Web pages

**What is a website?**

Before we get into how a website works, let’s first define what a website is.

**A website is a collection of interlinked web pages accessed via the Internet. It delivers information, entertainment, or services to users through a web browser on computers or mobile devices.**

These webpages contain and display information about the business or organization and are usually made up of elements such as photos, videos and text.

Users need a device with a web browser — laptops, smartphones or tablets — and an Internet connection to access a website.

Once users have those, they can type the website’s address on the address bar of the device’s web browser to access the website.

## ****What websites are used for?****

Before we learn how websites work, let’s explore what websites are used for. Websites are built for different purposes or goals.

Some reasons for creating a functional website include:

* **Providing information:** Multiple websites exist to provide information. For example, government and business websites inform visitors of updates in their respective offices or companies, while news websites update users on the latest happenings around the world.
* **Entertaining:** Websites such as YouTube and Netflix allow you to watch movies and shows, listen to music or play games.
* **Interacting with other users:** Social networking sites and forums allow users to connect, communicate and share ideas.
* **Buying and selling items:** [E-commerce websites](https://www.bluehost.com/wordpress/woocommerce-hosting) like Amazon and eBay allow users to sell and purchase items online.
* **Showcasing work:**Personal and [portfolio websites](https://www.bluehost.com/blog/how-to-create-a-portfolio-a-step-by-step-guide/) are sites created to demonstrate a person’s ability by collecting and showing past projects they’ve worked on for future clients.

A web page is a document written in hypertext (also known as HTML) that you can see online, using a web browser. Most web pages include text, photos or videos, and links to other web pages. A group of many web pages managed by one person or company is a website.

## ****Types of websites****

Mainly there are 2 types of websites, dynamic and static.

When creating your website, you’ll encounter a significant decision: choosing between a static or a dynamic website. This choice will impact how your web pages are stored and delivered to visitors in their browsers.

**Dynamic vs Static Website – A Quick Comparison**

|  |  |
| --- | --- |
| **Dynamic Website** | **Static Website** |
| Content changes and updates dynamically. | Content remains fixed for all users. |
| Can display personalized information for users. | Do not support real-time data fetching or personalized content. |
| Supports interactive features like logins, comments, and forms. | Does not support interactive features |
| Well-suited for online stores, blogs, and websites with user interactions. | Ideal for a simple online presence, such as company profiles or portfolios. |

**What you need to start a website**

You have read about how a website works and the types of websites. Now let’s look at what we might need to start a website. That way, you’ll have a better understanding of How websites work.

To start a website, you will need the following:

**1. A Website-Building Platform**

Websites are made of a set of code or programming languages. The most common languages used to build websites are:

* **Hypertext Markup Language (HTML)**helps browsers display webpage elements such as text, links and media.
* **Cascading Style Sheets (CSS)**define webpage styles such as colors, layouts and fonts.
* **Hypertext Preprocessor (PHP)**is the programming language used to create dynamic and interactive websites. PHP is responsible for retrieving content from databases and displaying them on your website. With PHP, you can create login pages, forms and galleries.
* **JavaScript**allows you to implement complex features to your website. Anytime your website does more than display static information, [JavaScript](https://developer.mozilla.org/en-US/docs/Learn/JavaScript/First_steps/What_is_JavaScript) is probably involved.

Nowadays, you don’t have to build websites straight from code. Content management systems (CMS) such as WordPress allow you to access websites and build a website easily.

These platforms use code but do not require users to have [developer-level coding skills](https://www.bluehost.com/blog/what-is-a-developer-how-to-hire-a-developer-to-build-your-site/) to use them.

**Domain Name**

Lastly, you’ll need a domain name to make your website work.

A domain name is the website name that users enter on the browser (i.e., Chrome, Firefox or Safari) when they visit your website.

Computers, servers, and other devices connected over the same Internet protocol are each assigned a unique string of numbers called the [Internet protocol (IP) address](https://us.norton.com/internetsecurity-privacy-what-does-an-ip-address-tell-you.html).

Every time you access a website, your computer communicates to the website’s server through IP addresses. But because the IP address consists of multiple numbers, users would struggle to memorize which string of numbers belongs to a website.

Thus, the domain name system (DNS) was born.

The DNS is composed of multiple nameservers that look up the domain. You can think of the DNS as a large web address book where computers can look up [domain names](https://www.bluehost.com/domains) and match them to their corresponding IP address.

A web browser is a type of software that allows you to find and view websites on the Internet. Even if you didn't know it, you're using a web browser right now to read this page! There are many different web browsers, but some of the most common ones include Google Chrome, Safari, and Mozilla Firefox.