

The Simple and Complex Process of Website Development



How anyone can create a website.

About this Guide

This is a guide for anyone that wants to create a website. A website is defined as a page displayed online to show information about a person, organization, or business. It can be used to make money or for posting a blog. There are many other uses for websites and many different ways to create them. There is the easy way, which uses a service that is already created to host and to make websites without any computer programming. Then there are hard coding websites. To achieve this, many different languages must be implemented to provide the user interface, the style, and the functionality respectively. The goal of this guide is to provide information on how to create websites for any purpose.



This image and information is sourced from <https://www.coursera.org/articles/how-to-become-a-web-designer>, a website for free certifications and courses on technical topics.

Primary Audience

The main audience is for someone looking to promote themselves or start looking into web development. Specifically, this can be for a business owner, a blogger, or for a design and development student or software engineering student. Starting a website can be a huge benefit to any individual, and should be used to help others. Each way of creating a website is unique and can be a great skill to possess. This guide is targeted towards the average person who has no experience in website development, college students studying this or something similar as a major, or advanced and talented developers looking for easier ways to create a website for a business or for themselves.

Introduction to Website Creation

```
<> finalWebsite.html x style.css JS script.js
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>PC Parts HQ</title>
5     <meta charset="windows-1252">
6     <meta name="viewport" content="width=device-width, initial-scale=1.0">
7     <link rel="stylesheet" href="style.css">
8   </head>
9   <body>
10    <div id="main">
```

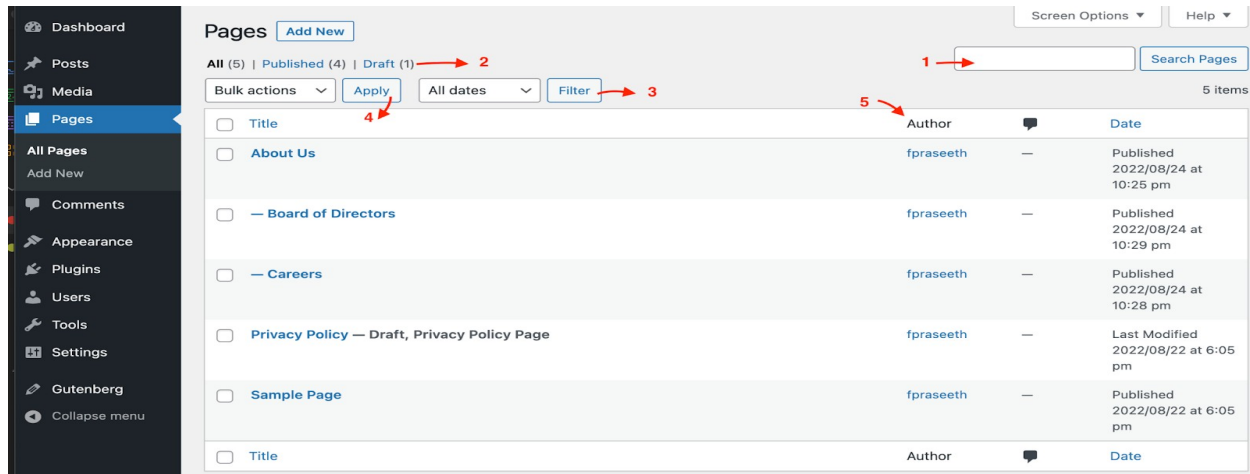
This is an example of HTML (Hypertext Markup Language), which is the primary language for creating websites.

When creating a website, there are easy ways to begin and hard ways to complete it. Each method of website design and development has pros and cons. Firstly, there are services that can be used to make hosting and designing a website fast and simple for everyone. Some services include Wordpress and Wix. They make it easy because there is little to no hard coding, and they offer the user a way to host their website for cheap. Using a service that creates an interface to drag and drop headings, buttons, or more on a website page is probably the easiest way to create a website. There is some code present in these methods, but it is rarely used. An individual can also consider hiring someone to create a website for them. Both these ways cost a decent amount of money though.

On the other hand, designing a website from scratch can be a challenge. There are several ways to accomplish this. The first way is by using three languages. The first is called Hypertext Markup Language, or HTML This is the main constructor for the website's design and look. It is the very basic skeleton for the website. Then, there is Cascading Style Sheets, or CSS. This is primarily used for the look and design of the website. This changes colors, fonts, margins, etc. JavaScript, which is one of the most popular programming languages in the world, is used to control the functionality of the website. This can be for buttons and storing data. All this information is stored on a server in either a hard disk drive or solid state drive. Each language is usually stored in a separate file, which is appropriately titled depending on the language used.

Finally, there are many frameworks that exist to create websites. One example is Microsoft's .NET Framework used with Visual Studio. Visual Studio is an Integrated Development Environment (IDE) that is used for graphic user interface creation with high level programming languages and for more complicated web design. This is one of the most complicated ways to create a website, but it has great potential and security for a company or small business.

WordPress



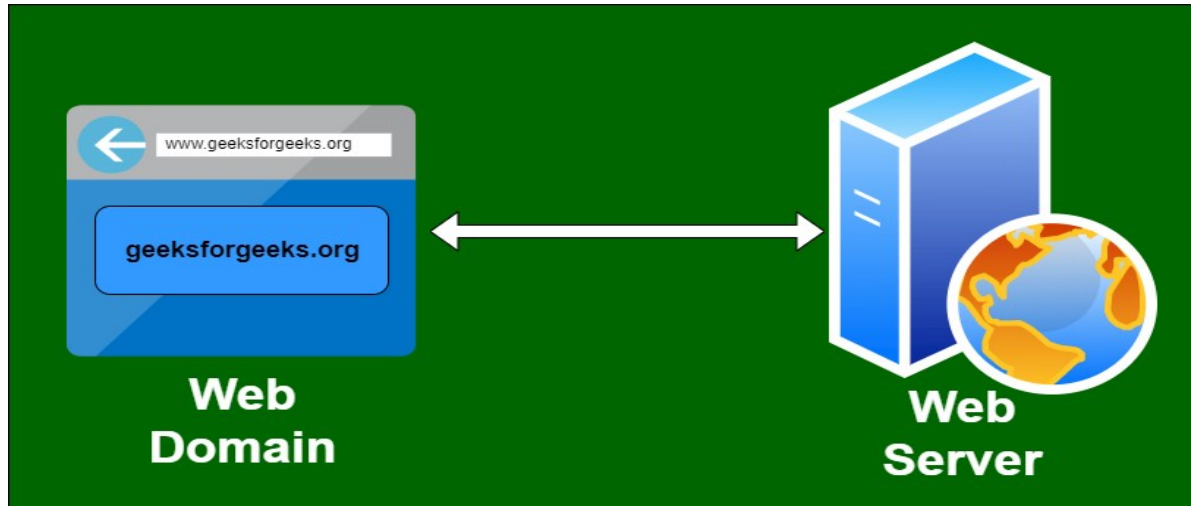
This is the Wordpress homepage. This is used for navigating through website pages and features.

By far the most popular web hosting service on the internet, Wordpress is used to host millions of websites. They also make it super easy to create a user friendly or unique design to capture the attention of people surfing the web. For this guide, Wordpress will be the main website tool discussed that uses little to no coding. Wordpress has free versions and paid versions for several services to help someone start a blog or business online. It is very easy to navigate and learn how it works.

The website was founded in 2003 by Mike Little and Matt Mullenweg. It was built off of another creation, and began as a creative tool for website design and development for people with little to no technical background. Today, Wordpress is used as a simple alternative for website creation. It is backed by several colleges and major technology companies as trustworthy and useful for easy web design. This takes time, and even someone who is not skilled in computer programming should dedicate a large amount of time when beginning to create a website. This also depends on how large it is, but using Wordpress takes time as well.

The website has a free version that allows someone to create pages, including home, information, about, or any page that a website would need. There are also posts that can be created when a designer wants to update some information on their website. Paid versions include a custom domain name and plugins and great features for businesses. These are necessary for a website to succeed. A successful website is one where many people visit it for information or for a service, and the creator should be able to gain a substantial profit from it.. This website should also be usable with some advertisements displayed, but not too many where it is completely useless without an adblocker. A domain name is also very important to know when creating a website, which needs to be mentioned.

Domain Name and Hosting a Website



This image and information is sourced from
<https://www.geeksforggeeks.org/how-to-choose-web-hosting-server-and-web-domain/>

A domain name is text that is given to a website that is hosted from an ip address. It can be broken down into four different parts. First is the protocol, which is usually defined as HTTP or HTTPS (which stands for hypertext transfer protocol or hypertext transfer protocol secure). Then there is the subdomain, or world wide web (www). The domain name is defined after these two, like Google or Amazon. Finally, there is the TLD, or top level domain. This can be .com (commercial), .net (network) etc. A website should have a professional name depending on the purpose. This is very important when trying to run a part of a business online.

When using a service like Wordpress, the service makes it easy to implement a custom domain name for a website. Services like GoDaddy help to host a website for a monthly or yearly fee. This can be helpful when someone does not want to hard code a website. This should be targeted to a single individual or small business though, as a huge multi-million dollar company should be using other alternatives (like some listed below). Hard coding websites can be required for larger companies, and it should not be looked down upon.

Hard Coding Websites

```
<> finalWebsite.html <> pageThree.html style.css script.js
22 <div id="titleSection">
23 <br>
24 <h1 id="titleText"> PC Parts HQ </h1>
25 <p class="subheader">Finding the Best PC Parts and Computers </p>
26 <br>
27 <br>
28 <p class="subheader"> We sell some of the best computer parts on the market. Check out some of the products below and ma
29 most common products on this page include custom made gaming computers, GPUs, CPUs, all different types of fans for a co
30 endless catalog of parts to explore and purchase.
31 </p>
32 <script src="script.js"></script>
33 </div>
34 <br>
35 </div>
36 <div class="below">
37 <br>
38 <h1 class="titleTwo"> More about PC Parts HQ</h1>
39 <br>
40 <p class="subheaderTwo"> PC Parts HQ was founded in 2022, and the purpose of the company is to fix broken computer parts
41 helps save the environment from trash and pollution and save computer parts that can be used in positive ways. Our part
42 they work and last for a long time. We spend our time fixing computer central processors, graphics cards, motherboards
```

Here is another example of HTML code. This contains paragraphs, containers, and a JavaScript implementation. This was sourced from my IDE from a web project that I worked on.

Hard coding websites can prove to be a challenge. However, learning these skills can really benefit someone looking to begin a development career. This is more complicated, and is catered to software engineering or computer science majors. Each language that makes up a website has been discussed in the introduction, and all should be used. To recap, HTML creates the skeleton of the website with headings, buttons, images, paragraphs, etc. CSS creates the style and look of the website with colors, fonts, margins, etc. JavaScript is the main scripting language that makes the website interactive (or do things). This can be for anything that is implemented in the HTML code.

Many of the services listed above, like GoDaddy for web hosting and Wordpress have custom HTML for computer programmers, or for someone who is used to hard coding. Knowing these languages also has benefits because many technology jobs want people with these skills, especially JavaScript. With this standard way, there are so many frameworks available for web developers. A framework is code provided for developers to begin creating an interactive website. There are so many different frameworks to use. Some examples include Ruby on Rails, Django, ASP.NET Core, Angular, Spring Boot (for Java developers), and Flask. Here are the examples and others below.

Top 10 Web Application Frameworks



This image and the information is sourced from <https://www.gurutechnolabs.com/web-application-frameworks/>.

Conclusion

Designing websites can be fun and difficult. Anyone can do it if they are determined and believe that they can provide a service for the world. Not everyone needs to know how to program to do it also. Programming is challenging though. Creating interesting and eye-catching visuals is enjoyable with some of the problem solving. However, working with more back end development like some user data or collection types can prove to be frustrating or challenging. When creating a website, always make sure to be careful of online scams (and please do not do this when creating a website). It should be a free service that helps the world instead of harming it.

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