E-Commerce by WordPress & Content Management System – Comparison

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Nykyään internetin ansiosta vain harvat eivät ole kuulleet sanaa verkkokauppa. Verkkokaupoilla on nykyään hyvin erityinen rooli taloudessa ja ne ovat tulonlähde tuhansille ihmisille.

Tämän työn tarkoituksena oli suunnitella E-commerce web-sivua WordPressin avulla ja käydä läpi verkkokaupan rakentamisen ja käynnistämisen edellytykset.

Työn alussa tutustutaan sisällönhallintajärjestelmiin, verkkoisännöintiin ja niiden tarjoajiin. Eri sisällönhallintajärjestelmistä tässä työssä valittiin käytetyin niistä eli WordPress.

Työssä kerrotaan WordPressin asentamisesta ja käyttämisestä esim. WordPressin teemoista, lisäosioista ja kieleistä sekä kehittämisestä ja laajennuksista.

Opinnäytetyössä kerrotaan miten WordPressiä pidetään ajantasalla ja lisäksi kerrotaan sivuston responsiivisuuden ja nopeuden optimoinnin osoittamisesta.

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Information and Communication Technology		Abstract
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The purpose of this thesis is to design an e-commerce website using WordPress and to go through the prerequisites for building and launching an e-commerce website.

At the beginning of the work, different content management systems, and web hosting providers were examined, and WordPress was chosen due to its ease of use, community support, and hundreds of plugins and themes. This thesis covered the installation and use of WordPress and web administration, such as WordPress themes, additional sections, languages, development, and extensions. The thesis result was an online store. The thesis explains how to keep WordPress up to date, in addition to demonstrating website responsiveness and speed optimization.

Contents

Terms & Abbreviations

Add-ons = Third-party software program or script that is added to a program to give it additional features and abilities.

Apache = is the web server that processes requests and server web assets and content via HTTP.

CDN = Content delivery network

CMS = Content Management System

C-panel = Control Panel Provides the most reliable server and site management platform.

DDOS = Distributed denial of service attack is a cybercrime.

FTP = File Transfer Protocol is a standard communication protocol used for the transfer of computer files from a server to a client.

FTPS = File Transfer Protocol Secure is an extension of the popular file transfer protocol that supports transport layer security.

HTTP = Hypertext Transfer Protocol is designed for communication between the web and the browser.

HTML = Hypertext Markup Language is the standard markup language for documents.

JS = JavaScript is the programing language of the web.

LAMP = stands for (Linux, Apache, MySQL, PHP/Perl/Python).

Linux = is an open-source operating system.

MVC = Model View Controller is a pattern in software design.

MySQL = is a widely used relational database management system.

PACKT = supports and promotes open-source projects and concepts.

PHP = Hypertext Preprocessor is a popular general-purpose scripting language.

PLESK = is a commercial web hosting and server data software developed for Linux

RAM = Random access memory is a form of computer memory.

RSS = Really Simple Syndication is an XML-based format for distributing and aggregating web content.

SEO = Search Engine Optimization.

SSH = Secure Shell Protocol is a cryptographic network protocol.

SSL = Secure Socket Layer is a standard security technology for establishing an encrypted link between a server and a client.

TLDs = Top Level Domains refers to the last segment of a domain name.

URL = Uniform Resource Locator is a reference to a web resource.

VPS = Virtual Private Server is a virtual operating system.

WAMP = is a server for a web development environment.

WiFi = wireless technology used to connect computers, tablets, smartphones, and other devices to the internet.

XAMPP = is a free and open-source cross-platform web server.

XML = Extensible Markup Language is a markup language similar to HTML, but without predefined tags to use.

ZIP = is an archive file format that supports lossless data compression.

1   Introduction

There are many different ways to make an online shopping website for example: pay an expert to make a website, code it from the beginning which takes a long time, especially for bigger websites, or choose a content management system. In the first step, I was taught to code it from scratch. After talking with the supervisor, he suggested using the most used content management system WordPress.

This thesis aims to create an e-commerce webshop. In this thesis, different content management systems and their differences are explored the most popular one, WordPress is chosen. The main reasons for choosing WordPress are, because it has worldwide popularity, excels in site speed compared to other Content Management Systems (later CMS), has more flexibility, has the possibility of optimal support, has SEO capability, and, most importantly, is free to use.

In addition to this, web hosting and different providers are also discussed. Add – ons are also presented in the thesis, as well as how to choose a theme that is free to use.

The thesis begins with an introduction to content management systems. This is followed by an examination of web hosting and web host providers. The third section of the thesis will introduce the most important settings of WordPress as well as the installation process and features needed for a website. Finally, possible problems and their solutions will be examined to provide a guide to a responsive, fast, and secure website.

2   CMS

CMS comes from Content Management System, meaning a software system that manages the content, and refers to software that provides a manageable system for recording, updating, and retrieving content. A content management system covers the life cycle of web pages from creation to extinction and allows website owners, who are not necessarily

familiar with the specialized topics of the internet, web, and web programming, to manage their website professionally. One problem that has made fewer people think of having a website is the high cost of designing it. It used to take weeks to fix a problem and support the website, but in the 21st century with the availability of content management systems, there is no such problem anymore. (business.adobe, 2022)
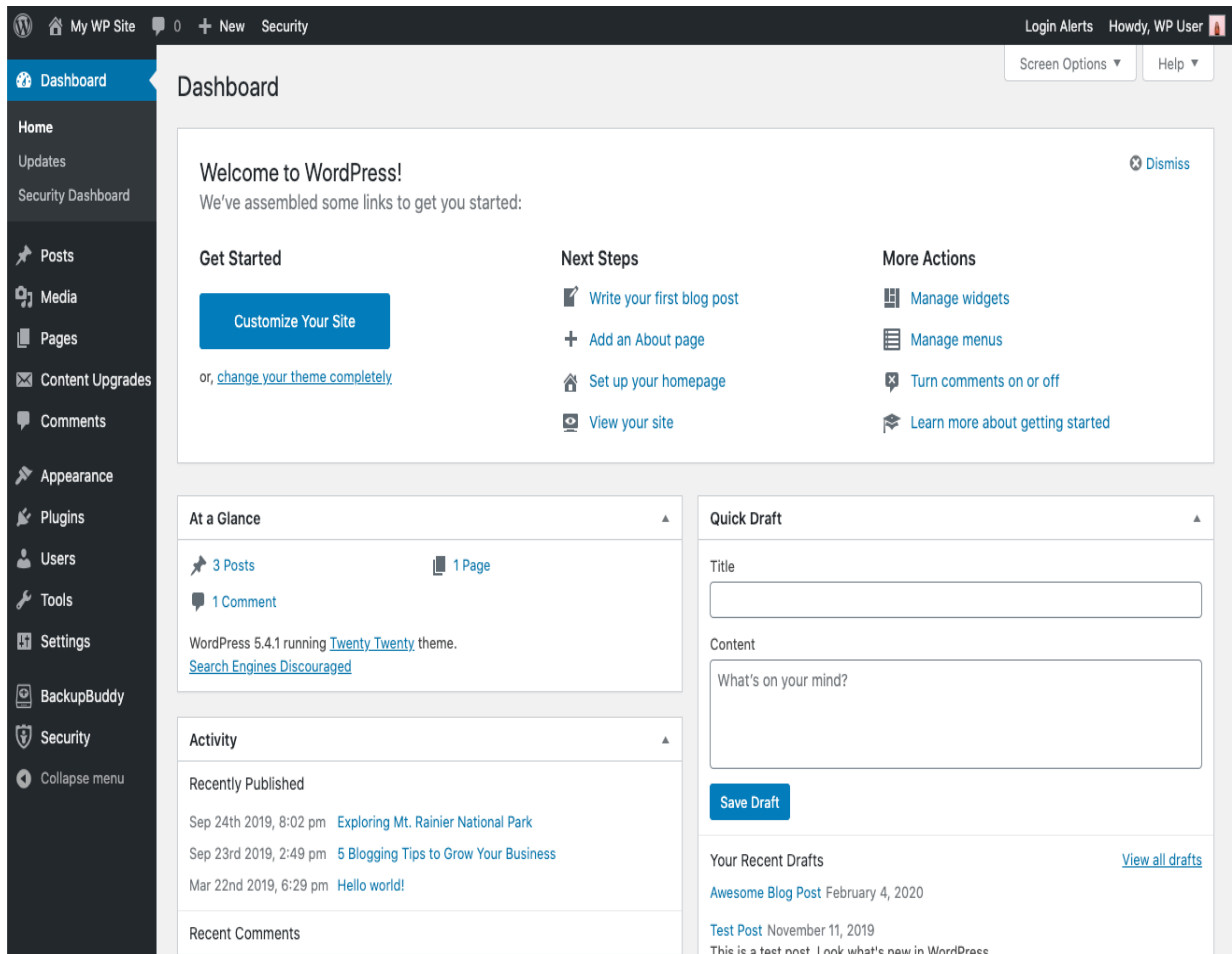
2.1   Popular CMS Platforms

Many content management system platforms offer the same products at different costs. Below is an introduction to the most popular/most used CMS platforms like WordPress, Drupal, and Joomla.

2.2   WordPress

WordPress is a content management system and a web application to provide a simple and quick answer to the question of what WordPress is. By installing WordPress software on the server, content management can be easily done. The most common use of WordPress is to set up and build a blog or a website. It also can create a social network with powerful plugins, such as Buddy Press. WordPress has a powerful core and is the most popular software in the field (Trends. Builtwith, 2022). WordPress web application is open source, and its core has been developed by different people. WordPress is written in PHP based on the MySQL database, so you can drag and drop and also add your code to it. On the WordPress dashboard, you will find options to change or edit. (ithemes, https://ithemes.com/blog/wordpress-optimization-guide/#ib-toc-anchor-6, 2020).

Figure 1. WordPress front page. (ithemes, https://ithemes.com/blog/wordpress-optimization-guide/#ib-toc-anchor-6, 2020)

Even though WordPress is the most popular CMS in use there are some disadvantages to using it.

1. WordPress security is the most serious weakness from users' and developers' points of view.

2. WordPress is not configured correctly and logically. For example, unique links are only complete when the user optimizes and stabilizes the theme manually with SEO plugins.

3. Key tasks in the WordPress editor, such as regular post types and categories, can involve writing a lot of complex code, which for a CMS could be much easier to configure.

4. It takes time to find the root problem of a WordPress website through the multitude of official tutorials.

5. WordPress documentation is inconsistent and incomplete.

6. WordPress failed to be a modern system, as it relies heavily on hacks and PHP codes to add extra features, and the functions of these hacks can be very confusing.

7. Sometimes WordPress can be slow.

8. Displayed SQL in WordPress is very complex.

9. Modifying graphics in WordPress requires knowledge of CSS and HTML, which frustrates beginners. (onextrapixel, n.d.)

2.3 Drupal

Drupal is another content management system (CMS). It is used to publish and manage the content of a website using a web browser on a smartphone, tablet, or desktop computer. Drupal uses MySQL database, and it is flexible CMS based on the LAMP stack, with a modular design that allows you to add and remove features by installing and removing plugins and to change the look of your website by installing and removing templates. As Drupal is also an open-source system, it is one of the best content management systems for creating news, personal, professional, and public websites and it has been selected as the best CMS of the year for best enterprise PHP CMS in 2014 and best free CMS in 2013. (drupal, https://www.drupal.org/, 2022).

Main disadvantages of using Drupal:

1. Developing a website using Drupal is very difficult for those who have not had any special experience with Drupal.

2. Drupal is not easy to understand due to its complex user interface.

3. The cost of using Drupal is relatively high between 40-60 dollars per hour.

4. Most Drupal users do their project designs independently, and this leads to a lack of quality designs for website design.

5. Installing Drupal updates and modules is done through File Transfer Protocol(FTP) and is not as simple as WordPress. (createdbycocoon.com, n.d.)

Figure 2. The Drupal flow has five main layers. (drupal, n.d.).
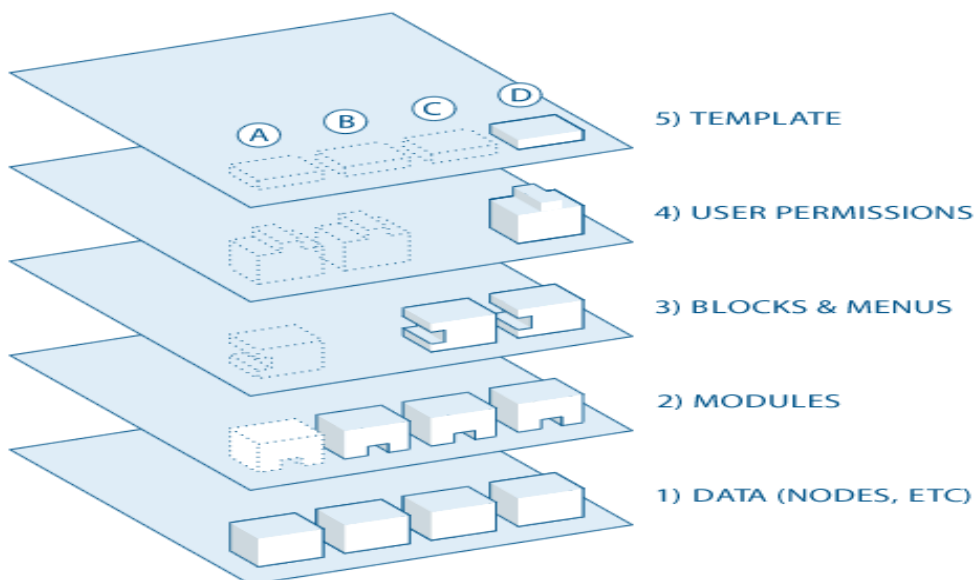
2.4 Joomla

Joomla is the name of free and open-source software for managing internet content. It is written in PHP and uses the MySQL database. Joomla features include temporary caching for improved caching, auto-listing, RSS feeds, print delivery, short news sections, forums, polls, calendars, web browsing, and support for multiple languages. In Joomla's site builder, any particular site builder, a host, and a domain are needed so that one can build a website by hosting it. Joomla was released in 2005 and has received the PACKT open-source content management system awards for best free CMS and best open source in 2021. Joomla uses the Model View Controller (MVC) design architecture. When Joomla processes a request, it first analyzes the URL to see which component processes the request. This model contains data that is used by the component (joomla, 2022).

Main disadvantages of using Joomla:

1. If the user is not familiar with computers and the field of website design, working with Joomla will be a little difficult.

2. The user communities are weak and there are not enough educational resources for Joomla.

3. When a failure occurs on the site it is not possible to get specialized and professional support. In general, there is a need for high technical knowledge to use Joomla.

4. The security of Joomla is relatively low and there are many tutorials on the Internet about hacking Joomla.

5. SEO unfriendly. For various reasons such as design strategies and as well as the lack of proper tools for SEO Joomla is not good enough. (createdbycocoon, n.d.)

Figure 3. Joomla dashboard where the setting can be set. (itheme, 2021)
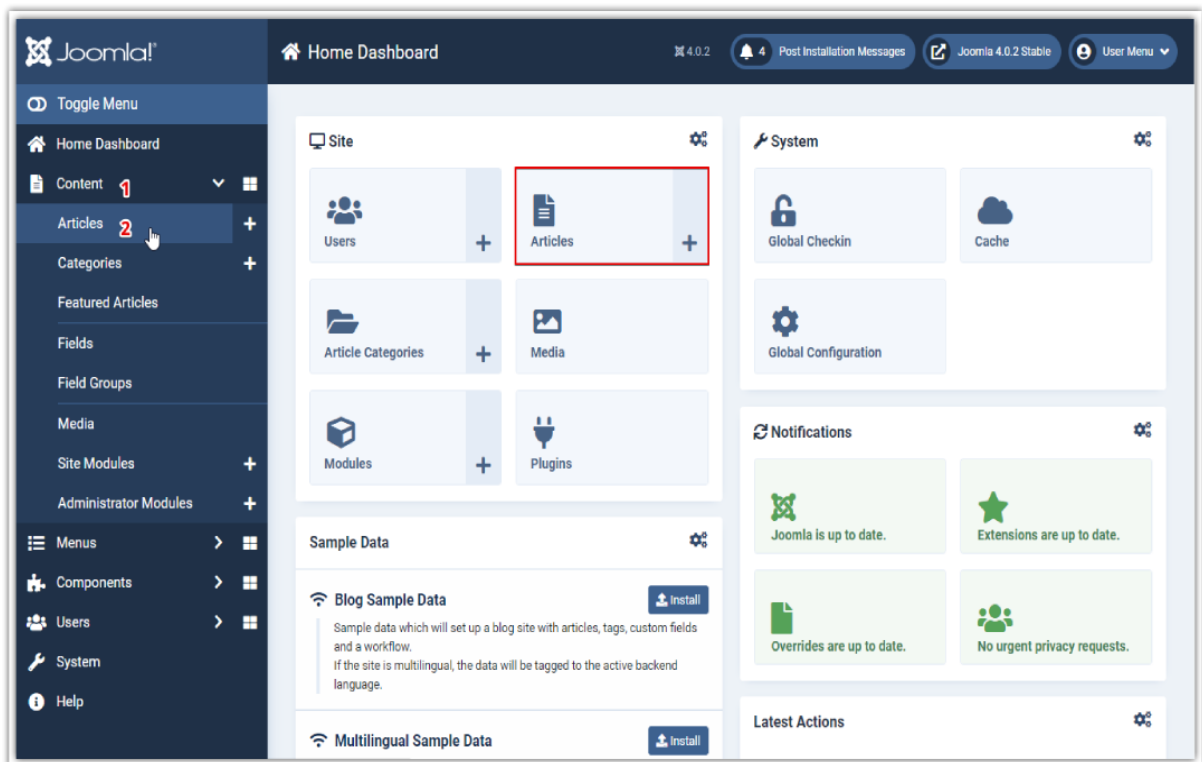
3   Web hosting

A web host is a computer that provides the necessary and appropriate space to store website information, content, and software. These computers are called "servers". Access to the servers is done remotely and this computer must always be turned on and connected to the Internet. Hosts have server management software such as C-panel, and Plesk that can be used to manage all parts of the host. Generally, there are two types of hosting, Linux and Windows, and they are provided by web hosting service providers.

Linux host supports HTML, PHP, and JS programming languages. Linux supports PHP language much better than Windows, so websites that are programmed with PHP should use Linux. (doteasy, n.d.)

Windows hosting supports JS, PHP, HTML, and asp programming languages if the programming language of the website is Active Server Page (in the following ASP). ASP is a

technology that allows the creation of dynamic and interactive web pages. ASP can only run on Windows hosting. (namecheap, n.d.).

Figure 4. Web hosting tools. (clevescene, 2021)

3.1 Web Providers

Web hosting does not mean a commodity business. Hosting providers may do everything the same way allowing them to share a small business with the world on the internet, but web providers are by no means equal in quality of service and benefits. Depending on the provider choice, one of them may offer great speed, but it will not give almost enough storage space and the opposite may also happen.

Small business owner needs to look for affordable web hosting providers to get the features they need exclusively for their situation. There is a web hosting provider that offers more storage space in the applications but if the user wants to work with a server that offers the fastest speed, the user should look for a service that has a lot of RAM and bandwidth in searches.

Most importantly no matter what provider the user chooses, the user must make sure the provider has 24/7 customer support services so problems can be fixed quickly and at any time of the day. (namecheap, n.d.).

Figure 5. Web hosting methodology. (quicksprout, 2022).

Next, some of the most commonly used web hosting providers will be introduced.

3.2   Bluehost

Bluehost is an American host company and one of the most reputable hosting service providers in the world. Bluehost's advantages are pricing, reliability, no hidden fees, free domain, and free CDN + SSL for every website.

Bluehost is one of the oldest hosting providers launched in 1996. Bluehost has become the largest brand in the field of WordPress hosting. Bluehost is an official WordPress hosting provider. They offer professional support 24/7 always available to help in critical situations

via phone, email, or live chat. They rank first in web hosting for small businesses. (Charlie Carmichael, 2022).

Bluehost offers a variety of hosting plans for all budgets and sizes these include shared hosting, VPS, dedicated server, cloud hosting, WooCommerce hosting, managed WordPress hosting, etc. (Bluehost, n.d.)

The advantage that makes the Bluehost provider the best is pricing: is that their hosting plans are well accessible to most users and reasonably priced, especially for those who are just starting. (wpbeginner, https://www.wpbeginner.com/hosting/bluehost/, n.d.)

Figure 6. Bluehost cPanel the plugins and settings can be made. (bloggingbeats, 2022).
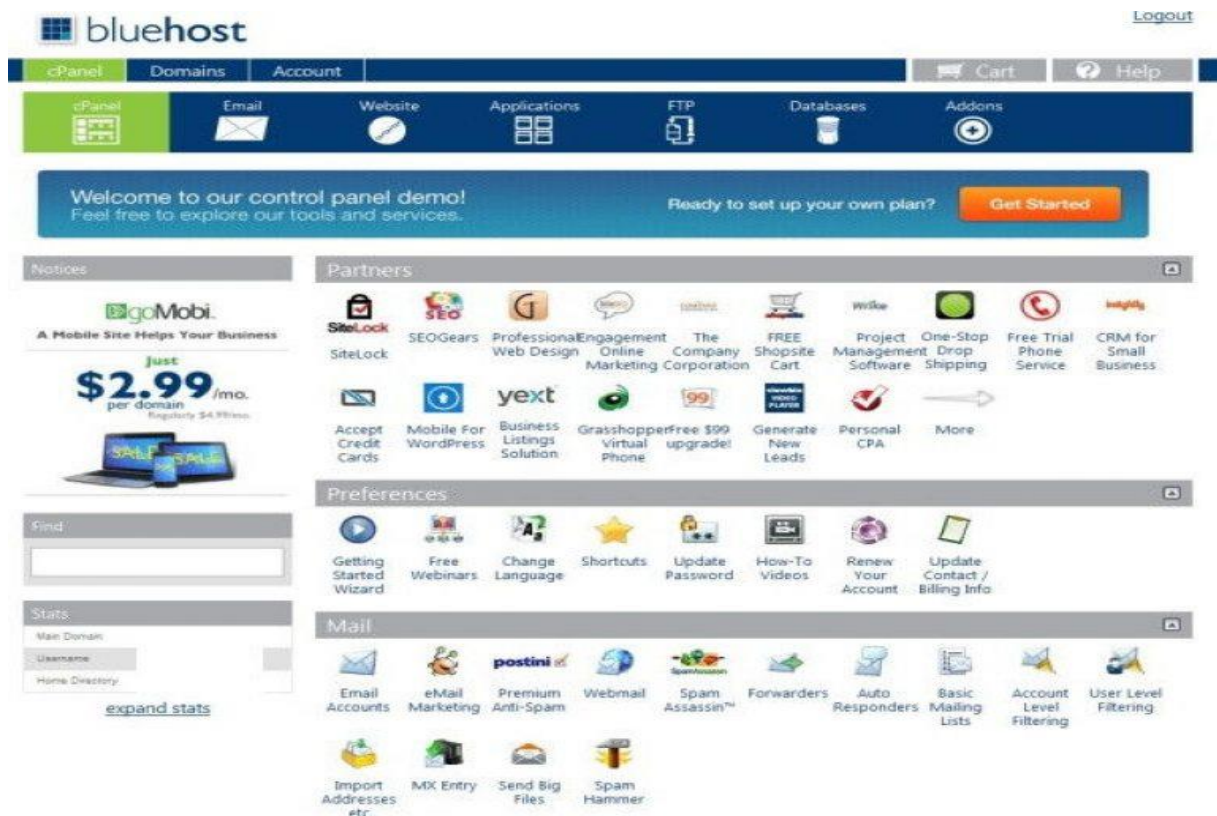
3.3 Hostinger

Hostinger was launched in Lithuania in 2004 as hosting media and was renamed Hostinger in 2011. Since then, Hostinger has reached more than 24 million regular customers. The largest

data centers for this collection are located in Brazil, Netherlands, Lithuania, USA, and Singapore. This site also offers a variety of services such as VPS and domain registration to its customers. (startuptalky, n.d.)

Hostinger service benefits are top host server performance, low registration price with the best features for users, it also provides enough space to develop websites, the ability to select 8 data centers around the world, access to SSL for domains and hosts for free, and privately, user-friendly and convenient control panel, a wide range of payment options (even bitcoin can be paid for shadow charging), WordPress acceleration to optimize for the best WordPress performance (for package users over 89$ per year), access to SSH for better security as well as easy website management and unlimited bandwidth (for package users over 89$ per year) (tooltester, https://www.tooltester.com/en/hosting/hostinger-review/, 2021).

Figure 7. Hostinger dashboard. (hostinger, n.d.).
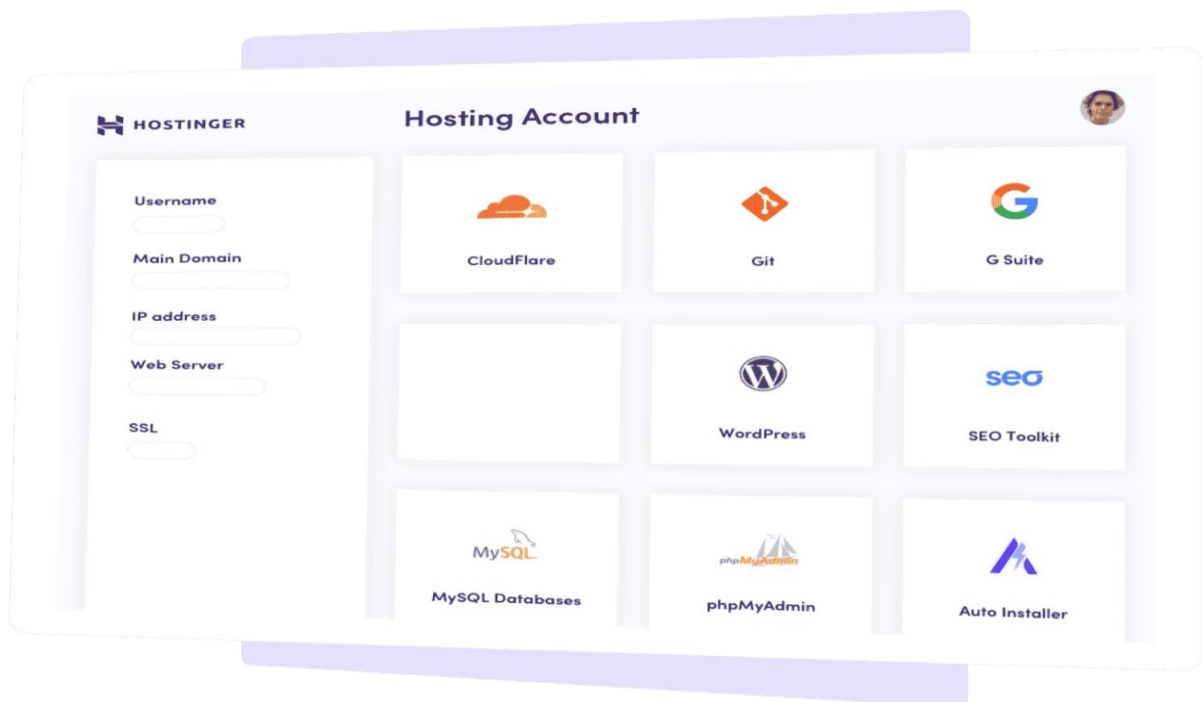
3.4 Dreamhost

All the services you expect from a web hosting website and domain services can be found in Dreamhost. From shared hosting and WordPress service to domain transfer and website, the building is done by this provider. In addition, they have services for private and dedicated servers as well as virtual servers. In addition, users can use the Dreamhost sales collaboration system, which pays between 15$ and 150$ per sale.

For the price user pay for this provider, they get significant features including unlimited storage and bandwidth, automatic backups, 24-hour support, and free SSL certification. In addition to hosting packages, we can choose site domains from more than four hundred TLDs (.com, .org, .net, etc.) options for each country are also available. One of the things to note about Dreamhost plans they are quite clear and simple according to research in this thesis (tooltester, 2022).

Figure 8. Dreamhost shared package pricing. (websiterating, 2022).

4 WordPress installation & Introduction

There are many ways to install WordPress:

Install WordPress locally on the computer

If users want to use the free version of WordPress then it is the best way to install it locally on the computer there are many free tools, users can use to install WordPress easily, so users get to know what WordPress looks like and how it works.

Install WordPress on the cPanel host

At first, the user needs to download the WordPress zip file then the user needs to go to the cPanel file manager to find a public HTML file to extract the WordPress file inside this file and install it. A cPanel host is a place where information about the site

is stored and there are various tools for managing the site host including Plesk and cPanel.

Host ready with WordPress

The easiest way to install WordPress is to choose a host that has already installed WordPress. Many host providers do most of the installation this feature allows us to get a WordPress site immediately after registering. In this thesis, some host providers have been introduced earlier.

4.1   WordPress using

WordPress is one of the most popular content management systems in the world. Therefore, this CMS is one of the most stable and secure content management systems in site design. (wpbegginer, 2022)

The followings section is about building a website with WordPress:

1. Personal WordPress site design
2. WordPress news site design
3. Corporate WordPress site design
4. WordPress online store design
5. WordPress designing and gallery sites, etc.

WordPress is designed to be installed on hosts. In addition, users can install WordPress in various ways. To run WordPress users need PHP, MySQL, a web server, and WordPress itself. Installing and configuring all of this can be complicated for beginners. Fortunately, there are many free packages for installing WordPress on Windows these packages will take the hassle out of installing the tools user need. Tools like PHP, MySQL, web server, etc. These simple programs allow us to use WordPress on any kind of Windows.

4.2   Free tools for installing WordPress on Windows

1. **Bitnami WordPress Stack**

This way is the easiest way to install WordPress on Windows computers. It will install all the requirements at once. PHP, MySQL, Apache, and WordPress are in the downloaded pack and will be installed without difficulty. Of course, this pack is not only for Windows users, and it is possible to install for other operating systems as well. (bitnami, 2022)

2. **Wamp Server**

The Wamp server is working with Xampp. Users have to install all items installed with Xampp and add phpMyAdmin and then install it easily on WordPress (how2shout, 2019)

4.3   Template selection

After installing WordPress on the host, users can change the site according to their needs and taste. The user needs to set a suitable template for the site according to the type of site and field activity. For doing this user needs to go to the WordPress dashboard under the appearances section click on themes and search for our suitable template, there are many free templates and also payable templates. Also, some plugins can be used to build the theme from scratch or customize the theme that user use from the themes store. For example, there are theme builders like Blocksy and Elementor. For this thesis project, a ready theme was chosen and customized with Elementor and Elementor Pro, these are plugins that help to build a theme from scratch or customize a ready theme, there are free versions and chargeable versions.

Figure 9. WordPress dashboard themes tab
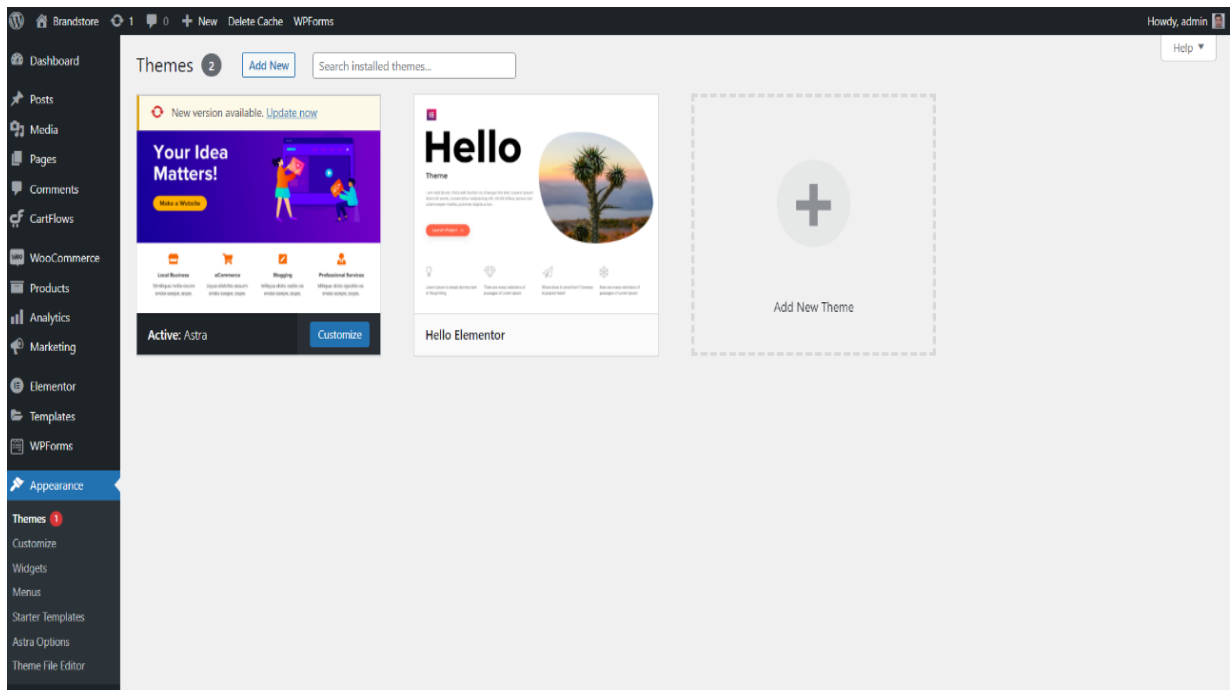
4.4 Customization by plugins

By installing plugins users can easily add additional functions to an online store. Plugins are like apps, as they provide extra features and elements to a site, and they are useful for personalizing the store or filling in performance gaps. In this step, users need to add desired features and characteristics to our WordPress site by using plugins. In this step, it is very important to choose the best and most useful plugins for the website. Plugins are also found in both free and chargeable versions. For example for this project website which is going to be an online store some plugins like WooCommerce, contact forms, cart flows, etc was needed. For installing plugins user needs to go to the plugins section and click on add new plugin after finding desired plugins click on install now and activate the plugins.

Figure 10. My plugins tab and installed plugins for an online store.
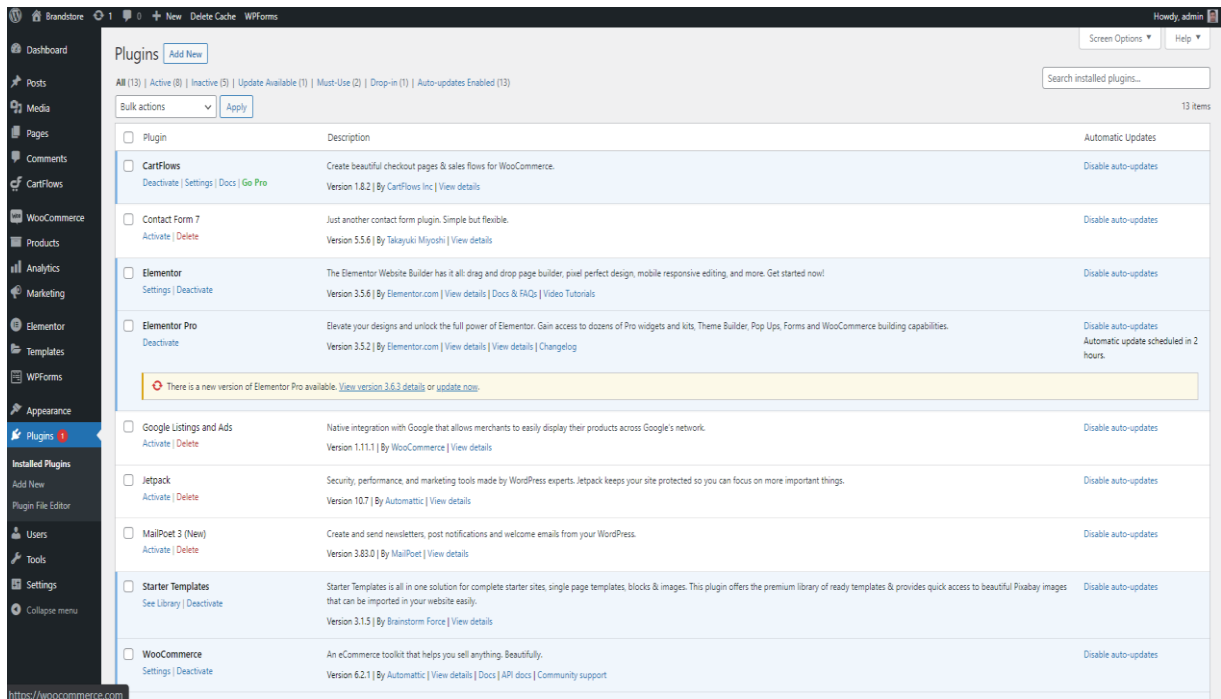
4.5   WooCommerce

As mentioned earlier, there are many ready themes users can choose for our personalized website. For an online store, users can choose a WooCommerce theme where user can find the WooCommerce plugin installed already. This is a great feature, as many tasks are automated and save time. Additionally, users can choose any kind of theme and install the WooCommerce plugin separately. After installing the WooCommerce plugin to get the site up and running, the user needs to click on the WooCommerce ad to get a quick installation and setup of WooCommerce. After WooCommerce is installed, users have to follow the steps, to should enter pieces of information such as the location of the store, the currency vendor is selling in, and whether shipping physical goods and collecting sales tax. Users can also choose a payment method such as direct online banking payment, PayPal, and payment methods used in Finland. Once completed, the quick launch salesman needs to add the products. Once users installed WooCommerce, it is time to get proper monitoring for the site. The key to increasing e-commerce site SEO is the type of content user use. Express product content in a way that is effective. The customer will decide to buy after receiving the

correct info about the product. When the salesman encourages the customer to buy, then the vendor will have high sales this way. (wpbeginner, 2021)

Figure 11. WooCommerce tab dashboard.
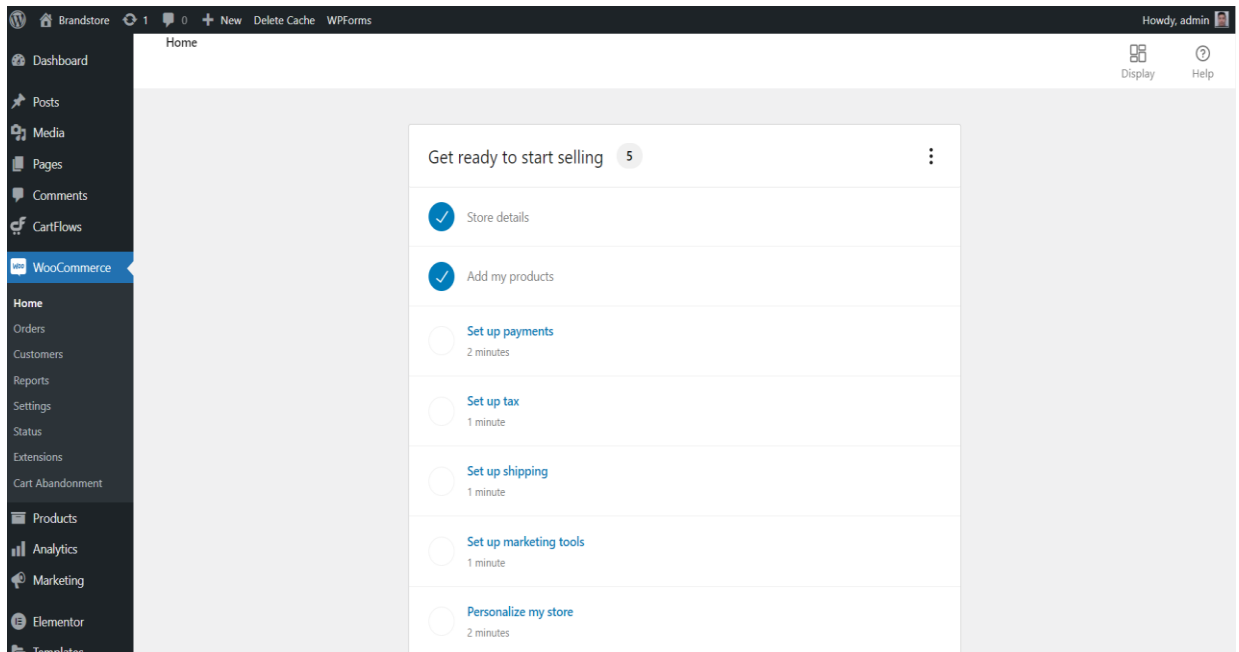
4.6   Online payment equipment

One of the necessities of an online store is to have a payment gateway which, in addition to facilitating the process of purchasing a valid payment gateway product, gives a sense of trust and confidence to the customer. Due to the sensitivities of financial issues, the security of the payment gateway and the security of the payment gateway plugin that a user uses is important, so to prepare an online payment gateway users need to choose from reputable sites. In addition, surveys report that some of the main reasons for leaving the shopping cart are the lack of a proper payment gateway. (bigcommerce, n.d.)

Figure 12. There are many reasons customers abandon their shopping carts. (barilliance, 2021)

Primary reason for digital buyers to abandon their carts in the United States as of 2015

Reason	Share
No express shipping available	4%
Couldn't find a coupon code	8%
Long and confusing checkout	9%
Concerns about payment security	15%
Was conducting research to buy later	17%
Having to create a new user account	22%
Unexpected shipping cost	25%

Share of respondents

Source:
Various sources (VWO)
© Statista 2016

Additional Information:
United States; Various sources; 2015; 1,000 Respondents; 18 years and older

statista

5.1   WordPress Hosting

One of the most important factors that affect the loading speed of a website is the host. If there are not enough resources on the main server, it will have problems servicing different sites. Smaller websites typically use a shared server, but larger websites often require a dedicated server. For example, sites such as Facebook or Twitter need a dedicated server to control all resources and respond to that volume of traffic. If traffic comes from different geographical locations, it might be a good idea to invest in a CDN (Content Delivery Network) system, because without it the Internet might be so slow. These types of networks are a set of servers that connect to the nearest server when a user opens a website from a specific location, so the data does not need to travel long distances and loads at a convenient speed for the user. (wordpress, n.d.)

Figure 13. Content Delivery System. (kinsta, 2022)

5.2 File size and Types

The large size of the files uploaded on the website can negatively affect the speed of the website as they naturally take longer to load. To optimize this, users need to shorten the code, reduce the size of the uploaded files, and most importantly, optimize the size and format of the images as much as possible. A digital camera or mobile phone images are not suitable for direct transfer to the website it is important to optimize them before uploading them to the site. To optimize the site images, the user should make them smaller in the first step the suggested size of the image is 800 to 600 because it is suitable for most screens today. To achieve the smallest image size user can use the new webP format, which is supported by most smart browsers. (ithemes, 2020)

Figure 14. Comparison chart of the file sizes. (wpbeginner, 2022)

Image Format	Image Size
Photoshop Optimized JPEG High	33 KB
TinyPNG Optimized	57 KB
JPEG Mini Optimized	70 KB
Photoshop Optimized JPEG Max	93 KB
Non-Optimized JPEG Max	119 KB
Photoshop Optimized PNG	135 KB
Non-Optimized PNG	145 KB

5.3   CDN using

Hosting companies have started to establish their data centers in the countries, and this will increase the speed of sites for the users. If users use an external host, the speed will decrease for the users, because the physical distance factor is very effective in speed therefore the use of CDNs as a solution to this problem has become very popular. CDN servers have different servers in different countries and websites are cached on them. When the user wants to enter a webpage according to their location, the request to connect to the nearest server is transferred geographically and the site from there, the server is loaded for the user, which will have a positive effect on speed. For example, if the main host of a website is in the country and a user wants to enter a webpage from Germany in the direct mode, the connection speed is low, but in the case of using the CDN, the user's request is transferred to the German server and the speed is multiplied. (cloudflare, n.d.)

Figure 15. How do CDN works? (cloudflare, n.d.)
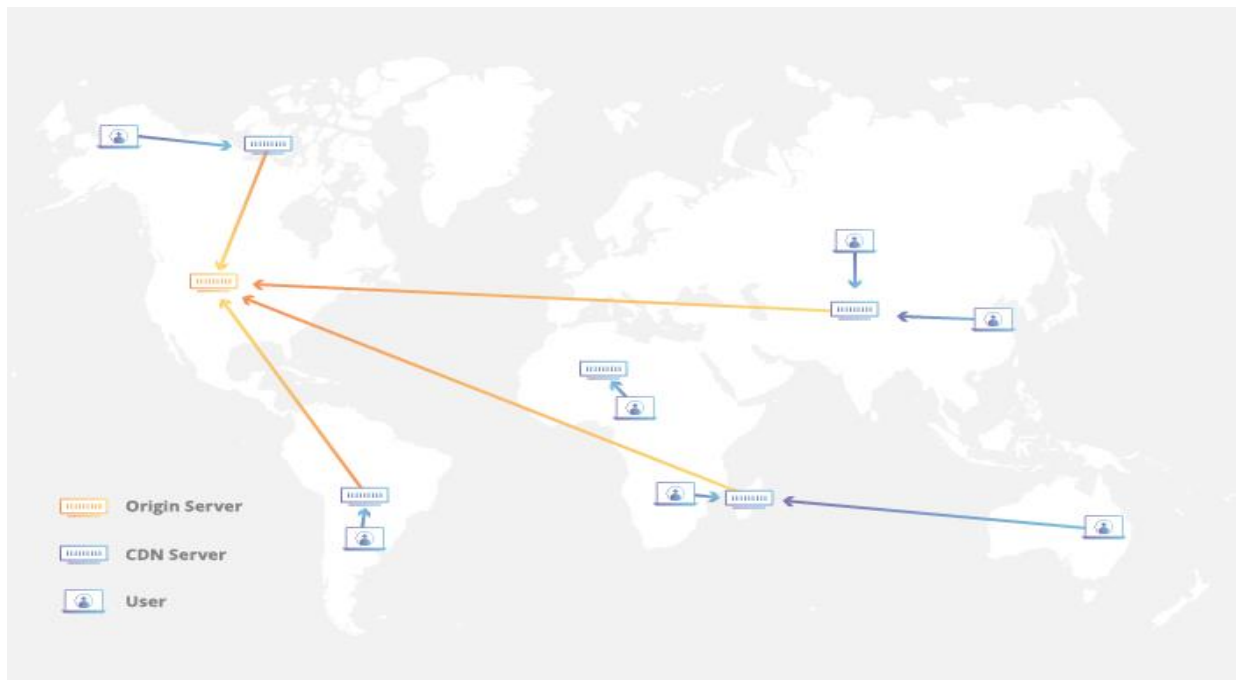
5.4 Purpose & Objectives

The purpose of this thesis was to make a responsive e-commerce website for an online shop, where the clothes and accessories will be sold. After considering and gathering information about the best possible way to create an online shop, WordPress was chosen, because it is open-source content and users have the freedom for building anything with just a drag-and-drop tool. There are thousands of themes to choose from with stunning designs and many features for WordPress. There is no need to write the code at all, but if there is something that the user can not find inside WordPress tools, then the user can add their code to customize the website as they want.

The first step to creating an online shop is to choose a domain name and a reliable host. The domain name will be the name of the online shop.

To create an online shop and use online payment gateways the owner must go through legal processes. An online-shop license will be needed.

For payment gateways, there are two ways to go through, first negotiate directly with the banks to create the necessary contracts with them. The second method is to use intermediary companies.

One of the most significant factors influencing the success of an online shop is SEO. SEO needs a specific strategy and planning it takes a lot of effort to make an e-commerce website be suggested on the first page of google. SEO is not an easy step. Improving the visibility and relevance of a website needs a lot of knowledge and patience. Search engines are unpredictable with the constant change in their ranking algorithms, therefore it is important to study SEO and keep the information up to date.

These two steps take time to complete In the future, the goal is to make the online shop that was created in this thesis project larger, more responsive, faster, and better for customers.

6   Conclusions

Based on the research done in this thesis, WordPress is the most budget-friendly option for a person founding a start-up business. There is a large number of users and business managers who are worried about using WordPress, solely because of its security system. WordPress in itself is not secure, but there are ways to secure the WordPress website with a series of measures.

For instance, the security of the website starts with the device used in case the computer has been compromised, this insecurity could extend to the web presence.

What should be done to secure a WordPress website:

Installing a virus and malware scanner on the computer to scan the system regularly. Putting the computer firewall on always. Let's not connect the WordPress site via public WiFi or an insecure connection. Beware that no one sees the username and password when logging in.

When accessing WordPress via FTP, users must use FTPS instead of insecure FTP to prevent the connection from being monitored. Users need to use a reputable host. A secure host always uses SSL to exchange information and also uses a strong password and username for services. Users should use a valid and professional CDN to protect the security of the website and data and also prevent DDOS attacks. At last, let's not forget to back up.

WordPress is the best free (CMS) according to research done in this thesis. On the other hand, WordPress alone will not be able to deal with hackers, however, by installing a WordPress plugin and its correct settings, as well as choosing a reliable web host, this problem can be solved.

References

Barilliance. (2021). *https://www.Barilliance.com/10-reasons-shopping-cart-abandonment/*. Retrieved from https://www.Barilliance.com.

Bigcommerce. (n.d.). *https://www.Bigcommerce.com/blog/WordPress-payments/*. Retrieved from https://www.Bigcommerce.com.

Bitnami. (2022). *https://Bitnami.com/stack/WordPress*. Retrieved from https://Bitnami.com.

Bloggingbeats. (2022). *https://Bloggingbeats.com/bluehost-review/*. Retrieved from https://Bloggingbeats.com.

Business.Adobe. (2022). *https://Business.Adobe.com/nz/glossary/content-management-system.html*. Retrieved from https://Business.Adobe.com.

Charlie Carmichael. (2022, 05 06). *https://www.websitebuilderexpert.com/web-hosting/small-business-hosts/*. Retrieved from https://www.websitebuilderexpert.com.

Clevescene. (2021). *https://www.Clevescene.com/cleveland/10-best-free-website-hosting-services-web-host-providers/Content?oid=35707343*. Retrieved from https://www.Clevescene.com.

Cloudflare. (n.d.). *ttps://www.Cloudflare.com/learning/cdn/what-is-a-cdn/*. Retrieved from ttps://www.Cloudflare.com.

Createdbycocoon. (n.d.). *https://Createdbycocoon.com/post/Joomla-pros-cons*. Retrieved from https://Createdbycocoon.com.

Createdbycocoon.com. (n.d.). *https://Createdbycocoon.com/post/Drupal-pros-cons*. Retrieved from https://Createdbycocoon.com.

Doteasy. (n.d.). *https://www.Doteasy.com/web-hosting-articles/linux-hosting-vs-windows-hosting.cfm*. Retrieved from https://www.Doteasy.com.

Drupal. (n.d.).

Drupal. (2022). *https://www.Drupal.org/*. Retrieved from https://www.Drupal.org/.

Drupal. (n.d.). *https://www.Drupal.org*. Retrieved from https://www.Drupal.org.

Hostinger. (n.d.). *https://www.Hostinger.fi/*. Retrieved from https://www.Hostinger.fi/.

How2shout. (2019, 6). *https://www.How2shout.com/what-is/what-is-Wampserver-and-why-it-is-used.html*. Retrieved from https://www.How2shout.com.

Itheme. (2021). *https://ltheme.com/how-to-create-and-manage-articles-in-Joomla-4/*. Retrieved from https://ltheme.com.

Itheme.com. (n.d.). *https://Ithemes.com/blog/WordPress-optimization-guide/#ib-toc-anchor-6*. Retrieved from https://Ithemes.com.

Ithemes. (2020).

Ithemes. (2020). *https://Ithemes.com/blog/WordPress-optimization-guide/#ib-toc-anchor-6*. Retrieved from https://Ithemes.com.

Joomla. (2022). *https://www.Joomla.org/*. Retrieved from https://www.Joomla.org/.

Kinsta. (2022). *https://Kinsta.com/learn/speed-up-WordPress/*. Retrieved from https://Kinsta.com.

Namecheap. (n.d.). *https://www.Namecheap.com/hosting/what-is-web-hosting-definition/*. Retrieved from https://www.Namecheap.com.

Onextrapixel. (n.d.). *https://Onextrapixel.com/*. Retrieved from https://Onextrapixel.com/.

Quicksprout. (2022). *https://www.Quicksprout.com/*. Retrieved from https://www.Quicksprout.com/.

Tooltester. (2021). *https://www.Tooltester.com/en/hosting/Hostinger-review/*. Retrieved from https://www.Tooltester.com.

Tooltester. (2022).

Tooltester. (2022). *https://www.Tooltester.com/en/hosting/dreamhost-reviews/*. Retrieved from https://www.Tooltester.com.

Tooltester. (2022). *toolteser.com/en/hosting/dreamhost-reviews*.

Wampserver. (n.d.). *https://www.Wampserver.com/en/*. Retrieved from https://www.Wampserver.com.

Websiterating. (2022). *https://www.Websiterating.com/web-hosting/dreamhost-pricing-plans/*. Retrieved from https://www.Websiterating.com.

WordPress. (n.d.). *https://WordPress.org/hosting/*. Retrieved from https://WordPress.org.

Wpbegginer. (2022, 1). *https://www.Wpbegginer.com/how-to-install-WordPress/*. Retrieved from https://www.Wpbegginer.com.

Wpbegginer. (2021).

Wpbegginer. (2022).

Wpbegginer. (n.d.). *https://www.Wpbegginer.com/hosting/bluehost/*. Retrieved from https://www.Wpbegginer.com.

Wpbegginer. (n.d.). *https://www.Wpbegginer.com/wp-tutorials/woocommerce-tutorial-ultimate-guide/*. Retrieved from https://www.Wpbegginer.com.