software which means that we can access its code and add changes to it according to our needs and then upload our own module (the changed code).