

Coded Websites vs Wordpress Websites

Geetha. S¹, Shasvat Shah², Harsh Shah³

Lecturer, Department of Computer Science¹

Students, Department of Computer Science^{2,3}

Shri Bhagubhai Mafatlal Polytechnic, Mumbai, Maharashtra, India

geetha.unnikrishnan@sbmp.ac.in¹, shashwatshah02@gmail.com², hrsshah04022004@gmail.com³

Abstract: *This document gives multiple instructions related to web developers using older as well as newer technology. Websites are being created using newer technologies like wordpress whereas on the other hand many people prefer making websites using the traditional way. This document will clear the doubt whether an individual should use wordpress websites or coded websites according to the users convenience. The Responsiveness of the websites, the use of CMS nowadays, more and more up gradation of technologies with SEO, themes, templates, etc. make things like web development much much easier. The aesthetics, the culture, the expressions, the features all together add up in order make the designing and development a lot more efficient and effective. Digital Marketing has a tremendous growth over the last two years and yet shows no signs of stopping, is closely related with the web development environment. Nowadays all businesses are going online due to which the impact of web development has become such that it has become an integral part of any online business.*

Keywords: Responsiveness, CMS(Content Management System), SEO(Search Engine Optimization), Digital Marketing.

I. INTRODUCTION

As we move to the introduction part we must first move to the point as what is web development. Web development is the work involved in developing a Website for the Internet (World Wide Web). Building a website is not an easy job but needs trained professionals which are known as web developers. Web developers build and maintain websites. Web developers often work for clients who are trying to get their product or service onto the web. Now as we have understood the concept of web development and web developer we must move on to the concept building websites. There are majorly two ways to build a website mainly the traditional method using coding (HTML, CSS, Javascript, etc.) or the recent method to build the website using Wordpress technology that provides multiple various themes, plugins, SEO, etc. Coded Websites are the most traditional way or the most aesthetic way to build a website. It involves using of multiple frameworks or multiple languages like HTML, CSS, Javascript, Django, ReactJS, NodeJS, Angular, MongoDB, etc. It is a guiding part to any beginner who wants to start their web development journey. Coded Websites provide complete customization that can be made to the websites. Responsiveness is also taken care of which helps viewing websites in different electronic devices like a cell phone, Tablet, Laptops, etc. in proper format.

Wordpress website is a newer technology in order to build websites in a very short time and in an effective manner which does not affect the responsiveness or any other factor of the website. A perfect method to build websites by simply just using themes and plugins which almost complete all the major task for you, all you are left with is the content you wish to add to your website. More and more user customization is being provided in order to understand the users perspective of building the website.

II. CODED WEBSITES VS WORDPRESS WEBSITES

2.1 History

Web development is in the use for more than 30 years now and it is growing and expanding day by day. Web design came into the picture when internet was introduced to the world. At that time, Websites were build and managed by the IT professionals only. But, in today's time, it has become an industry. Great businesses have grown with the help of

web development and even an individual can start his own business with the help of web development. Initially the web pages were static and without any design. The traditional way came into development within these years and also today new languages are being invented and being learned. Thus, building website through traditional means is still being used in today's time to a large extent. These websites have just been upgraded with the future as in responsiveness, SEO, backend processes, etc.

Wordpress comparatively is a much recent and newer technology if compared to coded websites. Currently websites are running the world from online e-commerce websites to proper business websites. In fact every business is trying to expand its business online. These wordpress websites have shown us the benefits of using an open source community in order to make something useful and beneficial to the world.

Wordpress probably didn't know that they are about to start a journey that would eventually benefit millions of users around the globe, create thousands of jobs, and a whole industry of developers, designers, writers, bloggers, and web publishers would make their living off it. Even in the near future we can expect that it will continue to empower people around the world to create wonderful web spaces.

2.2 Use and Source

Custom websites are used for static and dynamic webpage creation. It uses coding languages like HTML5, CSS, JavaScript to build the front end design of the webpage and uses languages like jquery, node.js and database like SQL or MongoDB for the backend and storage of the data of the webpage. Custom Websites requires time and efforts to learn and master the way of developing and building the website. This is the oldest and the most traditional way to build a webpage. HTML 5 gives you the contents of the webpage, CSS gives you the design of the webpage, JavaScript is the brain of the webpage (i.e it gives functionality to the webpage). Node.js and JQuery are the languages used for receiving and sending the data from the webpage to the database. The data of the webpage will be stored in the database like SQL, Mon- goDB, etc.

Wordpress websites are mainly those working on the CMS(Content Management system). As the word suggests CMS is a basic software or an application that manages all the data or content and is very much helpful in the case of building websites. These are open source i.e. they are free to use and is accessible to everyone around. Wordpress is one such CMS. Hence whenever we are using wordpress one can generally find that it is user-friendly, multiple themes and plugins, stronger security and it has the biggest support from the community.

Building websites using wordpress generally includes using of themes and plugins as per your criteria and then customizing the input text, images, design, etc. Various themes, plugins, applications all together act as a source to build website using wordpress.

2.3 Technology Used

Custom websites uses traditional way like HTML, CSS, JavaScript but there are regular updates on the versions of these languages. (Eg: HTML5, CSS3 , etc). A text editor is used to code on all the languages which are used to design a webpage. There are various text editors avail- able for free in which you can code and de- sign your webpage. Text editors start from simple notepad to softwares like VS code, etc. Most used text editors are: Sublime Text, Atom Editor, VS Code, Netbeans, etc. These text editors are free and you can use them to build dynamic and static webpages. Initially, notepad was used for web development but now-a-days, using a text editor is important because you can install extensions on it.

Extensions help in improving the coding part and it saves great time. Extensions are of great use be- cause it can change the user interface and also add some functionalities to the text editors. So, a text editor is of great importance in designing and developing web pages.

Wordpress works on the newer and better technology as it was built much more recently than the coded websites. Wordpress has its official website that provides multiple templates, themes, plugins, etc. that help users to create websites as per their choice. Wordpres as a whole takes care of all the problems, the issues user might face, updating the technology as per time, etc. to ensure that users have to face no hardship while they are building websites. As they

make use of newer technology, generally the base of the website is the template the user selects, users can also make their own customizable template using coding with PHP, etc. which can be later published so that other users can make use of it. Once we select our template, 90 percent of the job is over as we have the template right in front of us, we are just left with changing the content. All the rest SEO, Responsiveness, Design, etc. is taken care of by wordpress itself.

2.4 Designing

Designing is the key factor of web development. Designing is the most basic fundamental of the webpage. How the webpage will look, how to place images in the webpage, how to align the text, how to design the header and footer, hover effects and many more things come under designing. The main advantage of building a custom website is its design. You can make infinite types of design and the main advantage is you can design it just like the user wants it. User preference is given utmost importance in designing the webpage. Designing just not only means the look and feel of the website but it also means the visual hierarchy of the client. A good web design will make the user's eyes stick to your webpage and learn more about the content of the webpage. In today's fast world, the users decide within 30 seconds whether they should remain on your website or not. Visual hierarchy plays a vital role in that 30 seconds. So, designing is the most important factor in designing a webpage.

Wordpress expresses itself out in the designing part where it has thousands of free templates that are readily available for the users and can be customized as per their choice. As we know designing is the key factor of our website and therefore since then wordpress is trying its best to update itself in order to provide easy customization of templates. Currently wordpress focuses on improving their websites visual hierarchy and provide utmost customization to the website developers. As a general review people love to be different from others, similarly having same websites just with different content would not satisfy the purpose, hence here the design is very much important. Even with the same content, websites can be made more effective and better with new designs, new effects, new colour combinations, better GUI (Graphical User Interface), etc.

2.5 Responsiveness

Responsiveness is very crucial in every website. Each page in a website should be responsive. Responsiveness of a webpage means webpage is designed in such way that it can be viewed in desktop, tablets and mobiles. In the initial days, people use to browse the internet on the desktops but now most of the users view the website on their smartphones. So it is very important that each and every webpage should be responsive. In custom websites, you can build responsive websites using CSS and Bootstrap. CSS language is developed for designing of the webpage. Thus, responsiveness is given importance in CSS language. You can write media queries in your CSS page and by using the media queries the website will be responsive. Bootstrap is a new framework which is used in making the webpages responsive. Bootstrap has different features like carousel, buttons, navigation bar, cards, etc which are responsive in nature. These things are embedded in code using keywords and those keywords are added to your CSS page.

Bootstrap is also getting regular updates adding new features and functionality in their framework (currently bootstrap in on version 5) to make it more usable and better. Wordpress websites are the best in the case of responsiveness as these website templates are made in a way that these websites work perfectly according to the screen resolution. Example: Website built in wordpress automatically adjusts itself whenever the website is accessed either in a mobile phone or a laptop or a computer monitor. This is one of the most important point which led to the rise of using wordpress for building websites. Currently websites are being viewed more on mobile phones and less on laptops and monitors therefore responsive websites has become a necessity.

Responsiveness plays a vital role in the designing of the webpage as design and beauty is what is take into consideration nowadays. Responsiveness websites work with one fix moto as in quick and positive replies soothing to the eyes. Each and every website currently present are majorly responsive in nature whether built by coding or by wordpress.

2.6 Search Engine Optimisation (SEO)

Search Engine Optimization is a new emerging topic which is of great importance. SEO is used in webpages to rank the webpage in Search Engine Results Page (SERP). Let's take an example: when you search about any essay that you want to read first website that appears is most likely to be Wikipedia. This is because Wikipedia has worked a lot on their SEO that whenever you search about the topic the first most page is Wikipedia. In the back, the google search engine uses your keyword and based on your keyword they fetch you the result. In custom websites, SEO is not in-built. You have to build and add SEO to your website. It is a manual process. You can make your website SEO friendly by improving title tags, researching on the most used keywords of your niche, mapping the keywords, optimizing the website, producing regular content so that website remains fresh and more people tend to visit your website. You can add SEO keywords in your code which helps in mapping some keywords. Thus, in today's time it is very crucial to have SEO on a webpage.

Search Engine Optimization in wordpress is completely different than that of coded websites. As we know SEO mainly helps in increasing the rank of our website during web searches. In Wordpress web sites SEO is given as much importance as much as that of responsiveness. Each of the templates that are present in wordpress are made with SEO that is included in the template. Although these are different as per the topic of the developer but yet they act out to be as much important as much these help in increasing the websites rank during web search. In wordpress SEO is an automated process and therefore there is no extra time needed in order to incorporate SEO to websites. SEO includes some keywords that are important to the content that is present in the websites.

2.7 Backend Connectivity

Backend Connectivity or connecting our website with the database with SQL or mongoDB is a manual process and need to be done manually by the developer. Database is where all the data feeded into the website is stored, therefore whenever data is needed back again for use it can be extracted from the database. These databases need to be connected with the front end of the websites. This connectivity is very important for data entered into the website to be stored in the database. When we are working with coded websites all this has to be done by the programmer and needs prior knowledge and experience for doing the task.

When we are working with wordpress websites one thing is made sure that the database is taken care of by wordpress itself. Whenever a user develops a website using wordpress it needs to choose a template, the database is already linked to the templates. Hence there is no need to integrate the front end and the database. The database is already present, linked and ready for use by the programmer. Wordpress has completely automated the process of backend connectivity. Wordpress also provides an option of customized database connectivity that can be created using PHP by the programmer manually and incorporating into the templates

III. COMPARISON BETWEEN WORDPRESS AND CUSTOM WEBSITES

Parameters	Custom Websites	Wordpress Websites
Use	Static & Dynamic web page creation.	Content Management System (CMS).
Source	Building custom websites require prior coding knowledge.	Makes it as simple as using a template to build websites.
Technology Used	Any text editor from simply notepad to VS code.	Templates, plugins, etc. from the wordpress official webpage.
Designing	Websites can be designed as per your choice and preference.	Customization of templates is tedious till a certain limit.
Responsiveness	Supported largely using frameworks.	Provides by default responsive websites with limited customization.
Search Engine Ootimization (SEO)	It needs to be built manually.	Automated as well as customizable.

History	Most traditional way to build a website	New and Emerging technology to build websites.
Backend Connectivity	Connectivity required with database like SOL	Easy connectivity
Preference	Solopreneur and students.	Businessmen and Entrepreneurs.

Figure 1: Coded Websites vs Wordpress websites

IV. CONCLUSION

The review says that custom websites have more customizations but it also takes time to learn the coding languages. On the other hand, wordpress customization is restricted to templates only but it does not require any prior knowledge. So, if you are a student or a solopreneur who has just begin with their career you can learn the how to build custom websites as it will help a lot in your professional career. On the other hand, wordpress is for professional businessman and entrepreneurs who has already build a business and just want to take it to the next step by going online. Wordpress and Custom Websites have their own pros and cons and it's upto the individual to decide which way is great for them to build websites.

REFERENCES

- [1]. The role of responsive design in web development (Research paper)
- [2]. Wordpress : A versatile tool for managing contents (Research paper)
- [3]. New technologies for web development (Research paper)
- [4]. A deep study into history of web design (Research paper)
- [5]. Digital Marketing Wordpress (Research paper)
- [6]. A comparative study of web development technologies using open source and proprietary software (Research paper)
- [7]. Content Management system in brief <https://searchcontentmanagement>
- [8]. Understanding the history of wordpress <https://www.wpbeginner.com/news/the-history-of-wordpress/> (Website)
- [9]. Cascading Style Sheets introduction-<https://www.w3schools.com>
- [10]. Search Engine Optimization <https://backlinko.com/hub/seo/what-is-seo> (Website)
- [11]. The official wordpress website <https://wordpress.org/> (Website)
- [12]. Web Development <https://www.geeksforgeeks.org/web-development/> (website)
- [13]. Courses from Udemy (Related to Web Development and Wordpress)