

To download PHP

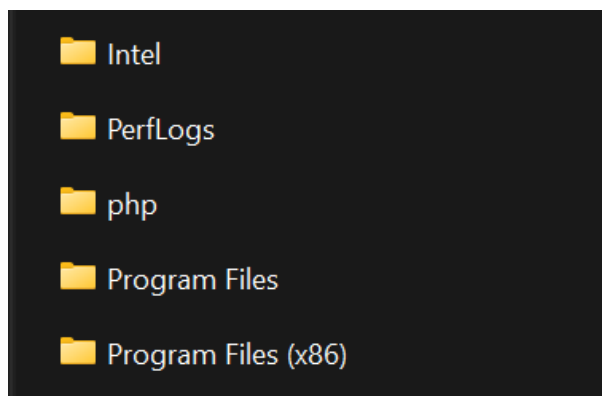
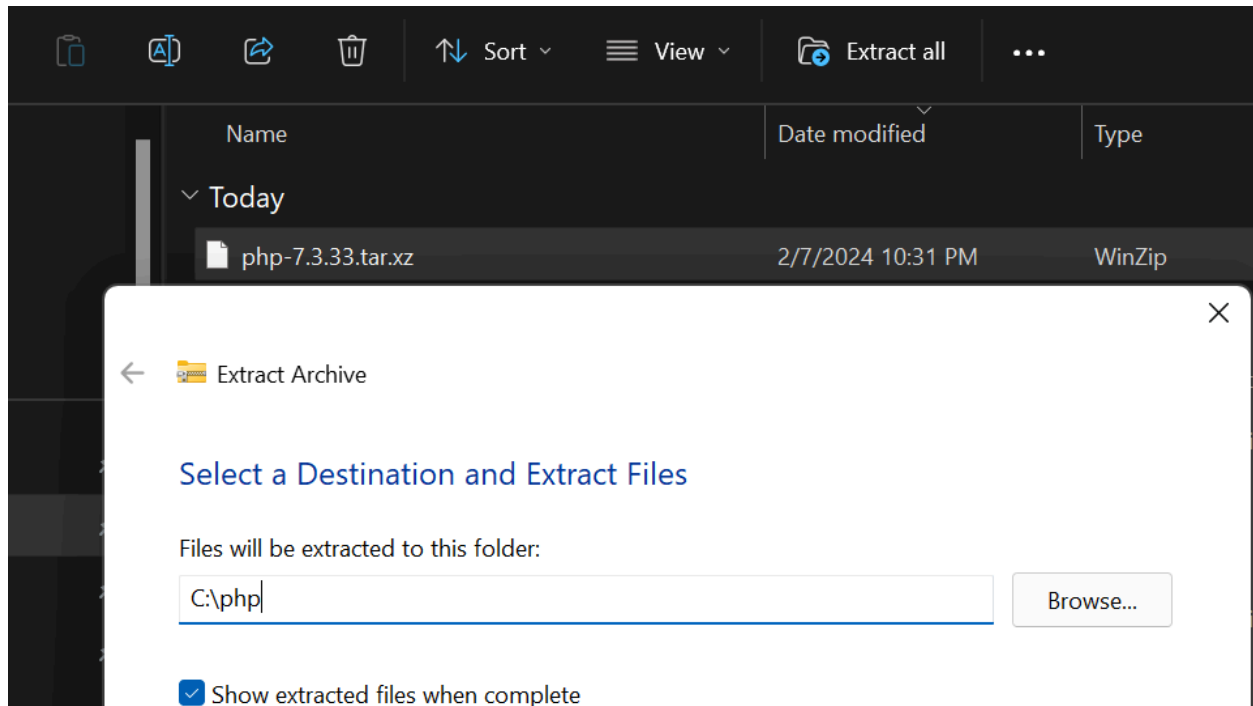
GoTo the website below:

<https://windows.php.net/download#php-8.3>

Ideally, click on the Zip file download for **VS16 x64 Thread Safe (2024-Jan-16 21:06:32)**

- Unless you need to use x32 or an unsafe thread version there are options listed

In downloads, extract all to C:/php or wherever you would like PHP to be stored, whether it be downloads or desktop. I chose C:/php as it was easier to find



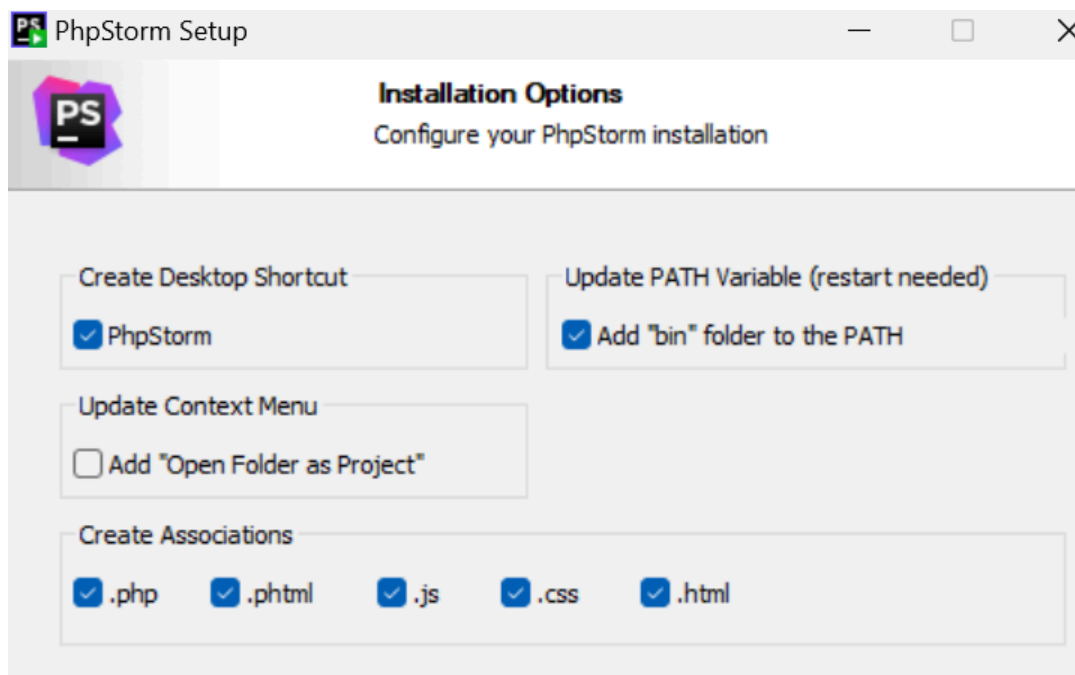
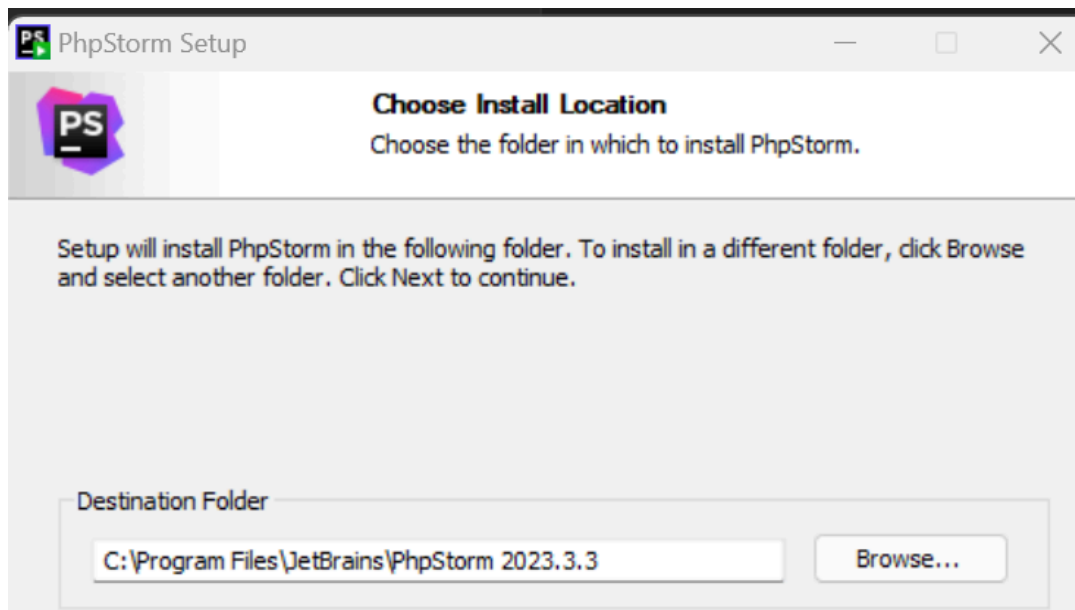
The folder itself can be found under “This PC” and then under /your_computer_name

To install PHP storm, the IDE/Text Editor, click the **link** here:

<https://www.jetbrains.com/phpstorm/>

For context, CSE 250's intellij and PHP storm are both under JET BRAINS so if the license key is still valid from CSE250, can skip over portions of the DOC, however, if you have not taken CSE250 in over a year, the license may have been revoked

Choose to install PHPSTORM wherever, and while you do not need all the options selected, CLICK "ADD BIN FOLDER TO PATH"



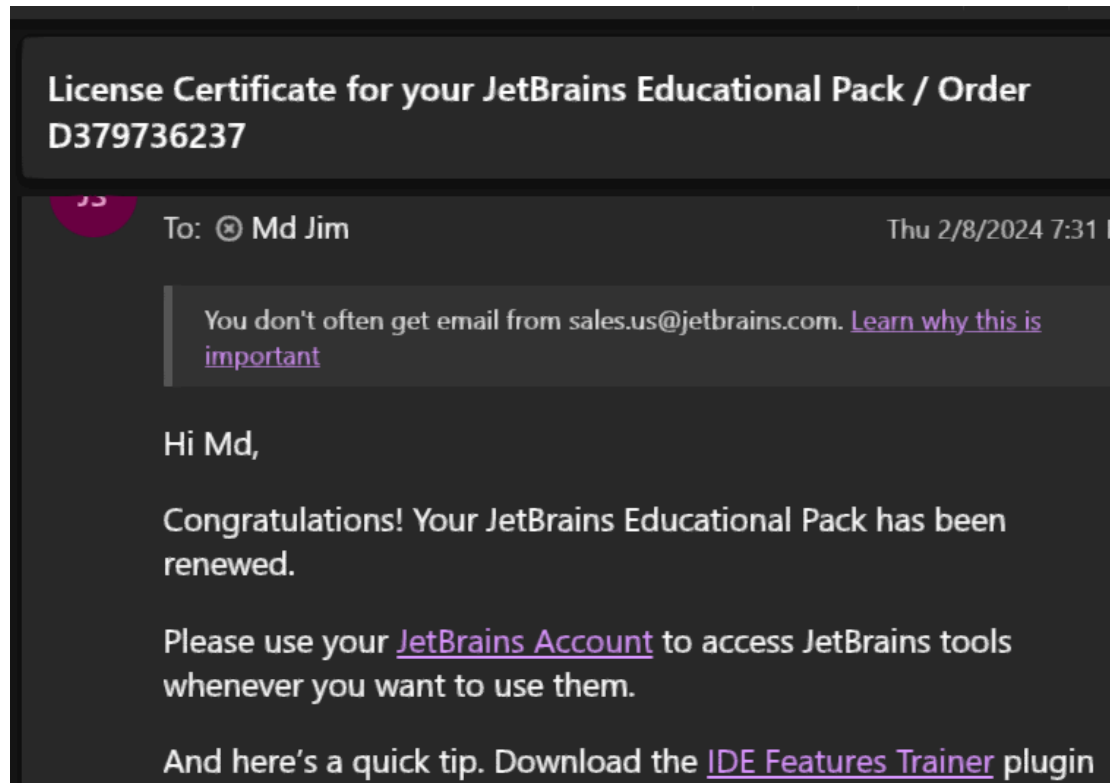
After the restart, launch PHPStorm and select "Do not import settings"

JETBRAINS IS ASKING FOR A LICENSE

While I can't post screenshots of it without messing up my own setup as I'm writing this AFTER I've configured my work station, go to the link below and sign up for a student account, you should have a student account from CSE250 and all you need to do is renew the license for a year:

<https://www.jetbrains.com/community/education/#students>

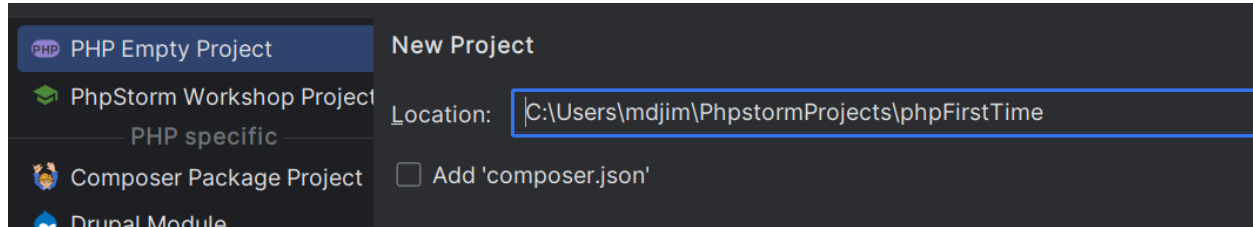
You should receive an email looking like this in which you click the link from there and continue:



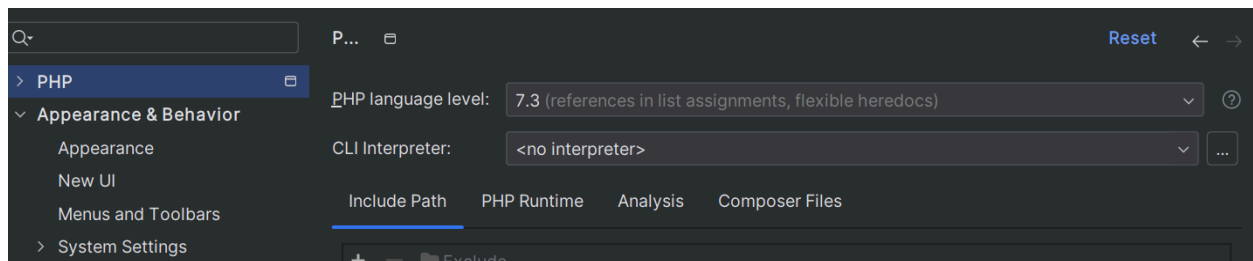
Make sure PHPStorm is connected that account in order to access everything offered

TO CREATE A PROJECT:

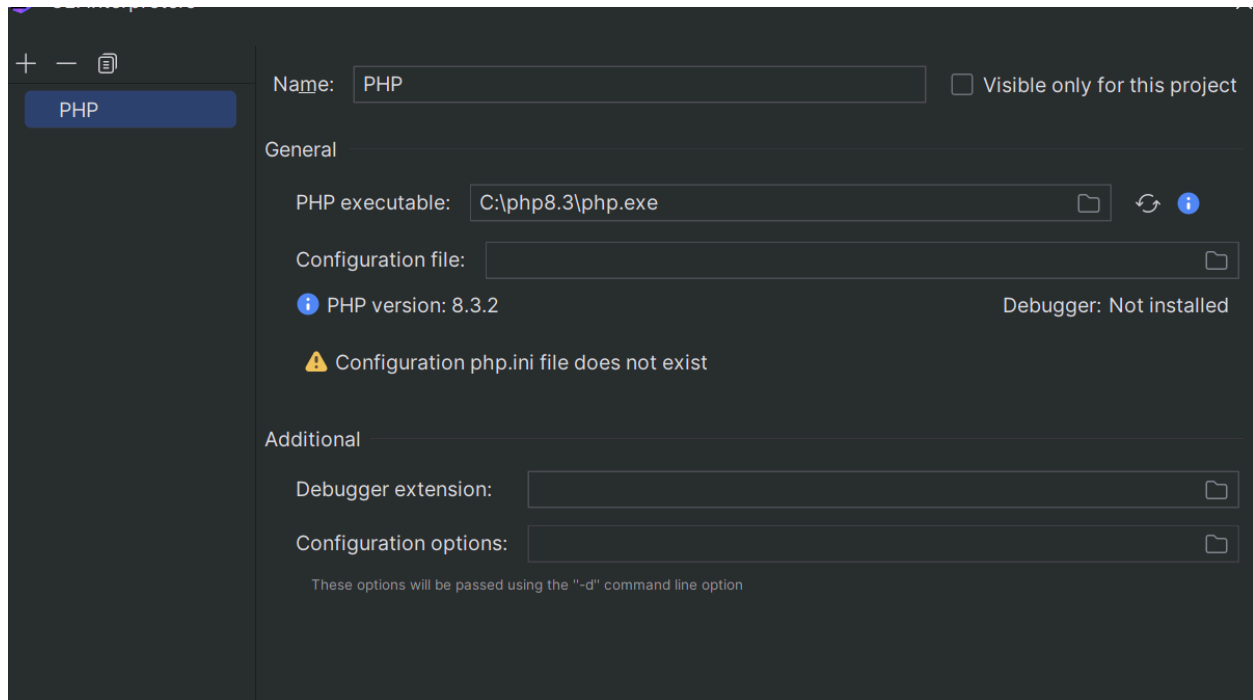
Click “New Project”, and from the side bar options, click PHP Empty Project, give your project a location:



IMMEDIATELY, click settings and PHP, change the PHP language level to 7.3:



For interpreter, click on the 3 dots, the + symbol and select local path to interpreter

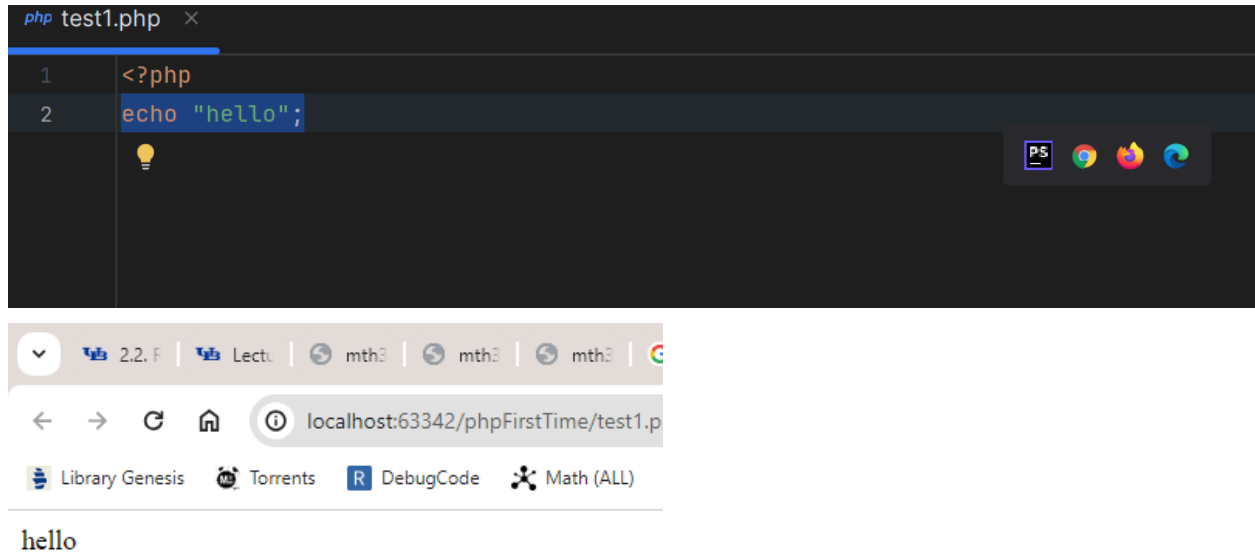


Have it be directed to the executable file in the PHP we had downloaded earlier, the file should be the same: “php.exe”

- Side note, PHP is stored as php8.3 and not php as I was testing with numerous versions to make sure it all worked correctly, you should stick to the naming you had used originally

Now, type `echo "hello";`

And click run OR click on the browsers if you have them installed:



Hello should pop into both the PHPSTORM terminal as well as the browser
For more complicated beginner code to mess around with:

```
<?php
echo "Enter the first number: ";
$number1 = readline();

echo "Enter the second number: ";
$number2 = readline();

// Converting user inputs to numbers
$number1 = (float) $number1;
$number2 = (float) $number2;
$sum = $number1 + $number2;

echo "The sum of $number1 and $number2 is: $sum";
```

The code is meant to just add two user inputted numbers, below is the outcome:

The image shows a screenshot of an IDE interface. At the top, the title bar displays 'PF phpFirstTime' and 'Version control'. The main editor area shows a file named 'test1.php' with the following PHP code:

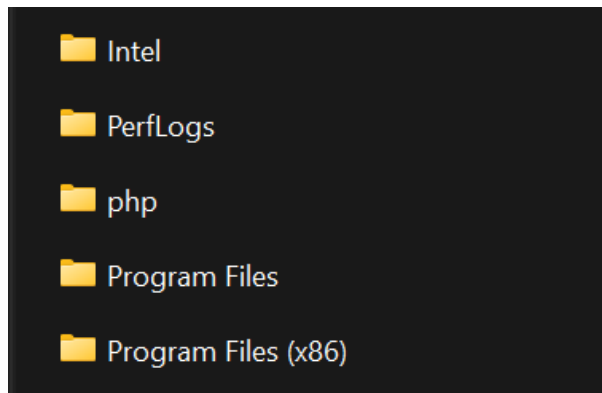
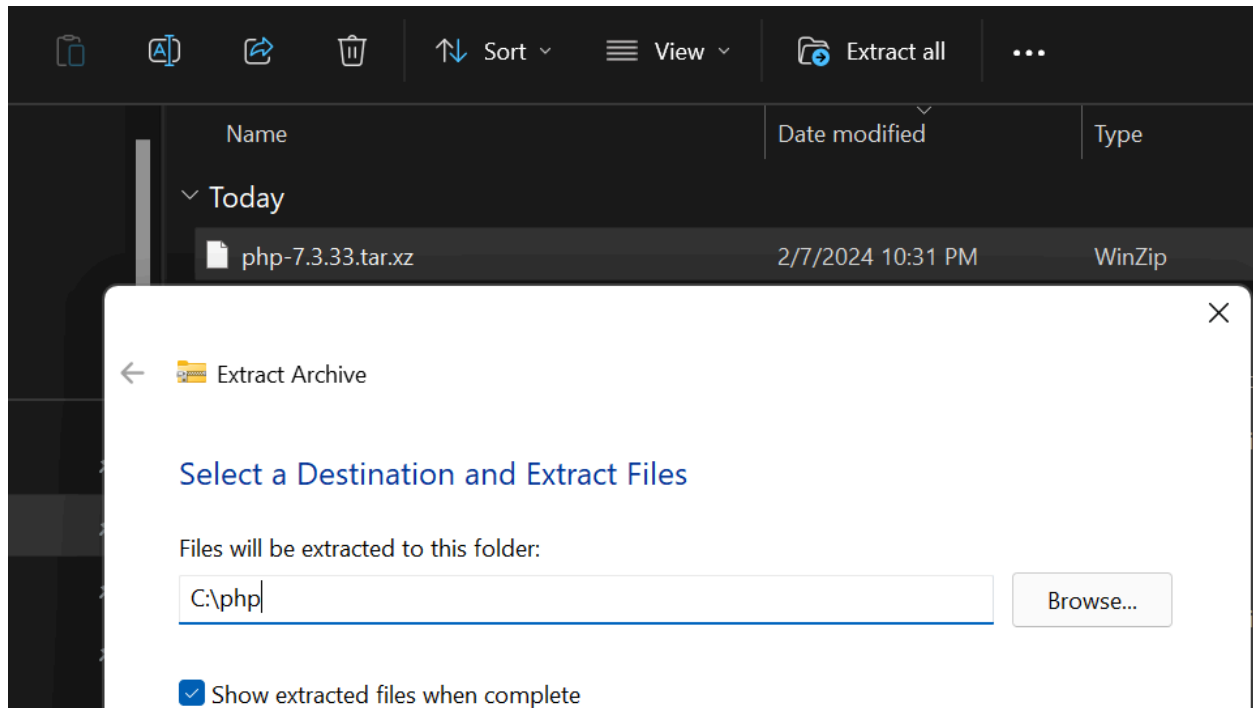
```
5 echo "Enter the second number: ";
6 $number2 = readline();
7
8 // Converting user inputs to numbers
9 $number1 = (float) $number1;
10 $number2 = (float) $number2;
11 $sum = $number1 + $number2;
12
13 echo "The sum of $number1 and $number2 is: $sum";
```

Below the editor, a 'Run' panel shows the execution of 'test1.php'. The command executed is 'C:\php8.3\php.exe C:\Users\mdjim\PhpstormProjects\phpFirstTime\test1.php'. The output of the script is:

```
Enter the first number: 5
Enter the second number: 4
The sum of 5 and 4 is: 9
Process finished with exit code 0
```

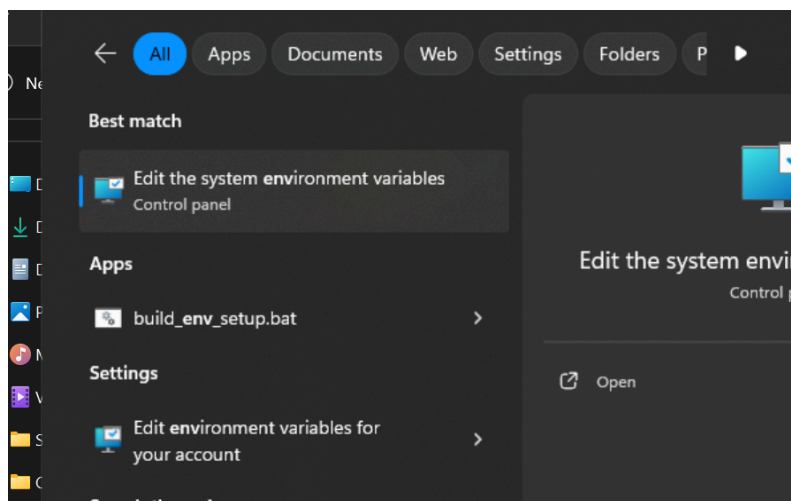
The IDE interface includes various icons on the left side for file management, search, and other functions. The top right corner shows 'Current File' and a play button icon.

If PHP cannot be added to the path via PHPStorm:

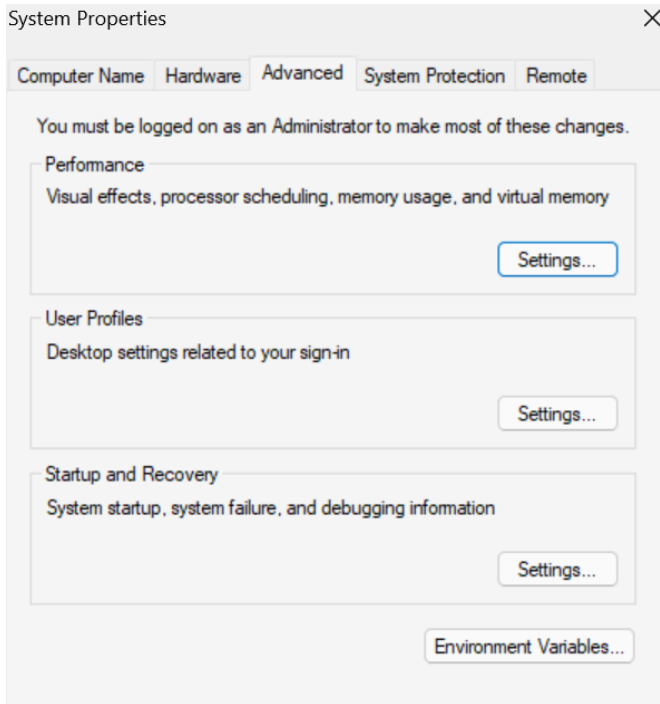


The folder itself can be found under “This PC” and then under /your_computer_name

CONFIGURE WINDOWS PATH VARIABLE



Go search up “environment” into the windows search bar to find this:

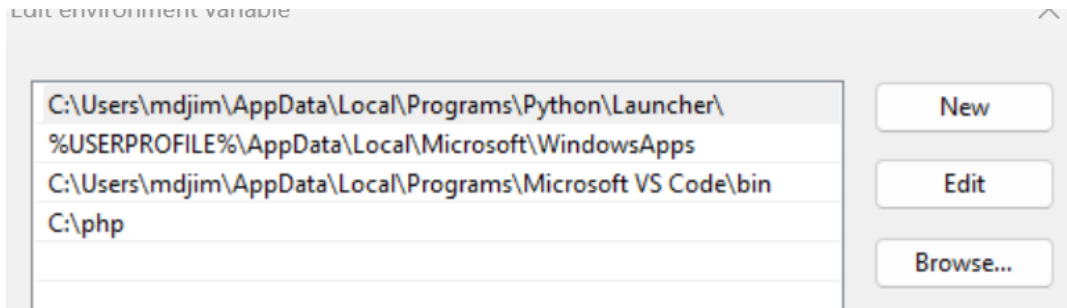


Click “Environment Variable”, you should be a table for VARIABLE | VALUE

Click on the **Path** variable and the edit under the first table (not system variables)

Click “New” and type in C:/php or the folder you have chosen to put 7.3 into, shown below

You can also Browse through and find the folder instead if easier



Click OKAY and do not does exit out, make sure it is installed, to check if it is installed, open up the command prompt (CMD, use windows search bar) and type:

Echo %PATH% -> if done correctly, this asserts that yes, there is a path to the PHP folder created

How To Deploy to a Web Server:

We will be using cheshire via <https://www-student.cse.buffalo.edu/> in which we must have PHP on the server with the server being able to handle PHP requests. We must set permission to allow access and for the execution of the PHP Files which can be done using CHMOD:

<https://www.php.net/manual/en/function.chmod.php>

CHESHIRE will use Apache as the server software can be better understood with the link below:

<https://www.youtube.com/watch?v=KgUp3FomMoc>

The web server plays a crucial role in the context of FTP in web development and file management. FTP stands for File Transfer Protocol. FTP provides:

FTP client allows for authentication credentials (user/pass)

File transferring from client to server using \$_GET[key] and \$_POST[key]

Installation of FTP:

<https://www.php.net/manual/en/ftp.installation.php>

CHESHIRE is just a host, FTP will be how we add/remove files we intend to add to the website.

FTP Example Case:

```
<?php
// set up basic connection
$ftp = ftp_connect($ftp_server);

// login with username and password
$login_result = ftp_login($ftp, $ftp_user_name, $ftp_user_pass);

// check connection
if ((!$ftp) || (!$login_result)) {
    echo "FTP connection has failed!";
    echo "Attempted to connect to $ftp_server for user $ftp_user_name";
    exit;
} else {
    echo "Connected to $ftp_server, for user $ftp_user_name";
}

// upload the file
$upload = ftp_put($ftp, $destination_file, $source_file, FTP_BINARY);

// check upload status
if (!$upload) {
    echo "FTP upload has failed!";
} else {
    echo "Uploaded $source_file to $ftp_server as $destination_file";
}

// close the FTP connection
ftp_close($ftp);
?>
```

Via <https://www.php.net/manual/en/ftp.examples-basic.php>

