



FULL STACK WEB DEVELOPMENT

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ABSTRACT

This paper provides the summary on varied aspects of full stack web development. Full stack web development could be a pace growing branch of CS sector because of its successive step towards making the long run in the IT industry. Full stack developers manage the rear end (backend) and front-end development of web site or an online application. They handle the info, clients, system engineering and style. Full stack developer is in demand since of their skills and mastery of web development, due to this vast demand the remuneration of full stack developers is additionally high as compared to alternative jobs. Full stack developer in the main works on web stack, native application stack or mobile stack.

Keywords: Full stack web development, Front-end, Back-end, Programming, Server-side, Client-side, Development.

[1] INTRODUCTION

Full stack web development is the scenario of acting on each, the front-end and back-end of a program. It is a term largely used for those operating in web development. The developers have background on making programs and user expertise for front-end, and even have robust information in an exceedingly programming language that's used for handling the logic of the appliance, therefore back-end.

A full stack could be a layer of software system or web development consisting of the front-end and the back-end parts of an associate application. Front-end is what the users can see or act with on your application. The back-end part is what users don't see, like application's logic, database, server, etc. A full stack web developer is comfortable operating with each, back-end and front-end technologies that build a web site or

application perform properly.

As Full stack web development refers to the both of each front-end and back-end of an online application, web application, the development method contains 3 layers, i.e., the logic layer (back- end layer), the presentation layer (frontend layer) and the information layer (database layer).

LAMP stack stands for Linux operating system, Apache server, My SQL Query Language, and PHP server-side scripting language. All of these are opensource tools which are free to use, and have contributed in creating many of the developments. The lamp stack comes as a very common stock in deploying websites and applications to the internet. A full-stack developer is proficient in both front-end and back-end technologies, allowing them to work on all aspects of web development, from designing user interfaces to managing databases and server logic. Here's a detailed breakdown of full-stack web development:

[2] RELATED WORK

The components of Full Stack Web Development are-

- Front-end
- Back-end
- Database

FULL-STACK DEVELOPMENT

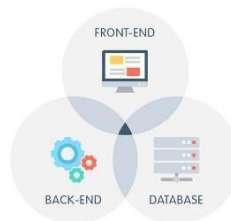


Fig 1: Components of Full Stack Development

- a) **Front-end** is the part that users see when they visit websites, web applications. The two most important types of front-end designs are-
- User Experience (UX)
 - User Interface (UI)

These things are of different kind when we got to know them, otherwise they seem same. The things including visual elements, animations, pictures, videos, etc. which look good on the website, are difficult to create is an example of good UI but bad UX and vice-versa; intuitive experience that doesn't require the user to think too much is a good way to design the website.

From the programmer's perspective front-end or the part that users see when they visit the website is mainly about the design and to make to look it good somehow.

server keeps synchronizing from time-to-time with application's code. The block parts of the code such as async- wait, try-catch, sync blocks are good examples of such codes. The server handles them according to their request type and response to client-side(front-end) or server-side(back-end) depending on the types of callbacks present in the code. The architecture of the server contains requests- responses tier that communicates to make synchronization successful and helps the application run smoothly. The application acts as an intermediate between the server and the database communicating all the data and requests that server or database needed to get the required output. The application basically contains all the code that is logical and functional which runs on the server/host of website/application based on the specific requirements of the product/app/website.



Fig 3: Major backend languages

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