



The Essential Qualities of a Web-Based Application Developer

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ABSTRACT:

In today's highly technological interconnected world, the web-based applications play a crucial role. The web based applications are those systems which are designed and developed by software developers to provide an interface through browsers such as *google chrome* so that they can make use of the systems to get their work done. However, designing a web based application systems is not an easy tasks as several points are needed before the high quality web based system can be deployed. The software developers responsible for developing the system must demonstrate and possess certain qualities to ensure that the system works in an optimal manner.

This paper discusses the essential qualities of a web-based application developer

Introduction:

In today highly competitive and inter connected commercial world, the role of web-based application software has assumed great importance. This is due to the fact that an ill-conceived and improper web-based application design can do severe damage rather than providing immense benefits for which it is intended. Figure 1 below depicts the harmful effects of a web- based application software which was ill-conceived and improper designed.

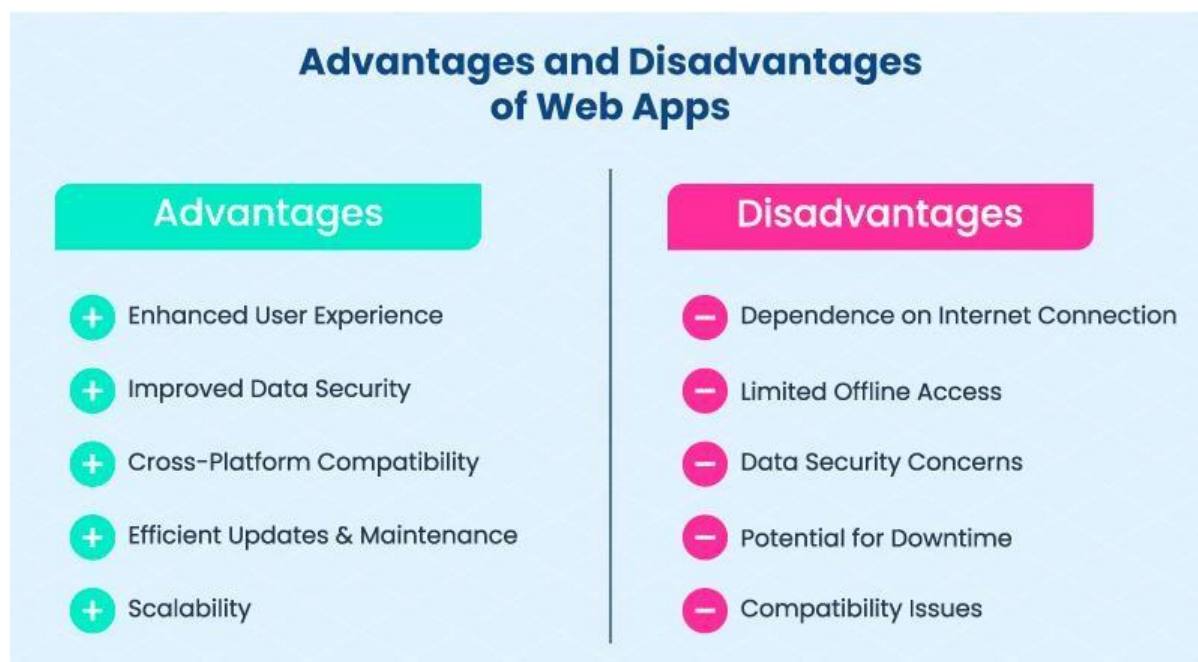


Figure 1: Harmful effects of ill conceived web based application designed

Source: <https://www.spec-india.com/wp-content/uploads/2024/04/1-2.jpg>

From the figure it is evident that developing web-based applications, the developer must have certain qualities to ensure that the web-based application being developed by them possess the ability to take into consideration the security issues and issues such as technical issues pertaining to audit log, the system track the design of the user interfaces.

This paper addresses the qualities which a web-based developer must possess

Basic Structure of a web-based application:

With the advancement of technology, the design of user interfaces and the capture of the user experience has taken a major role. For any lapse, in the user interface, has the potential to generate disastrous consequences.

The following points enumerate the concepts and the triggers for the qualities of a web-based developers

Figure 2 below depicts the basic structure of a web based application software

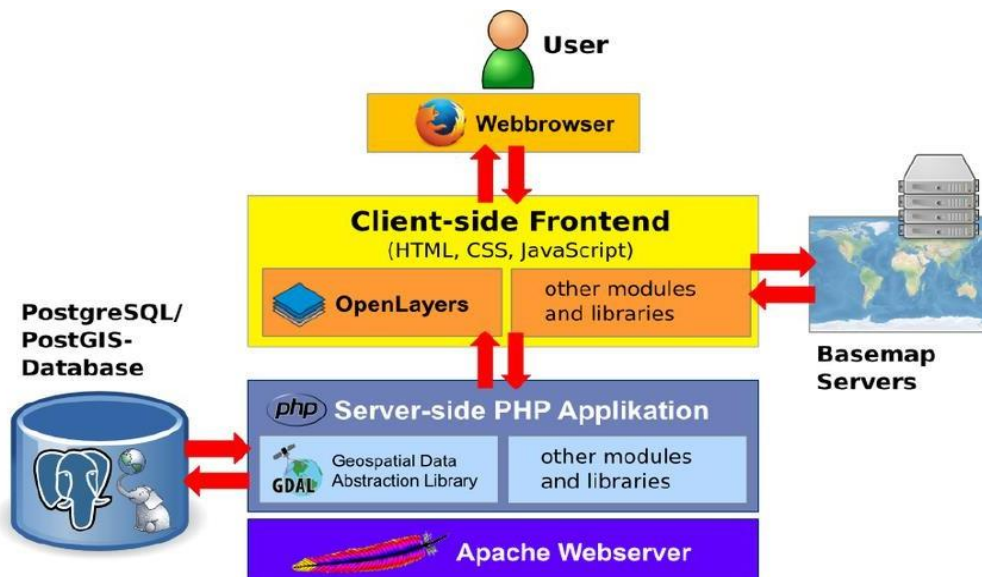


Figure 2: Basic structure of a web based application framework

Source: <https://www.researchgate.net/profile/Robert-Holmer/publication/277962718/figure/fig2/AS:294291160223744@1447175888217/The-basic-structure-of-the-web-application.png>

The Rise of Web Frameworks:

While developing web-based applications, frameworks are widely used. These frameworks simplify the work of the developers by providing them with tools to help them in the development of the interfaces and establishing connectivity between the back end and the front end. (Johnson, D. T., 2022).

Figure 3 below depicts the basic qualities needed to be a web based application software developer



Figure 3: Qualities for Web based application framework

Source:

https://www.techtarget.com/rms/onlineimages/skills_required_for_web_application_development-h.png

The Role of Soft Skills:

The development of web-based application involves continuous usage of technical knowledge and expertise, but this is not enough. This means that developer need to be trained and sharpen their soft skills *so as to capture, understand and implement the user experiences*. (Williams, 2020).

Adapting to Changing Web Standards:

The development environment is constantly changing and is evolving by leaps and bounds. The advent of new technologies, security protocols, and user experience standards are constantly putting pressures on the developers to keep themselves updated and to develop the skills needs to sustain the highly competitive business world (Smith, R., 2021).

Qualities required to be a Web-Based Application Developer

Strong Programming Skills: Programming skills are the most fundamental skill needed to write the code for developing the user interface as well as the process of incorporating user experience in the web based application software. Thus, the developer must be proficiency in technologies such as HTML, CSS, and JavaScript as well as also be able to interact with back-end technologies such as Node.js, Python, or Ruby and databases like SQL or NoSQL (Parker & Nguyen, 2023).

Mastery of Web Frameworks: The modern web based application functions on the basis of speed and complexity as well as their expertise in the corresponding framework they are developing the software. By developing expertise in the corresponding frameworks they develop a differentiator to remain competitive (Mitchell, A., 2021).

Strong Problem-Solving and Debugging Skills: problem solving skills is the basic tenet for a web developer. A great developer not only fixes the problem but also anticipate the problems and the requirements which are likely to occur in future obstacles (Jones, 2021).

Conclusion and Future Recommendations:

In order to become a successful web-based application developer he must develop the skills which are attuned to the requirements of the ever evolving, every changing and the dynamic business world. This include focussing on the aspects such as development of strong problem solving skills, constantly developing and optimizing soft skills and the ability to work under severe constraints such as strict timelines and odd working hours.

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