Configuration Driven Web Development Framework

Pratik Ghule[1], Vrushabh Doshi[2], Kishor Binwade[3], Siraj Bagwan[4]
Department of Computer Engineering
Dr. D. Y. Patil School of Engineering, Pune
Savitribai Phule Pune University, Pune

Abstract- *Emerging trends in various fields of data mining, IoT, AI everyone need to connect to the internet, enterprises are growing socially through vast network of web covering various variable aspects of their field. Due to increasing demands through globe of faster internet connectivity, framework needs to scale dynamically in web-pages generation adapting robust methodologies. This survey conducts the Wide Variable Versatile Worthy (WVVW) nature of today's web-world at once. The possibility of building a framework with above functionalities is stated in this paper.*

Keywords- Intelligent Content management, Portable and generic, faster ready for market.

I. INTRODUCTION

As this modern era with growing internet, every particular industry, large scale corporation wants their profile on internet to grow their business, stretch out to reach to the corners of the globe. Every single person with dreams want to be his/her low, high, small, large level firm to be represented on the world wide web. Even a non- technical person wants to be on web to be represented without the headache of coding and complexity to build a website. Providing vast tools and advance functions does not make a web framework user friendly , it comes with the ease of understand the process of developing web pages and the navigation process during the development of a user website. As technologies are growing and becoming more strong and effective in computer networks the internet is still, with same way of access and free available to everyone. Due to this there is so many web development frameworks which provide methodology to develop websites. The framework which we propose to build is applying the functionality of various open-source tools like Java, Tomcat, EJB, JSF, html and Cascading style sheet (css). The architecture of any framework makes is success in the market of web development industry. The user of the framework should visit frequently with different project regarding website building with faith of having being provide with same easy flow of content and provided tools as with any category, as it the first reason to visit a website again. Growing demand of every field and impulse of it to connect to the internet has inspired to build a framework of tools to enhance the process of web pages generation as simple as click. With the help of several methods and architecture of previous technologies in market we try simplify the hard task of web development and want to make it more interesting and fun. To attract the audience of modern era, lots frequent internet user dream have their own website for every single aspect but lack in development skills.

II. BACKGROUND

Nowadays, there are various ways to develop and produce a web application. However, any website development starts with understanding what architecture to select – static or dynamic and the further determination of development tool and service. [1 Bill Marshall]. A static website consists of a set of several HTML, CSS pages that are linked together by hyperlinks. Dynamic website contains content located in the database and displayed “on the fly”, directly on the user’s requests [1]. Except for HTML and CSS pages the static website may include some front-end Java scripts, whereas the dynamic website contains back-end scripts [2 Chris K.]. The front-end is a term that means client-side programming and the back-end server-side programming [3 Mayers, D.]. The front-end scripts are client-side scripting that is executed by a browser and the back-end scripts, i.e. server-side scripting is executed by a web server. Regarding a language the client-side scripting is JavaScript, whereas in the back-end scripting JavaScript, PHP, Python and many others are used. [4 Carey Wodehouse] Accordingly, server-side scripting works in the back end of a site, which the user does not see. It makes platform for the site to get to its database, all the in the background mechanics that sort out and control a site. Customer side code, in any case, handles what the client sees. We have seen that the vast majority of the application rationale of current websites manages what we call the determination rationale. This is: the means by which we can express which eidox we need to recover to appear in a specific site page. This reality clarifies why SQL inquiries are so generally utilized in web advancement. The choice rationale is critical for all performing artists engaged with the site improvement: for the data designer that characterizes content units and navigational examples, for the developer that executes the rationale, and particularly for the client that will peruse the site. We intend to carry selection logic to something

more abstract, more high-level, through the use of general properties [6 Carlos Castillo].

III. FEASIBILITY AND SCOPE

Website building is basic requirement for any small and big firms it provide details about firm to client. In this start up era web development should be user friendly and cheap prices. Market has lack of framework which can build website user friendly in cheap cost. Many firms have basic requirement to build website in typically same pattern this gap can be filled by this project framework. In this framework user need to fill information about business and choosing templates of website, after compilation of business information it will provide final output.As we are aware of very user friendly web development framework, but they still lack in some in their user interface. We have analysed that various users around the globe depend take interest in a website according to their presentation first and content afterwards. Keeping in mind service oriented architecture we have developed a report which states that look of the web site always attracts a customer more than any normal but more having more function website.

For example: - Any E-commerce attracts more customer having better visual and user friendly navigation than any other e-commerce website. Our design of framework is inspired by the idea of very simple but sophisticated framework architecture. Keeping in mind the SOA nature of our framework we propose to build very effective platform for various developer around the globe.

IV. ADVANTAGES

1) Check box and scroll down list for efficiently designing user website.

2) User friendly navigation of framework during development phase of a particular website and navigation within website also.

3) Top- down flowchart status mechanism for performance scales up of users website.

V. TAXONOMY CHART

Paper Reference No	Framework to be analysed	Approach	User Interface Simplicity	Efficiency		QoS
				Navigation	Webpage generation	
9	Angular Js	Bottom up	Complex	efficient	Efficient	Yes
6	Bootstrap	Top down	Complex	Non Efficient	Non Efficient	No
10	Ediox	Top down	Simple	Efficient	Efficient	Yes
14	Wordpress	Top down	Medium	Efficient	Efficient	Yes
12	Wix	Top down	Simple	Efficient	Non Efficient	Yes
11	Latex	Top down	Complex	Non Efficient	Non Efficient	No

VI. CONCLUSION AND FUTURE DIRECTIONS

We have presented a framework that allows for quick designing of a web site based on checkboxes. A checkbox is defined by its selection, representation and style rules and it is the basic unit that the information architect will use to build pages in the web site. These checkboxes provide ease to understand by the non-technical person and by the content providers. The proposed framework model supports different viewpoints without forcing the architect to opt for a particular one. This allows user to create website without much technical knowledge and it can provide ease of navigation to user so he can easily navigate. Web development process is designed in natural way. First content units are determined, then the ontologies are created and the content providers can start adding content. Visualization of webpage can develop independently. This way every user can focus on his task. This framework leads to great improvement in the final result in terms of content organization and page designing in less time. We can more improve this project by using drag and drop technique with help of Angular JS and spring, which make our framework more simple and efficient.

ACKNOWLEDGMENT

We are thankful for the guidance of Prof. Soumitra Das & Mr. Vinod Maid that they have provides us with valuable information and helps us to develop this project. We are also thankful for help of all friends, family members, all the faculty members, vast knowledge of World Wide Web with spine of internet.

REFERENCES

[1] Bill Marshall Spiderwriting.co.uk. (2017). Static v Dynamic Website Design – Spider Writing Web Design. [online] Available at: http://www.spiderwriting.co.uk/static-dynamic.php [Accessed 10 Nov. 2017].

[2] Chris K. Codeconquest.com. (2017). Static vs. Dynamic Websites. [online] Available at: http://www.codeconquest.com/website/static-vs-dynamic-websites/ [Accessed 10 Nov. 2017].
[3] Mayers, D. (2017). What is the difference between a back end and a front-end web programming language? - Kevin Chisholm - Blog. [online] Kevin Chisholm - Blog. Available at:https://blog.kevinchisholm.com/web-development/difference-between-back-front-end-language/ [Accessed 10 Nov. 2017].
[4] Carey Wodehouse Home, H., Development, W. and Experience, F. (2017). What is Client-Side Scripting? Choosing the Scripting Languages for your Web Application. [online] Hiring | Upwork. Available at: https://www.upwork.com/hiring/development/how-scripting-languages-work/ [Accessed 10 Nov. 2017].
[5] Asha Mandava and Solomon Antony Murray , A review and analysis of technologies for developing web applications state University Murray, Kentucky.
[6] Carlos Castillo ,A framework for the design and AND IMPLEMENTATION OF WEB SITES University of Chile / Newtenberg Digital Publishing Ltd. 2120 Blanco Encalada / 10 Estado 3rd floor, 2002.
[7] Wutthichai Chansuwath, A Model-Driven Development of Web Applications Using AngularJS Framework, 29 June 2016.
[8] OMG, Documents Associated With XML Metadata Interchange (XMI), Version 2.4.2[Online].Available: http://www.omg.org/spec/XMI/2.4.2/. Last Accessed: 30 Mar 2016.
[9] N. Jain, P. Mangal, and D. Mehta, "AngularJS: A modern MVC framework in JavaScript," J. Global Research in Computer Science, vol. 5, no. 12, 2015, pp. 17-23.
[10] Development of Website Solution for Association to Assist Young Professionals Metropolia University of Applied Sciences Bachelor of Engineering Information Technology Bachelor's Thesis, 30 November 2017.
[11] Maturana, H.1998 Ontology of observing. In Text in Cybernetics.
[12] Avishai Abrahami, CEO of Wix, a Tel Aviv-based company that offers a do-it-yourself website hosting service.[Founded in 2006]
[13] Ceri, S. Fraternali, P., and Bongio, 2000 A. Web Modeling Language (webml): a modeling language for designing websites. WWW9/Computer Networks 33 1-6,137-157.
[14] Theme generator for WordPress Author(s): Di Geronimo, Linda Publication Date: 2013
[15] Anders E. Johansen, Using Web Frameworks for Scientific Applications Hans Petter Langtangen1, 1Center for Biomedical Computing, Simula Research Laboratory 2Department of Informatics, University of Oslo Oct 11, 2015.
[16] Anupam Chanda, Karthick Rajamani, Cristiana Amza , Research paper published by CS Department-Rice University.

Website references:

[17] https://en.wikipedia.org/wiki/Separation_of_content_and_presentation
[18] http://blog.search3w.com/dynamic-to-static/
[19] https://java.com/en/download/faq/java8.xml
[20] https://en.wikipedia.org/wiki/Enterprise_JavaBeans
[21] https://en.wikipedia.org/wiki/Apache_Tomcat
[22] https://www.webopedia.com/TERM/J/J2EE.html
[23] https://www.tutorialspoint.com/jsf/jsf_quick_guide.html
[24] https://www.computerhope.com/jargon/h/html.html
[25] https://doi.org/10.3929/ethz-a-09979939
[26] https://en.wikipedia.org/wiki/HTML5
[27] https://en.wikipedia.org/wiki/XML