



# Write a Web Application for Free

## Edition 2

Thomas Davenport

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Thomas Davenport

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# Contents

Chapter One . . . . . 1  
    In which we get started . . . . . 1

# Chapter One

## In which we get started

### Introduction

We are going to build a simple web application to learn something about HTML, CSS, JavaScript, PHP and MySQL. We will use these technologies to create a working web application.

Apart from your computer and internet connection, everything you use will be free. We will develop and test our code off-line before uploading the tested application to the server. That is not always a straight forward process but it does allow us to make mistakes offline and in private.

NB: For this book I am working on a Windows platform. All of the code will work on Linux or IOS but you may need different development tools. The browser in all of the images is Firefox developer edition.

### Get the Tools

#### 1. Text Editor

There are many free editors. If you google “Free Text Editor” you will get over 150 million hits. They all have their own strengths and weaknesses. The one I will use is called Notepad++. I like the way the layout changes dependent on the file type and we will find the ftp and Spell-checker plugins very useful.

Get a copy of Notepad++ from here <https://notepad-plus-plus.org/>

#### 2. Local Hosting

Our free web server is most likely to be a Linux server so we need a local hosting environment that provides Apache, MySQL and PHP. Apache, MySQL and PHP provide the letters ‘AMP’ in the various AMP stacks.

If you google “AMP stack” apart from the guitar amplifiers you will probably get a list including WAMP, LAMP, MAMP, XAMP and a plenty of permutations on the AMP theme. I read the reviews, tried three different stacks and chose one called AMPPS. I have found it to be easy to use and trouble free.

Get a copy of AMPPS from <http://ampps.com/download>

### 3. File Transfer Protocol

We will need an application to transfer files between our development computer and our server. Transfers are carried out using a file transfer protocol (ftp). A fantastic free ftp application is FileZilla. Make sure you get the client version.

Get a copy of FileZilla from <https://filezilla-project.org/download.PHP>

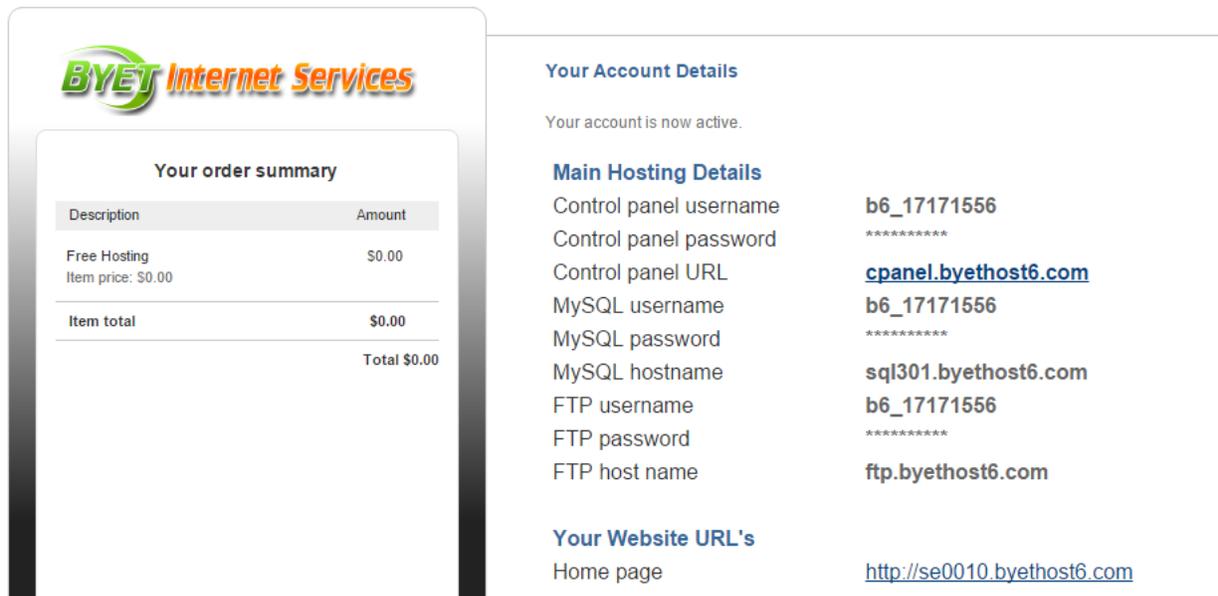
### 4. Hosting

An editor and local hosting are enough to get us started but as we are assembling our toolkit let's get somewhere to host our web application. When I googled 'free web hosting sites with PHP MySQL review' I got 1,820,000 results in 0.30 seconds and looked at the first 4.

<http://magazine.joomla.org/issues/issue-oct-2012/item/840-part-1-review-9-free-web-hosting-services-to-make-joomla-site-live> has a list of reviews and a comparison chart. Using more gut feel than serious analysis I plumped for Byethost.

To use byet open a browser (they recommend using Firefox) and go to <https://byet.host/>. Select Free Hosting->Signup for Free Hosting.

Give your details, they send you an email, follow the link in the email and then, hey presto, you should see something like this:



**BYET Internet Services**

**Your order summary**

| Description                        | Amount              |
|------------------------------------|---------------------|
| Free Hosting<br>Item price: \$0.00 | \$0.00              |
| <b>Item total</b>                  | <b>\$0.00</b>       |
|                                    | <b>Total \$0.00</b> |

**Your Account Details**

Your account is now active.

**Main Hosting Details**

|                        |   |
|------------------------|---|
| Control panel username | <b>b6_17171556</b>  |
| Control panel password | *****   |
| Control panel URL      | <a href="https://cpanel.byethost6.com">cpanel.byethost6.com</a> |
| MySQL username         | <b>b6_17171556</b>  |
| MySQL password         | *****   |
| MySQL hostname         | <b>sql301.byethost6.com</b>                                     |
| FTP username           | <b>b6_17171556</b>  |
| FTP password           | *****   |
| FTP host name          | <b>ftp.byethost6.com</b>  |

**Your Website URL's**

|           |   |
|-----------|---|
| Home page | <a href="http://se0010.byethost6.com">http://se0010.byethost6.com</a> |
|-----------|---|

Sign up for free web hosting

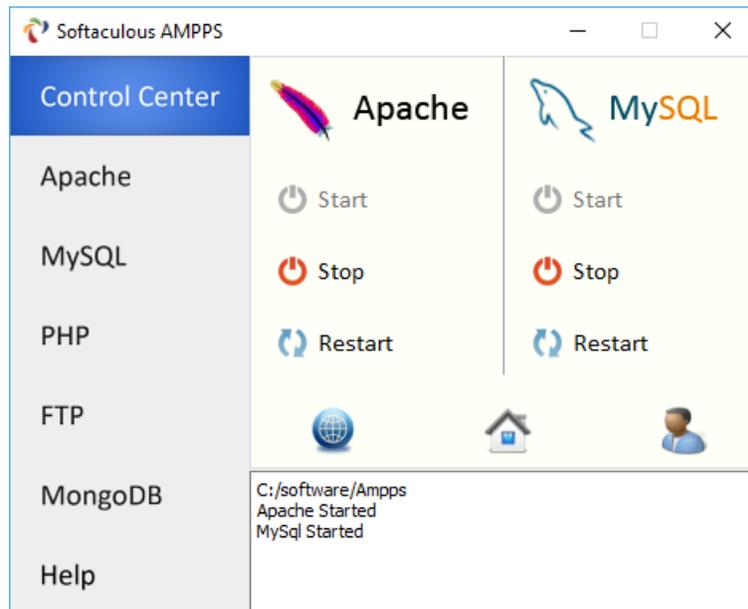
My site is called [se0010.byethost6.com](http://se0010.byethost6.com) - not the most memorable name but it will do for now.

Copy the hosting details and save them somewhere that is both safe and accessible.

## 5. A Simple Web Page - Local Version

Our plan is to create a simple web page and view it using the local host. Once the page looks the way we want it we will upload it to our web host and see what it looks like there.

First thing is to open AMPPS. You should see this:



Your local Apache/MySQL/PHP stack

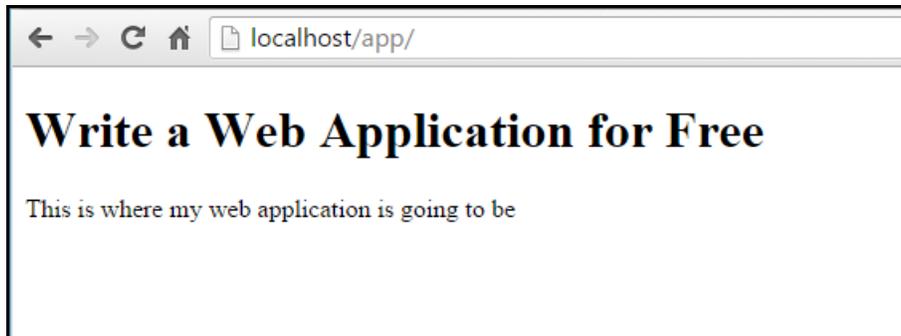
The two Stop buttons mean Apache and MySQL have both started. PHP will also be running. Minimise AMPPS for now.

If you installed AMPPS to C:/Program Files/Ampps you should find there is a folder called C:/Program Files/Ampps/www. Create a new folder called C:/Program Files/Ampps/www/app.

Open Notepad++, copy and paste the code below into Notepad++ then save it to a file called **index.html** in the C:/Program Files/Ampps/www/app folder.

```
1  <!DOCTYPE HTML >
2  <html>
3  <head>
4    <meta charset="utf-8">
5    <title>WVA4F </title>
6  </head>
7  <body>
8    <h1>Write a Web Application for Free</h1>
9    <p>This is where my web application is going to be</p>
10 </body>
11 </html>
```

Open a browser and enter the address **localhost/app/** in the address bar. If everything has gone according to plan you should see something like this:



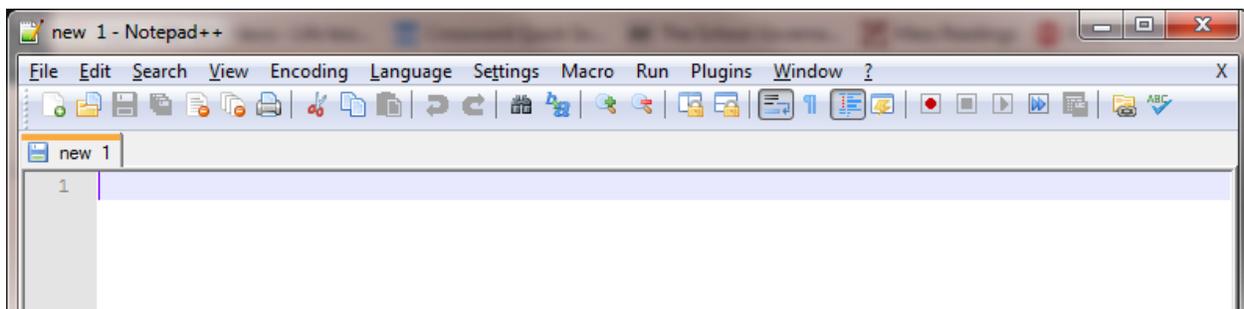
Your first web page running on a local server

If you can't see this page in your browser go back and find which step you have missed.

## 6. A Simple Web Page - Remote Version

The next step is to put our webpage onto our server. To do this we will use the ftp plugin for Notepad++.

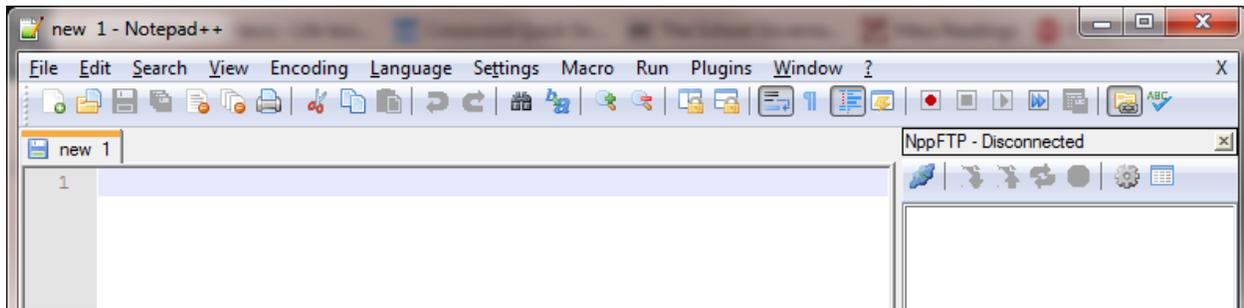
Your copy of Notepad++ probably looks like this:



Notepad++

Click on Plugins->Plugin Manager->Show Plugin Manager. Scroll down to NppFTP and check the box. This should cause the ftp plugin to be loaded.

Now click on 'Plugins->NppFTP->Show NppFTP Window'. Notepad++ should look like this:

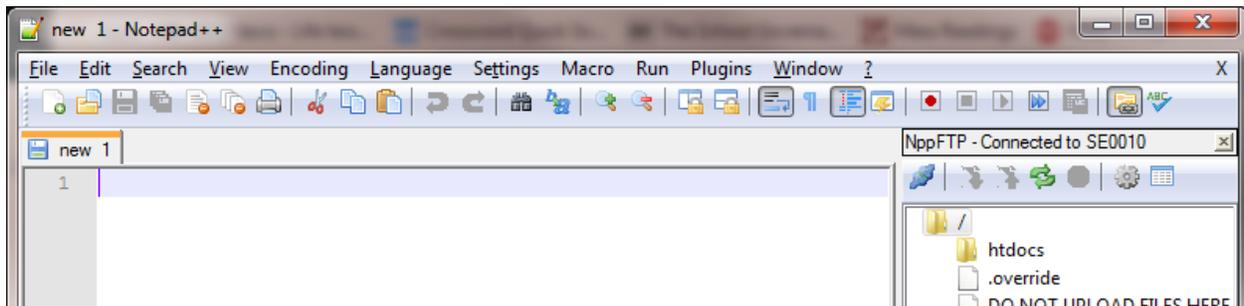


Notepad++ with the FTP window open

Click on the settings button, it's the sort of gear wheel, last but one icon on the bottom right menu at the top of the screen. Choose 'Profile Settings->Add New' and give a name for the connection. I called mine 'SE0010' because that is my site name. Put in the ftp details for the Hostname and Password that you were given by the hosting company. The port should be 21. Check the **Ask for password** box (you don't want Notepad++ to connect automatically when you are not there now do you). Click 'Close'.

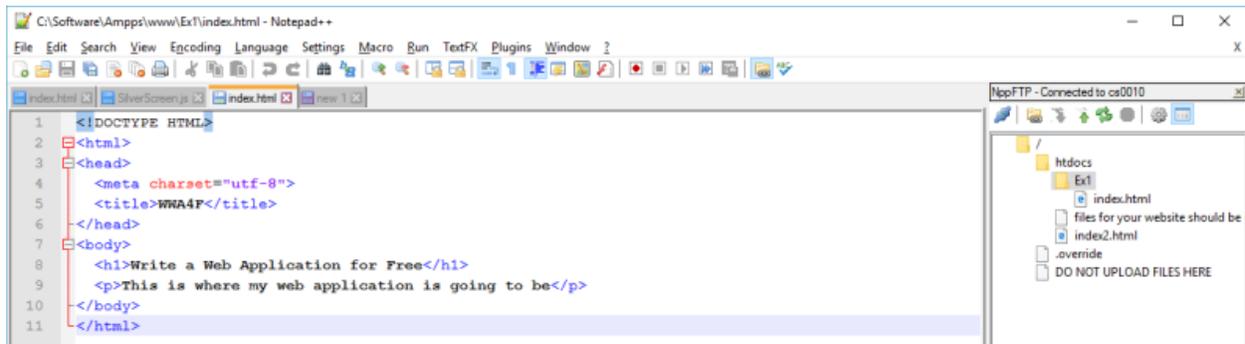
The '(Dis)Connect' button should now be blue.

Click on the '(Dis)Connect' button and enter your password. If everything has gone to plan you should now see this:



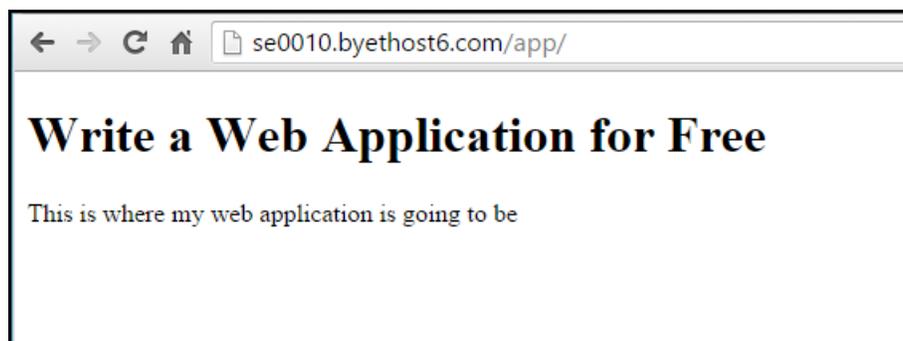
Notepad++ connected to the host

Notice the file called **DO NOT UPLOAD FILES HERE**. That's fairly clear isn't it? Right click on **htdocs** then left click on **Create new directory**. Call the directory **app** and click **OK**. This should create and display the new directory. Right click on the new directory then left click **Upload current file here**. Now you should see this:



Notepad++ with source and upload

Open a new tab on your browser and navigate to [http:// your web address/app/](http://yourwebaddress/app/). If everything has gone as we planned you should see this:



Your first web page on the internet

and if you do you deserve a pat on the back. You have successfully:

- Downloaded a free text editor and AMP stack
- Written and tested a working web page
- Registered a free web site
- Created an FTP profile
- Connected to your site
- Uploaded your web page
- And it works

You really do deserve a pat on the back. You do you can sit back in the warm glow of a job well done. You have established base camp and are ready for the next stage in our conquest of web applications.