

Background

For this semester, this is the first lab.

In this lab activity, we will prepare our environment to run PHP and MySQL. This semester, we are making the assumption that you are working on your laptop and not inside a virtual machine.

Web servers listen on port 80 (for HTTP) and port 443 (for HTTPS) waiting for requests to come in from a web browser. For our labs, the client and the server will be on the same machine.

Note: If you are running another web server on your machine already (such as IIS), you will want to stop that process so that there are no conflicts on ports 80 and 443.

Part A: Install Notepad++ editor

Note: If you haven't installed Chrome (or similar browser) yet, do that now.

In your browser, search for Notepad++ and download the latest version of Notepad++ (If you prefer another editor, feel free to use that one)

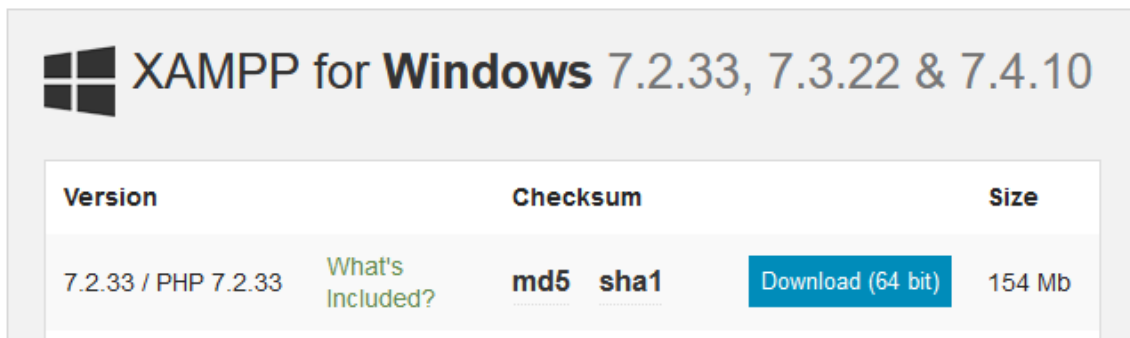
The *Notepad++ Installer 32-bit x86* is the first suggestion, however, you can scroll down to the 64-bit version.

Once downloaded, accept the defaults and install Notepad++

Part B: Install XAMPP for Windows

Download the latest version of XAMPP for Windows from this URL:

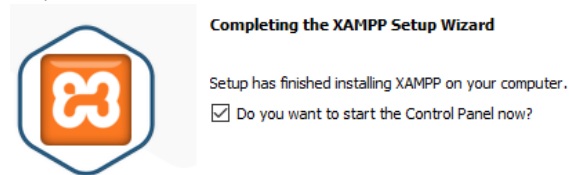
<https://www.apachefriends.org/download.html>



Version	Checksum	Size
7.2.33 / PHP 7.2.33	What's Included? md5 sha1	Download (64 bit) 154 Mb

OTE: The latest available version may differ from the one listed above

Once downloaded, run the installer.exe file and accept the defaults
When the installation is finished, allow it to start the Control Panel:



Click **Finish**

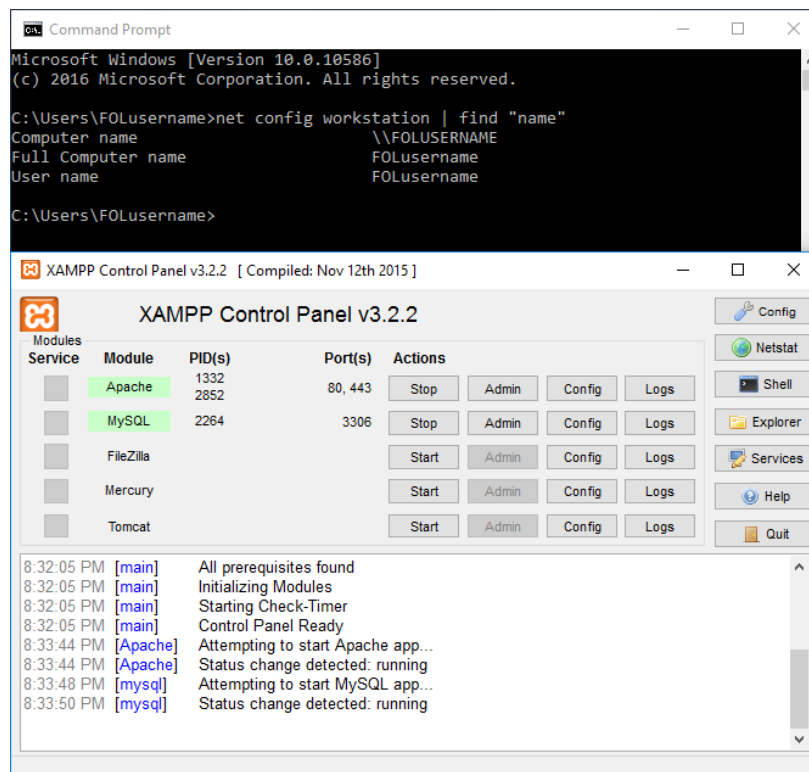
You should now see the XAMPP Control Panel started. Click on **Start** next to Apache and MySQL

Open up a Windows CMD prompt and type in **net config workstation | find "name"**

This is just so I can see that you are doing this on your own machine. Place the CMD prompt behind the XAMPP control panel with the output of net config workstation visible and take a screenshot. **You can use Alt-PrintScreen to copy to the clipboard.**

Your screenshot should also show that Apache and MySQL have successfully started, are running on ports 80, 443, 3306, and received a Process ID number.

Save the screenshot (example shown below) as a .gif and upload it to the Lab F02 submission folder on FOL



Part C: Testing the environment

Using notepad++ or another code editor of your choice, in **c:\xampp\htdocs** create a file **helloworld.php**

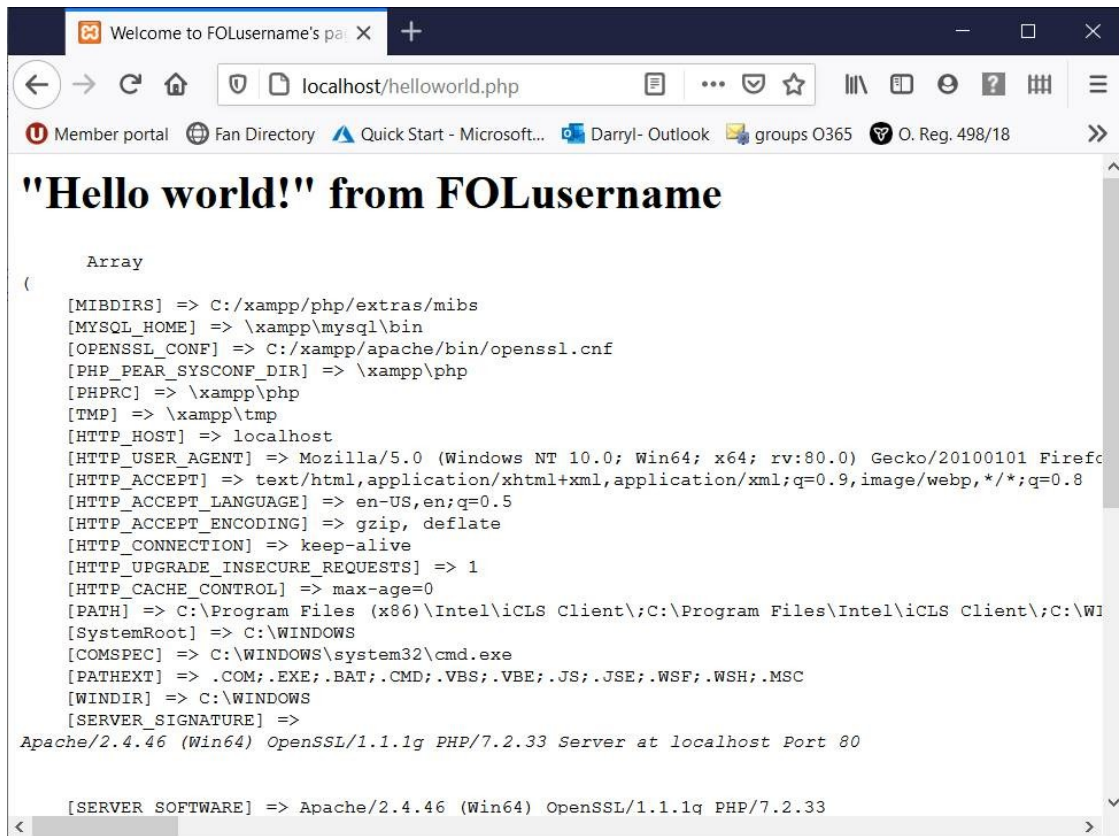
Substitute FOLusername with your actual FOL user name:

```
<html>
<head><title>Welcome to FOLusername's page</title></head>
<body>
    <h1>"Hello world!" from FOLusername</h1>
    <pre>
        <?php
            print_r($_SERVER);
        ?>
    </pre>
</body>
</html>
```

The PHP `print_r()` function is a "recursive print." Unlike the regular `print()` function, it can display the contents of an array or other complex data structure. The output looks best inside the `<pre>` preformatted text tag. `$_SERVER` is a built-in array containing server environment data. **Food for thought:** Would you keep this PHP page on a production web server? Why not?

Open your browser and surf to <http://localhost/helloworld.php>

Take a screenshot, save it to a graphic, and upload it to the FOL submission folder.



The screenshot shows a web browser window with the address bar set to `localhost/helloworld.php`. The page title is "Welcome to FOLusername's page". The main content of the page is a large heading: **"Hello world!" from FOLusername**. Below the heading, there is a preformatted text block containing an array of server and client information. The browser's address bar also shows several tabs and icons, including "Member portal", "Fan Directory", "Quick Start - Microsoft...", "Darryl - Outlook", "groups O365", and "O. Reg. 498/18".

```
Array
(
    [MIBDIRS] => C:/xampp/php/extras/mibs
    [MYSQL_HOME] => \xampp\mysql\bin
    [OPENSSL_CONF] => C:/xampp/apache/bin/openssl.cnf
    [PHP_PEAR_SYSCONF_DIR] => \xampp\php
    [PHPRC] => \xampp\php
    [TMP] => \xampp\tmp
    [HTTP_HOST] => localhost
    [HTTP_USER_AGENT] => Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:80.0) Gecko/20100101 Firefox/80.0
    [HTTP_ACCEPT] => text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8
    [HTTP_ACCEPT_LANGUAGE] => en-US,en;q=0.5
    [HTTP_ACCEPT_ENCODING] => gzip, deflate
    [HTTP_CONNECTION] => keep-alive
    [HTTP_UPGRADE_INSECURE_REQUESTS] => 1
    [HTTP_CACHE_CONTROL] => max-age=0
    [PATH] => C:\Program Files (x86)\Intel\iCLS Client\;C:\Program Files\Intel\iCLS Client\;C:\WI
    [SystemRoot] => C:\WINDOWS
    [COMSPEC] => C:\WINDOWS\system32\cmd.exe
    [PATHEXT] => .COM;.EXE;.BAT;.CMD;.VBS;.VBE;.JS;.JSE;.WSF;.WSH;.MSC
    [WINDIR] => C:\WINDOWS
    [SERVER_SIGNATURE] =>
    Apache/2.4.46 (Win64) OpenSSL/1.1.1g PHP/7.2.33 Server at localhost Port 80

    [SERVER_SOFTWARE] => Apache/2.4.46 (Win64) OpenSSL/1.1.1g PHP/7.2.33
```