The World Wide Web

The term "World Wide Web" is used to describe all the open websites or pages that people can visit on their own computers and other internet-connected devices. Users can access the linkages between these pages and documents by clicking on them to access more information. Text, photos, music, and video are just a few of the formats in which this data might be presented.

The World Wide Web is made up of many parts that let users access different internet resources, documents, and web pages. These pages, which make up the majority of the World Wide Web, are connected by hyperlinks, which let users go from one specific location in a hypertext or hypermedia document to another one there or to another one entirely.

Timothy Berners Lee developed the World Wide Web in 1989 at Geneva's CERN. He proposed it in order to enable researchers at CERN to collaborate successfully and efficiently. In time, it evolved into the World Wide Web.

Client-Server Architecture

Servers and Clients. The term "client" refers to a person or an organization that uses a specific service. In the same way, a client in the digital world is a computer that can accept information or use a specific service provided by the service providers.

Similar to that, a server is a person or a medium that provides a service. In the same way, a server in the digital world is a remote computer that offers information or access to specific services.

Web Browsers

Anywhere on the internet is accessible with a web browser. It information from other websites is retrieved, and it on your computer or mobile device. The Hypertext send Protocol, which outlines how text, pictures, and video are communicated on the web, is used to send the information. So that everyone using any browser, anywhere in the globe, can view the information, it needs to be distributed and presented in a uniform manner.

When a user types the URL of a chosen website into the address bar, the entire process of information collection starts. The client role is played by the browser as part of the client-server model. It uses HTTP, or hypertext transfer protocol, to communicate the requested data to the web server. After receiving the request, the server compiles the necessary data and sends it via web pages.

Hypertext Transfer Protocol (HTTP)

The World Wide Web was built on the Hypertext Transfer Protocol (HTTP), which is used to load webpages with hypertext links. Running on top of other layers of the network protocol stack, HTTP is an application layer protocol created to transport data between networked devices. A client machine makes a request to a server, which then sends a response message, in a normal HTTP flow.

Web browsers and other Internet communication platforms like them ask for the data necessary to load a page via HTTP requests. An HTTP method, also known as an HTTP verb, specifies the action that the HTTP request anticipates the requested server will take. Every HTTP request includes headers, which are text strings that are kept in key-value pairs. These headers transmit essential details like the client's browser and the data being requested.

Uniform Resource Locator (URL)

Uniform Resource Locator, or URL. A URL is nothing more than the Web address of a specific, particular resource. Theoretically, every legitimate URL leads to a different resource. These resources could be an image, a CSS file, an HTML page, etc. In actuality, there are a few exceptions, the most frequent of which is a URL leading to a resource that has either relocated or vanished. It is the owner of the web server's responsibility to properly maintain the resource that the URL represents as well as the URL itself because the Web server is in charge of both.