



Life Cycle of a Software Engineering and Overview of Web Development

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Abstract: Software improvement can be completed with the benefit of the arrangement and efficient improvement model. It is a sequential process that starts with the requirement collection and completes with the project implementation and maintenance at the client end. Software functionality can be modified by using the prototyping model of software development. This article is an attempt to develop a life cycle model for the web-based application based on Software Development Life Cycle Model (SDLC). The First segment of this item defines the functionalities and many stages in Web Development Life Cycle Model. The next segment defines the steps to be followed through the web development life cycle. The last segment defines the benefits of the WDLC.

Keywords: Literature Survey, **Web-Based Application Development**, Website Analysis, Website Testing, compound web applications.

I. INTRODUCTION

Here are different forms of web applications, which are currently on the cloud for definite resolutions and use. All of them have, unlike projects such as.

- Web design for educational purposes.
- Web design for personal purposes.
- Web design for commercial purposes.
- Web design for an Organization.
- Web design for news and events.
- Web design for entertainment.
- Web design for blogging.

As websites are designed for a different purpose, there are different web browsers available, which can be used by the client for various functionalities, look and feel. Internet Explorer, Mozilla, Firefox, Netscape, and Opera are some of the web browsers, which are used, but the most popularly used web browser is Mozilla and Internet Explorer.

II. LITERATURE SURVEY

In the past many researchers worked on different aspects of SDLC. Usually, they relate SDLC models further to find the top model for an exact condition. Vishal Massey and K.J.Satao in their item [1] have too linked several change simulations for breakdown and show and need to plan an original model for the good show. A related article by the U.S. Department of Integrity called how the major area of every SDLC is to carry value to software organizations (DOJ, 2000). [2][3] It further defined a quality system as one that:

- Existence of all customer expectations.
- Well, working on the software in the planned resource.
- Easy and low cost of maintenance.

SDLC is an arrangement of unlike stages, all stages included many steps. These steps typically include software feasibility, analysis, design, coding, testing, and maintenance. Osborn (1995) also discussed “traditional SDLC methods and exactly how done period, the stages of these methods must develop well-kept in a growth set that includes:



- Feasibility analysis.
- Defining requirements.
- Scheming an organization to see a person's requirements.
- Coding or construction.
- Testing and Maintenance.

Each phase of the development cycle is strictly followed in a sequence. E.g., in the waterfall model, the yield of all earlier strengths is a condition for the following stages (e.g. all details of requirements definitions are documented before the start of design, design is complete before coding, and testing is performed before release.

III. METHODOLOGY

This article is after research-built graphic knowledge to equal the SDLC model to dose a web-based enquiry and structure model. It trails the simple stages of SDLC to make the complete web-created scheme advancement. This article is an energy to kind a WDLC model, which can be approved for some substantial system-built presentation growth.

IV. WEB-BASED APPLICATION DEVELOPMENT

Though planning to publish the website the initial phase towards website publication twitches with planning and finishes with development. Website development comprehends various complex decision-making procedures. Similar to the Software Development Life Cycle, We do have a Web Development Life Cycle. The websites vary from edifying to commercial and various more. Even though it functionally varies, they all path the undeveloped design pattern to confirm reliability and fullness. WDLC is a structural procedure for developing and keeping a Website. There are five stages of the WDLC which permit the whole designing process. Individually the phases contain a set of tasks, which depend on techniques that produce specific document files for the understanding of the project.

3.(A) WEBSITE FEASIBILITY

The definite first stage of the WDLC is the preparation. The probability is very imperative as it is the building block for the whole website. If the arrangement drives incorrect, then the following phases of the WDLC will also go in the incorrect method. Manufacture good decisions about the website's association and page design activates with making a plan. Following are the stages which have to be agreed out in the scheduling phase of WDLC.

3.(B) WEBSITE ANALYSIS

It is a set of events in which the analyst puckers the information supplies of the users, and analyses them methodically in the form of the functionality of the application system, the effort data requirement and their sources, the yield data and their presentation supplies. The system analyst gathers data near the performance opportunities of the users such as expected response period the total turn-around period, etc. There are the following stages which are carried out in the investigation phase of WDLC.

3.(C) WEBSITE DESIGN AND DEVELOPMENT

It comprises preparing the exhaustive design of the website. It makes many pictorial representations of the rational and physical articles to be established during the development periods to follow. The major articles contain data models, procedure models and performance models. Lastly, the system design is predictable. This includes programming and testing separate programs based on the design article.

3.(D) WEBSITE TESTING

Testing is the furthestmost imperative stage of the website, in this stage, we comparison the definite functionalities with predictable functionalities. If there is no alteration among expected and creative functionalities then we reflect the product as a excellence invention. It involves preparation the testing, generating the text data, execution text runs, identical the text grades with the expected grades, analyzing the changes setting the viruses and difficult the virus setting frequently while waiting for a suitable quantity of disparities are detached. Websites should be verified at various phases of the WDLC for rereading the Web pages, Contented, Functionality, Serviceability, and Exactness. Serviceability of the website is the amount of how well the Web page permits a user to accomplish goalmouths testing involves the succeeding forms.



3.(E) WEBSITE IMPLEMENTATION AND MAINTENANCE

It comprises publication the website on the holding system screening the research of the server and database management system, comparable successively and going live as main actions. In this stage, the website has original come in contact with the near users, and the users get a unplanned to application on it for the first period. In addition, it includes the greatest imperative stage of user reply testing, which characters the practical and vendible ciphers of the WDLC. It involves supporting the website always up to date to confirm that it is in line with current data necessities considering even the modern vagaries in the alike. It assistances keep the website up to date in that way confirming the user's high return on their undertaking at the operative equal of the business. The developer explores the changes in the bright of the latest whims in the design distinguishes the new unorthodoxies in the design, validate rapidly that it works as credible. The application stage involves the ensuing activities.

V. ADVANTAGES

This will model can be accepted for humble and compound web applications.

- This model can be simply modified for web pages for data sharp, recovering updating and application transfers and available marketing.
- This model is a trial approach which can be improved by counting prototyping and a twisting approach for unconventional web applications.
- This model can also be used to develop the prototyping version and to concoct the test modules which can be realized on any web page design.

VI. CONCLUSION

This WDLC model is a footstep web development life cycle model for whole web-based application development. Even however the waterfall model is familiarized the basic SDLC model delivers a consecutive assembly for the software development. This WDLC delivers a elementary structure which also incorporates numerous strategies to meet the necessities of the ending creation. This can be accepted by any kind of web application development progression like a waterfall, prototyping, spiral, or win-win spiral. This can also be improved by counting prototyping and reiterative assembly to advance the superiority of the website.

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