

Front-end technologies- The part of a website that the user interacts with directly is called the front end or the client side of the application. It includes everything that users experience directly such as text colors and styles, images, graphs and tables, buttons, colors, and navigation menu. HTML, CSS, and JavaScript are the languages used for Front End development. The structure, design, behavior, and content of everything seen on browser screens when a website opens is front end technology.

- 1) HTML (Hypertext Markup Language) - is used to design the front-end portion of web pages using a markup language. HTML is the combination of Hypertext and Markup language. Hypertext defines the link between the web pages. The markup language is used to define the text documentation within the tag which defines the structure of web pages.
- 2) JavaScript - JavaScript is a scripting language which is used to make the site interactive for the user. It is used to enhance the functionality of a website to running games and web-based software.
- 3) CSS (Cascading Style Sheets) – is a designed language intended to simplify the process of making web pages presentable. CSS allows us to apply styles to web pages. Also, CSS enables and allows us to do this independent of the HTML that is also used to make each web page.

Back-end technologies - Backend or the server-side of the website stores and arranges data, and also makes sure everything on the client-side of the website is working fine. It is the part of the website that you cannot see and interact with. It is the portion of software that does not come in direct contact with the users. The parts and characteristics developed by backend designers are indirectly accessed by users through a front-end application. Activities, like creating libraries, and working with system

components without user interfaces or even systems of scientific programming, and writing APIs are also included in the backend.

- 1) PHP (PHP: Hypertext Preprocessor) - PHP is a server-side scripting language designed specifically for web development.
- 2) C/C++ - It is a general-purpose programming language and widely used nowadays for competitive programming. It is also used as a backend language.
- 3) Java - is one of the most popular and widely used programming languages and platforms. Java components are easily available.
- 4) Python - is a programming language that lets you work quickly and integrate systems efficiently.
- 5) JavaScript - can be used as both front end and back end technologies and programming languages.
- 6) Node.js - is an open-source and cross-platform runtime environment for executing JavaScript code outside a browser. NodeJS is not a framework or a programming language. Node.js is used for building back-end services like APIs like Web App or Mobile App. Used in companies like Paypal, Netflix, Uber and Walmart.