Self-Taught Coders

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Web Server Setup Guide

How to set up your own computer for web development.

Setting Up Your Computer for Web Development

Our web server software

As we discussed, our web app is comprised of two main parts, the front end and the back end.

The front end languages—HTML, CSS, and JavaScript—are all automatically understood by your web browser. There's nothing special we need to do in order for their code to be properly executed.

In order for the back end to function properly, on the other hand, we need to configure our own web server. Without a web server, we wouldn't be able to run any code in the back end's language, PHP, or store any data in a database.

There are three major pieces of software we need to install in order to establish our full web server...

Apache

Apache is our web server software, which will be responsible for allowing us to actually host and serve pages via a web browser.

Without it, we wouldn't be able to develop a system of interconnected pages, which make up the true essence of the app, itself.

PHP

PHP, as we've discussed, is our back end language.

But in order for our computer to be able to understand and interpret PHP code, the PHP software application needs to be installed.

MySQL

MySQL is the name of the database we'll be using.

As was just mentioned previously, our database will be responsible for storing all of the data that we'll be using so we can retrieve it and display it throughout our web app.

If you're on Windows...

...you can simply install **WAMP**, which stands for Windows, Apache, MySQL, and PHP. It contains all of the software that we need to establish our web server.

You can download WAMP directly from SourceForge—http://sourceforge.net/projects/wampserver/.

If you're on a Mac...

...you can simply install **MAMP**, which stands for Windows, Apache, MySQL, and PHP. It contains all of the software that we need to establish our web server.

Visit MAMP's Downloads page—http://www.mamp.info/en/downloads/—and download the current version of MAMP & MAMP Pro ("MAMP & MAMP PRO 3.0.5" at the time of writing).

Installing WAMP/MAMP

Once you've downloaded WAMP or MAMP (depending on your operating system), proceed through the installation, making sure to **write down any passwords** you need to create throughout the process. They don't have to be insanely secure (and can sometimes even be left blank), as you'll only be accessing these tools on your own computer.

You can leave all options set to the defaults as you progress through the installation.

Testing everything out

Once installed, let's test everything to make sure it's working properly.

On Mac

If you're on a Mac, make sure the MAMP application is started (it should be located in your Applications directory) and that you see its icon in your menu

bar. Clicking the icon should bring up the MAMP control center, as shown in Figure 1.



Figure 1: The MAMP control center

If the "Apache Server" and "MySQL Server" indicators in the "Status" section are not green, click the "Start Servers" button to start them.

Then, to make sure everything's working properly, click the "Open start page" button, which should open the MAMP start page within your web browser, similar to the one shown in Figure 2.

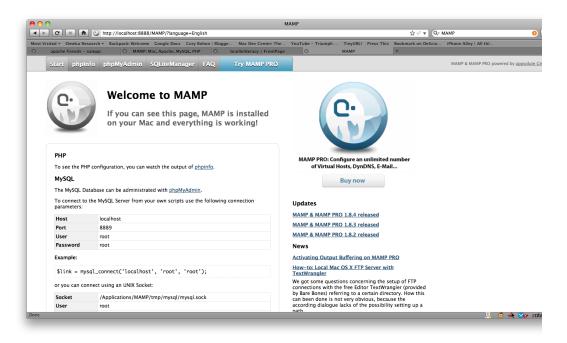


Figure 2: The MAMP start page

Mac only: A minor adjustment

When you opened up the MAMP home/test page, you may noticed that the URL included an ugly :8888. Let's get rid of that.

In the MAMP control center (Figure 1), click the "Preferences" button, then click the "Ports" button/tab, and then click the "Set to default Apache and MySQL ports", as shown in Figure 3.

Wait about ten seconds for the new settings to take place and then click the "Open start page" button again. You start page's URL in your browser should now be shown without the ":8888". Success!

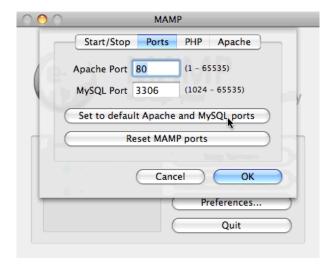


Figure 3: Setting default Apache and MySQL ports in MAMP preferences

On Windows

If you're on a PC running Windows, make sure that the WAMP application is started (you should have an icon on your Desktop or within your Start menu) and that you see it's icon at the very bottom of your screen on the right side of your taskbar, as shown in Figure 4.



Figure 4: WAMP's taskbar icon (all services started)

If the icon in your taskbar is *not* green, left click on it, and choose "Start all services", as shown in Figure 5.

From that same menu (Figure 5), you should now be able to click "Localhost", which should display the WAMP start page in your browser, similar to the one shown in Figure 6.

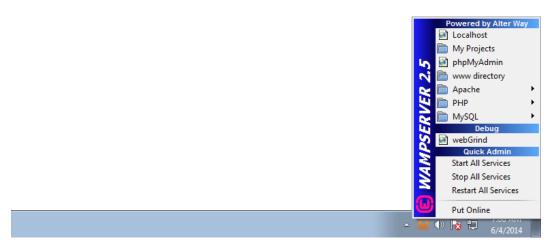


Figure 5: WAMP control panel menu

If you run into any problems...

...run a quick Google search. It's very likely that someone else has experienced a very similar issue before and has explained how to remedy it.

If Googling doesn't turn anything up, feel free to contact me and I'll help point you in the right direction.

Your development tools

Great! You now have the necessary background applications installed to power your web app.

But as with anything other craft, web development requires a set of tools.

In our case, the main tool we're concerned with is essentially a fancy text editor, known as a **source code editor**. It will allow us to easily manage our our app's files, as well as edit our existing files and add any new files, as needed, all within a nicely designed application.

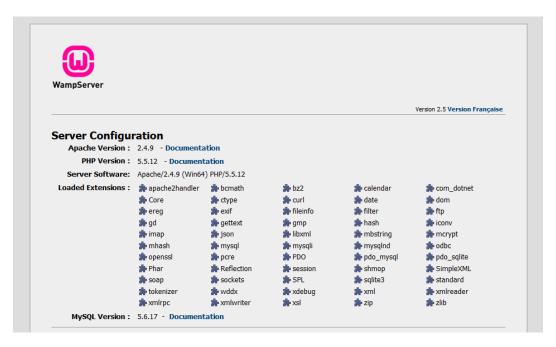


Figure 6: The WAMP start page

Sublime Text 2

The source code editor that I highly recommend is **Sublime Text 2**. You can certainly use any number of the other options, but this is the best, most comprehensive source code editor I have ever come across. And it's very easy to get started with—don't worry!

To get Sublime Text, visit the Sublime Text homepage and download the latest version. Note that it doesn't cost anything to download and install, but if you end up really liking the tool, they recommend you pay a one-time cost of \$70. For now, though, you can just give it a try.

Go ahead and install Sublime Text, using all of the default options, and open it up. You'll notice that, at first glance, it appears to just be another text editor, really. We won't jump into any of the super-cool features it possesses at the moment, but suffice it to say it's way more to it than meets the eye.