Web Development

What Are Web Technologies?

Web technologies are the various tools and techniques that are utilised in the process of communication between different types of devices over the internet.

To understand this term in a better manner, let's break it down into two pieces: 'web' and 'technology'.

The web, in this case, refers to the World Wide Web, more commonly known as WWW. It first came into being in 1989 when famous scientist and engineer, Tim Berners-Lee, came up with an efficient mechanism to share resources between scientists all over the world.

What Are The Different Types Of Web Technologies?

Since we have a limited space to examine the wide array of web technologies available, we have picked a few that are used most often by both beginners and experts in the industry. We have divided them into the following sections:

1. The basics, which will cover web browsers and some web app development fundamentals
2. Programming languages and frameworks which are used in the development of websites
3. Databases that are used at the backend to store data required or collected by websites
4. Some protocols, that is, rules for communicating on the web
5. Graphic, audiovisual, and other multimedia elements
6. Some data formats that are usually used to transmit data over the internet
7. Other miscellaneous web technologies

The Basics

In this section, we will talk about web browsers and some other web fundamentals.

Web browsers, often just called browsers, make it possible for us to view all the resources that are part of the World Wide Web. They are based on a client-server architecture. The client is the browser in this scenario. You can think of the server as a combination of software and hardware that receives the client's requests and then sends the requested resource to the client.

Whenever you enter a URL into a browser's address bar, it relays your request to the server and then fetches and displays whatever the user requested for.

Some popular web browsers are Opera, Mozilla Firefox, Google Chrome, and Safari.

Frontend Vs Backend Development Technologies

What is web development?

Web development refers to the process of creating websites. This process is based on a number of steps, which we will cover in more detail when we explore the tools involved in each process.

The two parts of a typical website

As we go further, we will discuss individual web development technologies and tools used to create websites. But before that, we need to be clear on the two distinct parts of a website: the frontend and the backend.

Frontend refers to all those parts of a website that a user can see on their screen and interact with.

Backend refers to the exact opposite of that. It involves the hidden mechanisms that make a webpage function. A typical user is generally unaware of what goes on at the backend.