Websites 101

Presented by Dick Knuth <u>dknuth@raknuth.com</u> (760) 672-8333 <u>https://raknuth.com/</u>

Build a Website - The View from 10,000'

If you have a product or service to sell, or if you have expertise you would like to share, you need a website. Do you build it yourself, or do you pay a developer to build it for you? That, my friends, is the million-dollar question.

The modern website is a complex structure comprised of a multitude of complex objects. At its core, it is "programming". A website is assembled using markup like HTML and CSS, and languages like PHP and Javascript. Although you can find tools to simplify many aspects of website programming, building a website still requires skilled labor.

If you chose to build, you will want to watch YouTube videos and walk through tutorials.

If you choose to pay a developer, you will want to watch YouTube videos and walk through tutorials (so you know what to expect from your developer).

If you do not watch YouTube videos and walk through tutorials, you will be unpleasantly surprised at how much time it will take and how much it will ultimately cost to build your website.

Have you heard about WordPress... Joomla? These content management systems offer a complete set of tools to help you build your website.

Have you heard about Wix... Squarespace... GoDaddy... Weebly... Shopify? These companies offer to help you build and publish your website.

Because I don't have the time to talk about all these options today, we're going to pretend that you've done some homework and have decided that you are going to build your website using WordPress. Because you are bold and industrious, you've decided to build it yourself.

Since WordPress is the most widely used system for building websites in the world, you've spent a few hours watching the thousands of WordPress videos available on YouTube and running hundreds of tutorials. You are prepared!

IMPORTANT: En route to building a great website, you will create many website accounts. Please manage usernames and passwords carefully. Take detailed notes – it may be months before you find the need to log on to a website a second time.

Build a Website with WordPress - The View from 10,000'

1) Choose a domain name

A domain name is the basic building block of the website's address. The name should reflect the name of your business or your interest. The name you want may not be available, so you will want to list a few that are acceptable to you.

2) Purchase a domain name

Visit the web page of a Domain Registrar – a company that can sell a name to you. When you buy an available name, you own that name for one or more years. There are many domain name registrars on the Internet, and their prices do not vary much. Do a search for "buy a domain name".

You may purchase more than one domain name for a given website, if it serves your need. For example, you may want to buy *bottledwater.com*, *bottledwater.net*, and *bottledwater.info*, and point all three names to the same website.

Important: when you buy your domain name(s), use an email address that you intend to check forever. Notifications for renewal will go to that email address. If you miss the email and fail to renew, you may lose ownership of that domain name.

Important: when you buy your domain name(s), pay for private registration. Private registration hides your personal details from the public domain name databases. This prevents hackers and spammers and other deviants from discovering your name, address, phone number and email address.

3) Buy website hosting

Website hosting refers to the hardware, software, and services needed to publish your website in a place that is available to the peoples of the world. Websites are stored on a webserver. Webservers come in two flavors: Linux and Windows. A good hosting package should include email. It may also include backup services and rudimentary marketing services. Since we are discussing the use of WordPress as the primary tool for building your website, you will want to make sure that the hosting company you select is compatible with WordPress. Look for terms like cPanel (on Linux) and Plesk (on Windows).

Do a search for "website hosting". Compare capabilities and pricing.

Note: there is no correlation between the type of computer you own and the type of website hosting you buy into. Don't feel like you need Windows hosting because you run a Windows 10 computer.

Note: many hosting companies offer pre-payment discounts based on time. Paying for one year up-front will be less expensive than paying monthly. Many hosting companies also offer tiered plans.

4) Collect your tools

WordPress is web-based; you'll access it using your favorite web browser. But you'll want to install a text editor (not a word processor) and an FTP (File Transfer Protocol) program to your computer. I use NotePad++ to edit text and I use FileZilla for FTP; both are free. If you intend to post photos, you'll want to make sure you have a decent image editing application available to you.

5) Install and configure and customize WordPress

If your hosting plan includes cPanel, you can use the built-in software installer to install WordPress. Or you can watch a YouTube video on how to install it manually.

Once WordPress is installed, you'll need to log into the "backend" - the admin interface. There is a navigation bar down the left edge of the page. Click on Settings, and dance through the various settings, making changes where appropriate. Click on Appearance -> Customize and dance through the Customizer, inserting and editing data where appropriate.

Note: in the Reading settings, your homepage will be:

- "Your latest posts" if you are building a website that will primarily be a blog.
- "A static page" if you are building anything but a blog.

Note: in the Media settings, I strongly suggest you uncheck the box for "Organize my uploads into month- and year-based folders".

6) Gather your content

In your mind's eye, you saw this website unfold before you. Just as you would do before building a bookcase or getting dressed for Halloween, you will need to assemble your raw materials. Create a folder on your computer and name it "Website - bottledwater". Into that folder, place the text files and photos and drawings and videos required to turn your imagination into your new reality.

7) Prepare your content

- You will use copy-and-paste to insert text into your web pages, so spell-check and grammar-check your source documents.
- Make sure you are not plagiarizing someone else's work.
- Large images take longer to download and present on the page than do smaller images. They also consume more storage space on the webserver. Therefore, image editing is an important discipline.

- Crop your images, if required.
- Re-size your images, if required. Note: the width of a web page is measured in pixels.
- It might be more efficient for you to create a YouTube channel for your videos than to expect your webserver and website to play videos directly. You can embed a YouTube video in a web page in a way that makes YouTube do all the heavy lifting.

8) Create your website

HERE WE GO! You finally get to use WordPress. Create pages, insert content. Save. Test. Test. Test. Test.

You've watched dozens of videos, so you know that the look-and-feel of your WordPress website is controlled by a theme. If you're not happy with the general look-and-feel of your content, search the Internet for a new theme. Install and configure the new theme.

If you need some functionality that is not available yet, search the Internet for "wordpress plugin [nneded functionality]". For example, "wordpress plugin contact form". Install. Configure, Insert into webpage. Test.

Feel free to play around. This is, after all, a learning experience.

9) Tell your friends and family and as many strangers as will listen about your new website

The Internet is BIIIIG PLACE. Spammers and hackers may find you before anyone important finds you. So, tell everyone who will listen about your new website.

Dos and Don'ts

• Don't let your website developer hold you hostage: Make sure EVERYTHING is in your name, paid for

with YOUR credit/debit card, using YOUR email address.

- Make sure your website developer is prepared to give you a full copy of website files and website database.
- Be prepared to contribute to the design process. Don't tell your website developer to "just copy this other website".
- Include BACKUP in your hosting package.

- The bad guys will attempt to hack your website, so include extra security in your backup package or install a security plugin to your platform.
- Layout your website pages like you would lay out a company's org chart. Home page at the top.
 Indicate which pages should be in the navigation bar (the menu).
- List the required functionality you will need. If you want to show available dates or times, you will need a calendar. If you want to sell product or services, you will need a shopping cart & the supporting services.
- Use a contact form. Do not put simple "mailto" links to your email address on your pages.
- Do not obscure your message with too many distractors.
- Don't hurt my eyes with too many colors or hurt my brain with too many fonts. Keep the design simple and consistent.
- Prep your content for speed. Learn enough about photo editing to crop and resize your photos.
- Don't believe it when your website developer tells you, "Sure, you'll have an easy time updating content and adding photos."
- Don't believe it when somebody offers a guarantee that they will put you at the top of the Google listings.
- Keep a good list of the things you buy. Make sure you know which items are a one-time purchase and which have a recurring payment attached to them. Know when payments are due. Keep an eye on your email for renewal notices.
- Know who to call when there is a problem.

<u>Terms</u>

- **TCP/IP**: the set of network protocols that provide the backbone for Internet network traffic and most computer network traffic in businesses and homes.
- *IP Address*: the unique numerical address of a TCP/IP-enabled network device.

- *Host Name*: the unique alpha-numerical designation of a TCP/IP-enabled device.
- *Router*: a device that connects two networks.
- DNS: Domain Name System. The TCP/IP "address book". A database of Host Names and their associated IP Address(es).
- **Domain name**: the unique name, or identity, that corresponds to a person's or organization's network resources. Typically, these resources include a website and email.
- Hosting Package: the computer and network resources that facilitate the publication of a website and the transmission of email. These resources are typically provided on a Windows Server platform or on a Linux platform. A comprehensive hosting platform typically includes a webserver, an email server, a control panel (cPanel, Plesk), server-side programming support, software installation support, log file viewers, and much more.
- WordPress: one of the most common website platforms (frameworks).
- Other common platforms: Wix, Squarespace, Joomla, Weebly, Site123.
- **Database**: a container that stores the data for your website management and presentation.
- **Framework**: the programming structures that perform the work of managing the website (the backend) and presenting your content to the viewer (the front end).
- **Theme**: the components that create the look-and-feel of your website. The theme may also include additional functional components.
- *HTML*: Hyper Text Markup Language. The language of web pages. HTML does not perform work. It is used to build the structural components of a web page.
- **CSS**: Cascading Style Sheets. The markup language that controls look-and-feel. CSS provides the styling elements for the structures built with HTML.
- Javascript: the language used by your web browser and email clients to perform work.
- **PHP**: one of many languages used by the webserver to perform work.