

Download Visual Source Code:

<https://code.visualstudio.com/download>

Download XAMPP for Windows

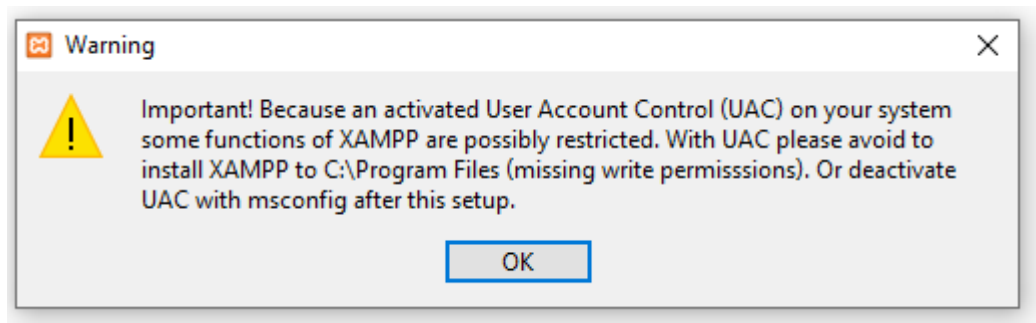
<https://www.apachefriends.org/download.html>

Select version 8.1.6 / PHP 8.1.6

Select 64 bit/ 32 bit as required

This contains Apache + PhP + MySQL together

Don't install in C:\Program Files



How to setup XAMPP environment

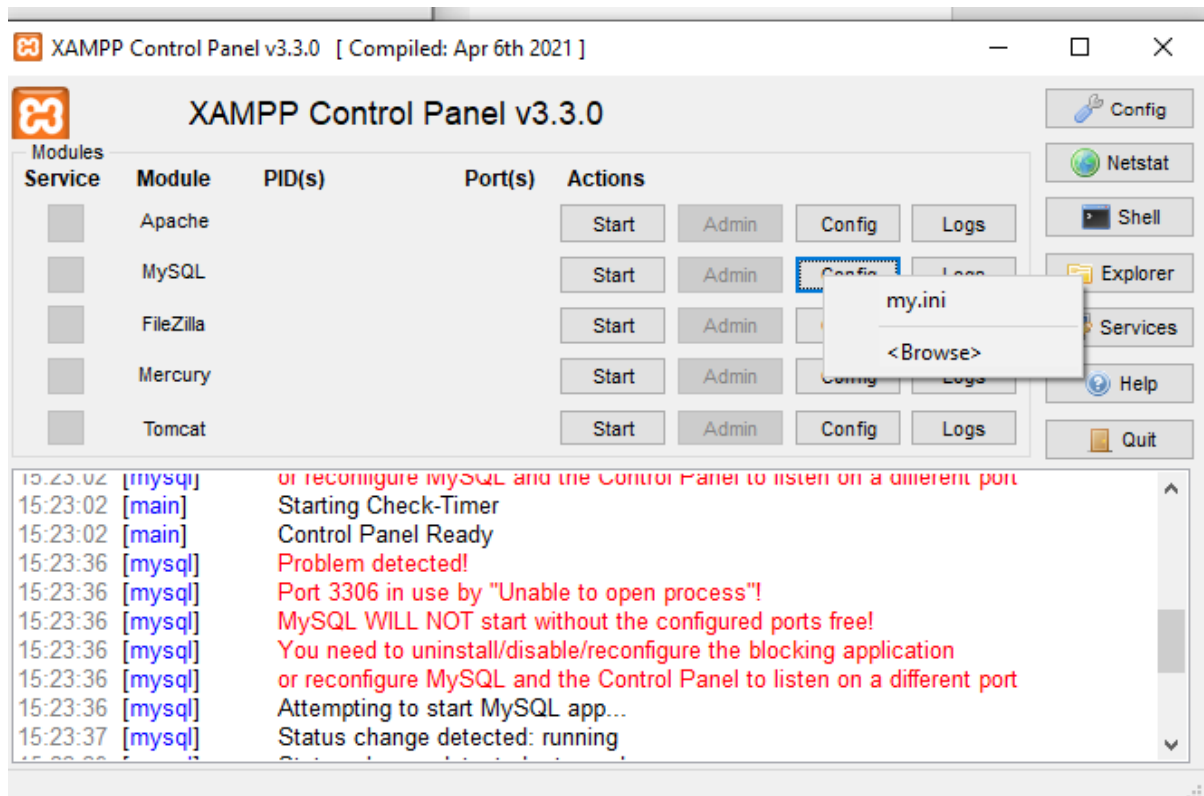
https://www.youtube.com/watch?v=at19OmH2Bg4&list=PLu0W_9lII9aikXkRE0WxDt1vozo3hnmtR

Change Apache port to 8080 if it port 80 is already occupied.

See

<https://stackoverflow.com/questions/11294812/how-to-change-xampp-apache-server-port>

change SQL starting port=3306 if it is already being used by some other process.



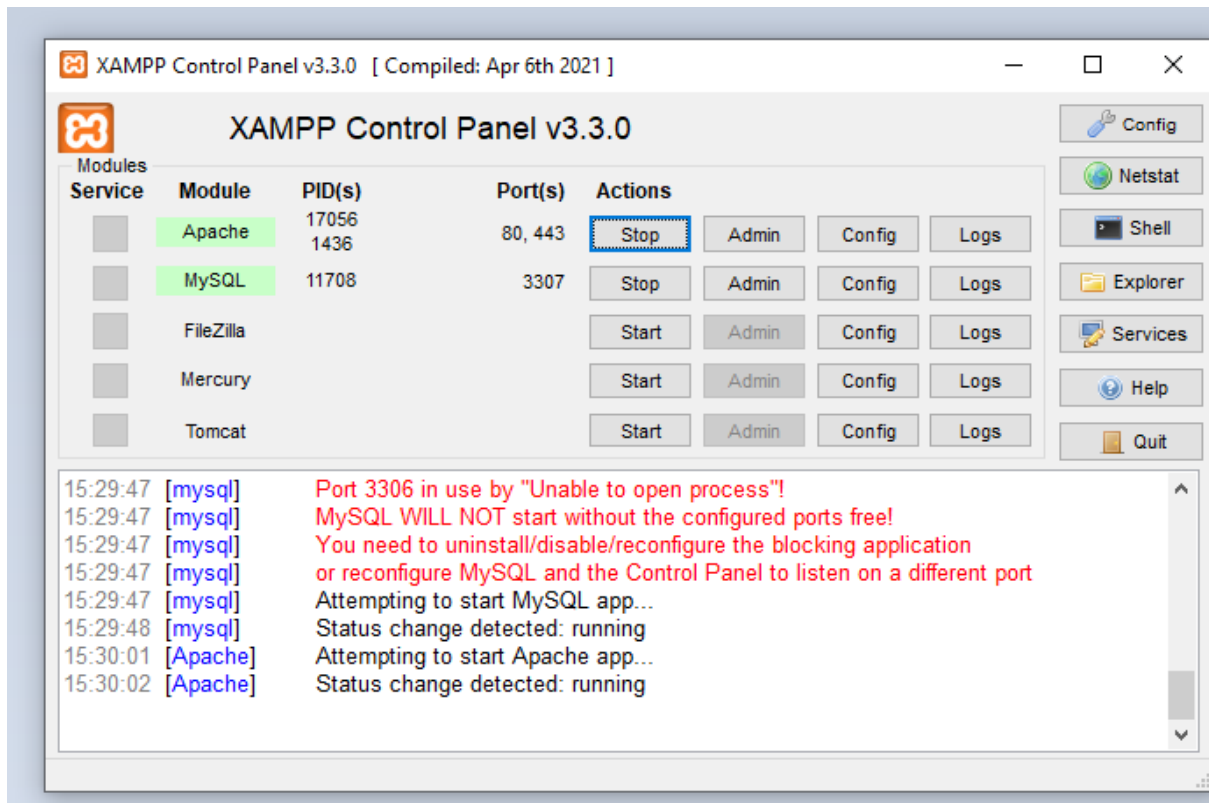
Let us say it is 3307. Note that it needs to be set up at two places in the my.ini file:

```
# The following options will be passed to all MySQL clients
[client]
# password            = your_password
port=3307
socket="D:/xampp/mysql/mysql.sock"

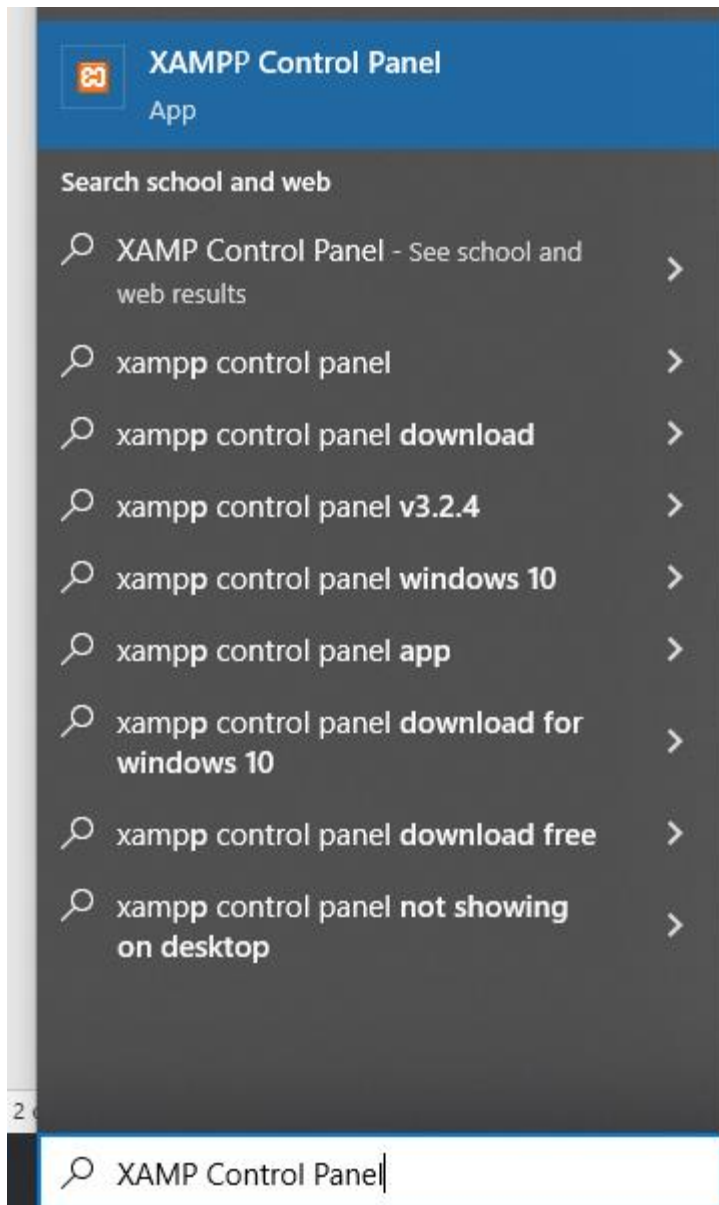
# Here follows entries for some specific programs

# The MySQL server
default-character-set=utf8mb4
[mysqld]
port=3307
socket="D:/xampp/mysql/mysql.sock"
basedir="D:/xampp/mysql"
tmpdir="D:/xampp/tmp"
```

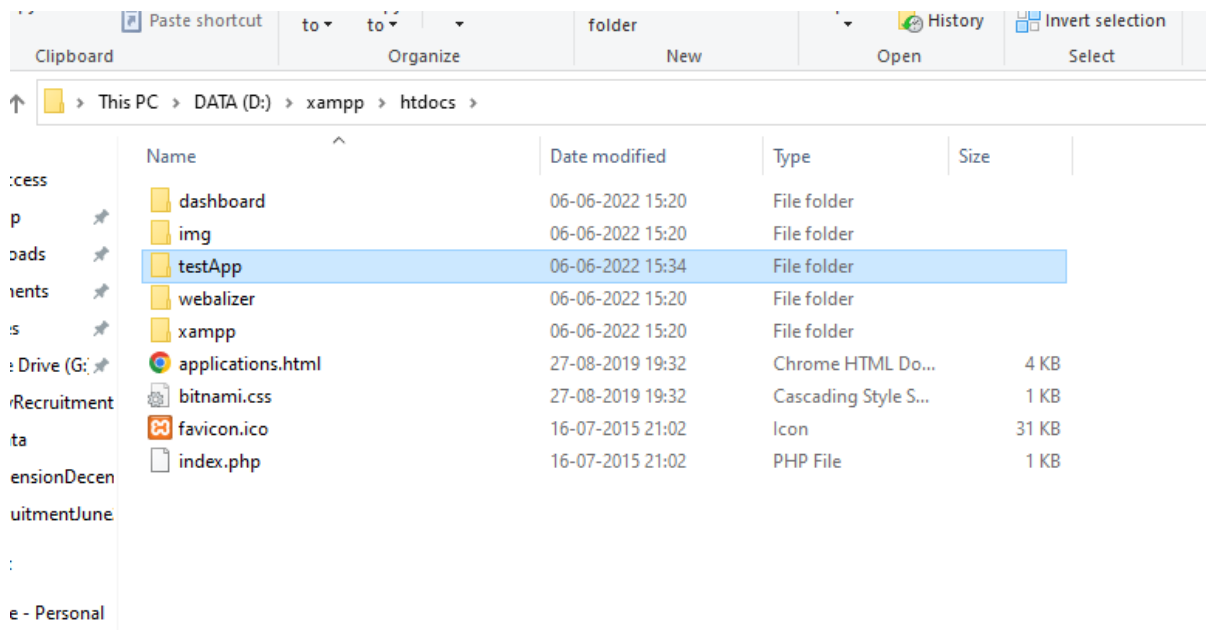
Both MySQL and Apache need to be started



The above interface is of XAMPP control panel



In the XAMPP htdocs (e.g., "D:\xampp\htdocs") folder, which is the default root folder from where the web-server starts, create a folder testApp



Within testApp folder place index.php

If the default port was changed, the same need to be updated in the
 “D:\xampp\phpMyAdmin\config.inc.php”

Add

```
$cfg['Servers'][$i]['port'] = '3307';
```

After the above, go to link

<http://localhost/phpmyadmin/>

Change root password of DB

<https://dbschema.com/2020/04/21/mysql-default-username-password/>

In phpmyadmin, click on SQL and run the following statement

```
SET PASSWORD FOR 'root'@'localhost' = PASSWORD('password');
```

To change the password from empty to ‘password’

After changing the password you need to go back to and update the password in the configuration
 file “D:\xampp\phpMyAdmin\config.inc.php”:

```
$cfg['Servers'][$i]['password'] = 'password';
```

And start <http://localhost/phpmyadmin/> again

Sample index.php file will look like:

```
<!DOCTYPE html>

<html>

  <head>

    <title>Example</title>

  </head>

  <body>

    <p>This is an example of a simple HTML page with one paragraph.</p>

    <?php

      $servername = "localhost";

      $username = "root";

      $password = "password";

      // Create connection

      $conn = new mysqli($servername, $username, $password, "", 3307);

      // Check connection

      if ($conn->connect_error) {

        die("Connection failed: " . $conn->connect_error);

      }

      echo "Connected successfully";

    ?>

  </body>

</html>
```

If the default port is used, then just

```
$conn = new mysqli($servername, $username, $password);
```

Will be sufficient.

How to Make XAMPP Apache serve file outside of htdocs

<https://www.youtube.com/watch?v=GHgEi-ygJ7o>

You can download PHP docs from

<https://www.php.net/download-docs.php>

How to send emails

See <https://netcorecloud.com/tutorials/send-an-email-via-gmail-smtp-server-using-php/>

Instead of

```
composer require phpmailer/phpmailer
```

run

php composer.phar require phpmailer/phpmailer

How to send email without turning on “Less secure app” option.

<https://www.youtube.com/watch?v=Kjn5vBbBsi8>

How to configure a Gmail client without less secure app option

<https://support.google.com/accounts/thread/168492730/how-to-have-my-php-send-a-gmail-email-now-that-less-secure-app-access-is-no-longer-avail?hl=en>

If you get

“[SOLVED] PHPMailer SMTP Error: Could not connect to SMTP host”

https://netcorecloud.com/tutorials/phpmailer-smtp-error-could-not-connect-to-smtp-host/#:~:text=There%20are%20many%20popular%20cases,you%20enable%20the%20extension%3Dphp_openssl.