### Manual Installation for Web Server

**Author: Christian Diaz-Caez** 

### I. Install Python

Search online for Python 2.7 Windows x86-64 MSI installer and install it in the following directory:

### C:\Python2

Usually Python 2 is installed by default in C:\Python27 so you will need to rename the folder to Python2. After that go to Python2 folder and rename python.exe as **python2.exe**.

Install Python 3 Windows x86-64 executable installer. Usually Python 3 is installed by default in the AppData folder, you will need to choose *Customize installation*, add the following directory for your custom installation:

### C:\Python3

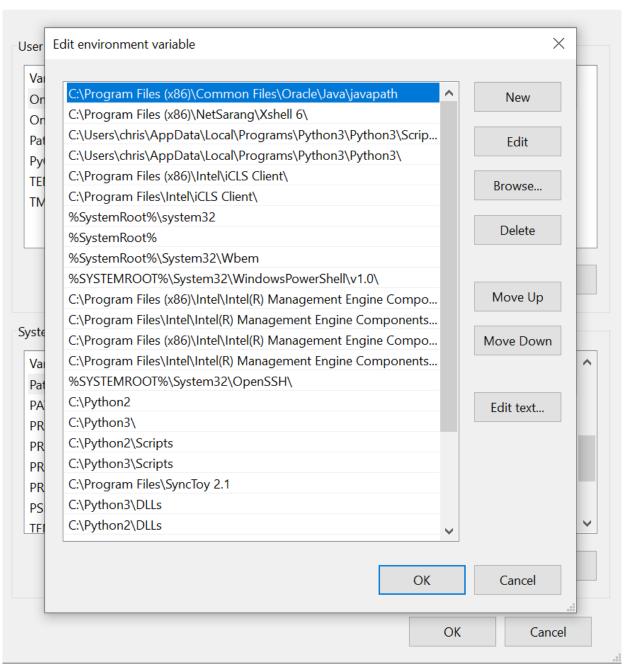
After that go to Python3 folder in your and rename python.exe as python3.exe.

# II. Add Python to the PATH – Environmental Variables

Add the following directories to the PAHT Environmental Variables

- C:\Python2
- C:\Python3
- C:\Python2\Scripts
- C:\Python3\Scprits

Environment Variables



Then, open CMD and verify by typing python2 and python3 if you can call both python environments.

```
C:\Users\chris>python2
Python 2.7.16 (v2.7.16:413a49145e, Mar 4 2019, 01:37:19) [MSC v.1500 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> ^Z

C:\Users\chris>python3
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 19:29:22) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>>
```

# III. Install python packages/libraries

Packages for python2. Use the following command in your CMD:

### python2 -m pip install <package name>

- mysql-connector
- numpy
- beautifultable

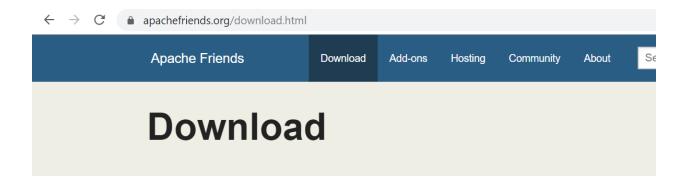
Packages for python3. Use the following command:

### python3 -m pip install <package name>

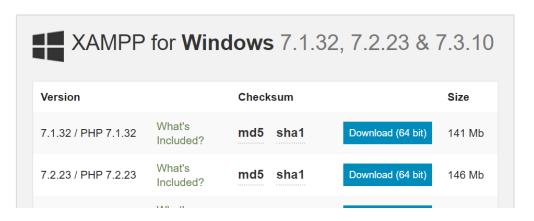
- prettytable
- numpy
- matplotlib
- beautifultable

### IV. Install XAMPP

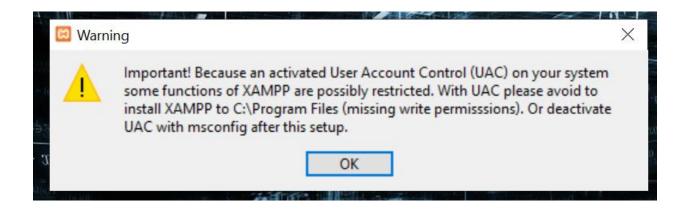
Search XAMPP for Windows installer in your Browser.



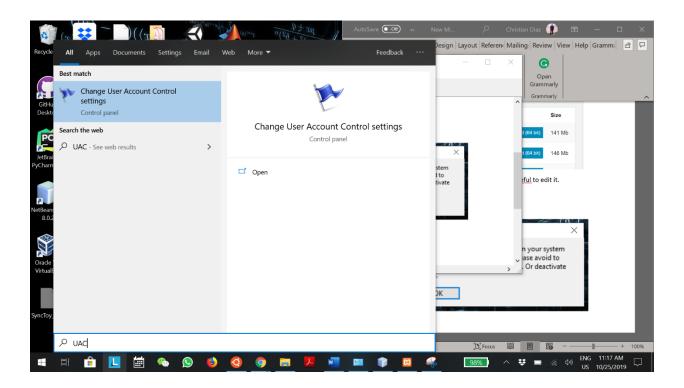
XAMPP is an easy to install Apache distribution containing MariaDB, PHP, and Perl. Just download and start the installer. It's that easy.



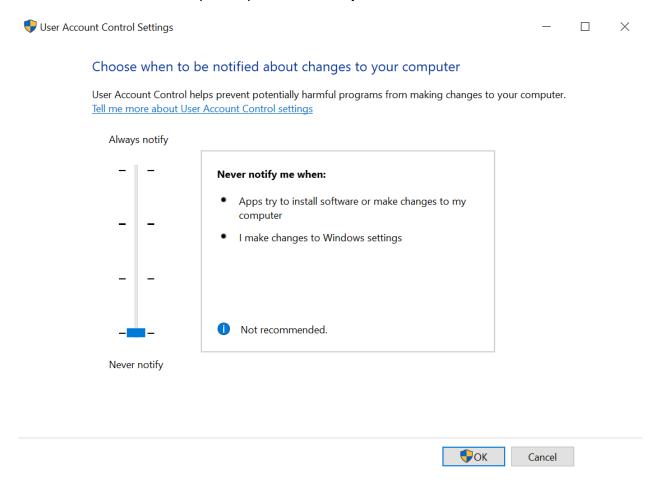
After you have opened XAMPP installer, you might have the following warning.



If so, open you User Account Control (UAC) as shown below:



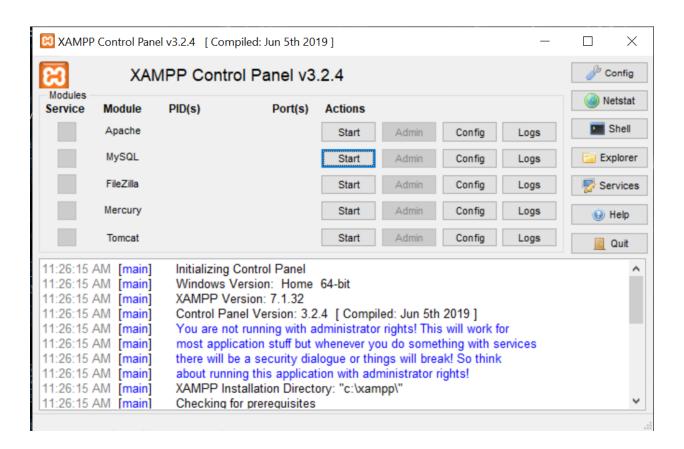
# Then scroll down from always notify to Never notify.



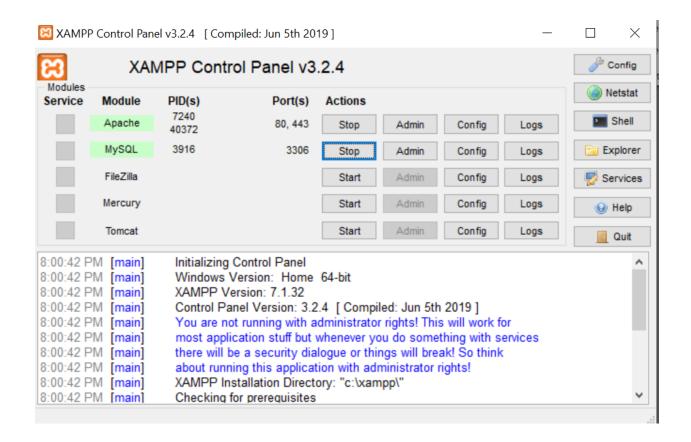
Click OK and save change. Then, try to install XAMPP again.



After installed, run Apache and MySQL:



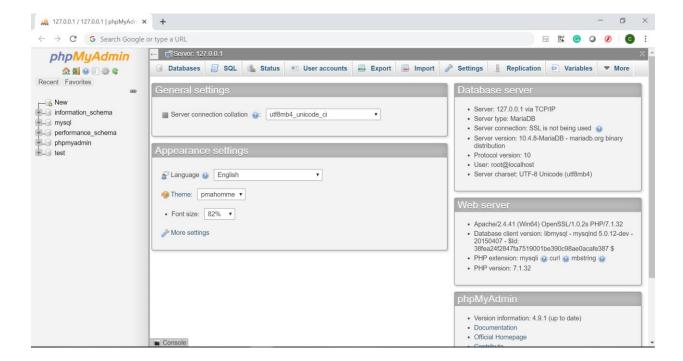
Run Apache server and MySQL database by a clicking on Start button, Sometimes, after the first time you run it, see below if there are error message in red color, if so, maybe the XAMPP default port is in use by other software in your machine. You will need to find online reference to fix it. If everything is fine, will looks like below.



Verify XAMP is working, open your browser and type 127.0.0.1. It is the Local host IP address.



Verify if Database is working by typing in your browser <a href="http://127.0.0.1/phpmyadmin/">http://127.0.0.1/phpmyadmin/</a>



# V. Copy web server files

XAMPP by default will be installed in the following directory:

#### C:\xampp

and there will be a folder named **htdocs**. There is where xampp save the webserver files and projects.

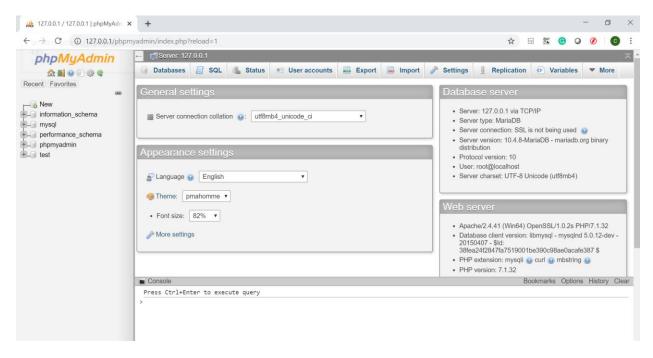
Extract all the files form **webserver\_packege.zip** and copy everything inside the folder **Web\_server\_files** in the following directory:

C:\xampp\htdocs

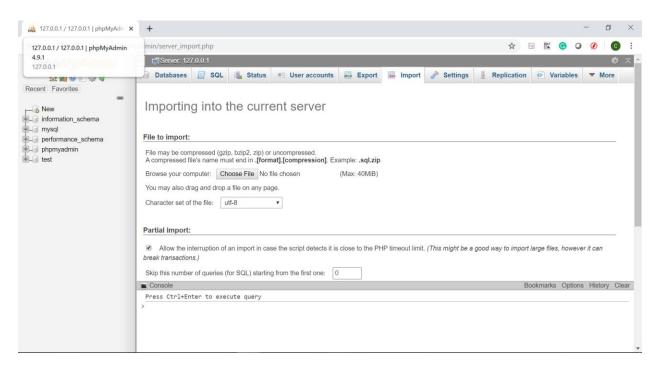
#### VI. Create the database

In your browser, go to <a href="http://127.0.0.1/phpmyadmin/">http://127.0.0.1/phpmyadmin/</a>

See in the left size of the page, Click on New just above information\_schema



After that, click on IMPORT, and below select Choose file

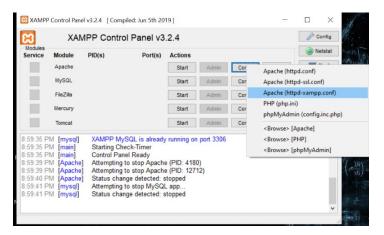


Search for database.txt available in the package web server files.zip

After you have selected the file, scroll down and select **Go**, and your database called *humanterrain* will be created with two tables.

### VII. Intranet

Open XAMPP and click on Apache config and select httpd-xampp.conf



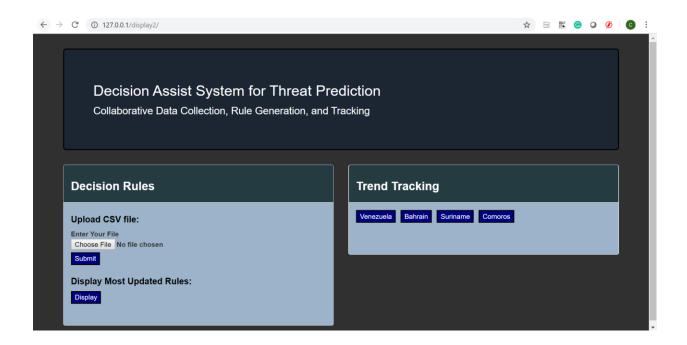
This file will be opened as a text document. Find where say **Require local** and replace it with **Require all granted**. The document use require local like 2 or 3 times, all depend the version you are using. Make sure you replace all of them. Also, make sure that **Require** is first capital letter and **all granted** is all lower case. After that, save the change and open your CMD, find your IP address for LAN Wi-Fi.

Once you get your IP address, you can access the web server from any device connected to the same LAN using the IP address in the URL. For example: 10.0.0.0.212/display2

# VIII. Testing

You are done.

From you Brower go to 127.0.0.1/display2 or use your IPaddress/display2.

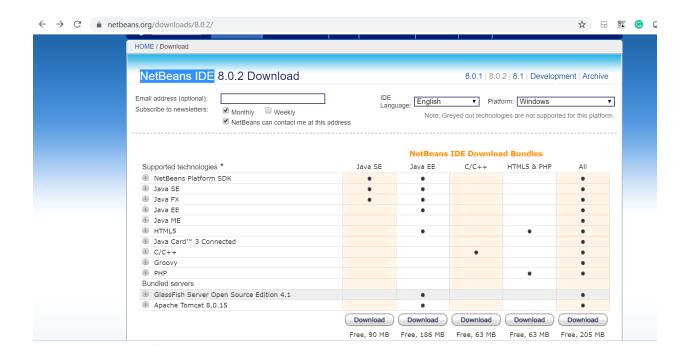


You can read the second manual about how to use the web server. CSV files for testing are attached in the **webserver\_packege.zip** in a folder called **Validation Set Real Data**.

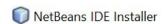
# IX. For Developers

If you want to make change or improvements and the web-server files, you can use Neatbean.

Search for Neatbeans dowloand and select the free download that support **All** the technologies, in the picture below, it is the last column, Download free, 205 MB



Open the installer and verify if you have a warning saying that your JDK was not found or it is not compatible, as shown below. If so, cancel the installation and download JDK 8.



### Welcome to the NetBeans IDE 8.0.2 Installer

The installer will install the NetBeans IDE with the following packs and runtimes. Click Customize to select the packs and runtimes to install.

X

Base IDE

Java SE

Java EE

Java ME

HTML5

Java Card™ 3 Connected

C/C++

Groovy

PHP

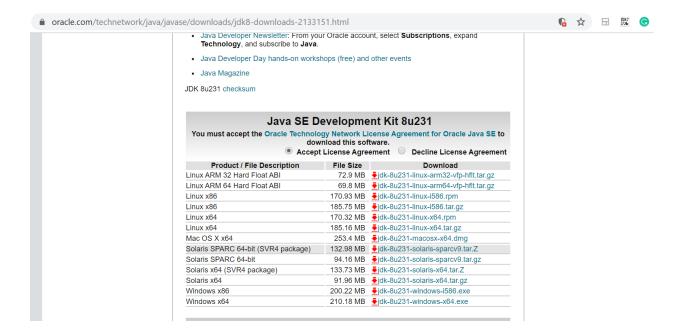
Features on Demand

#### Runtimes

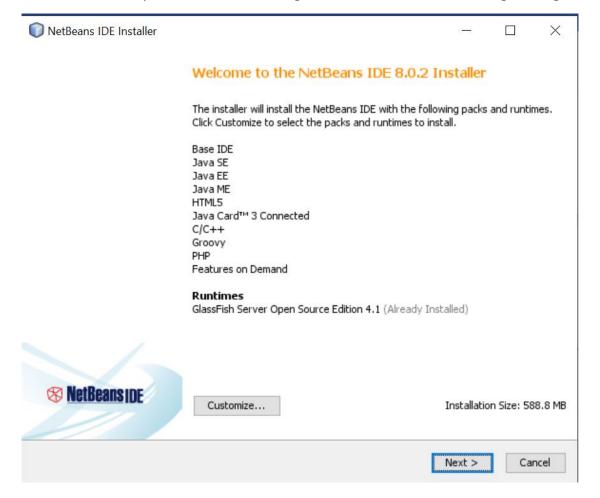
GlassFish Server Open Source Edition 4.1 (Already Installed)



Search online Java SE Development Kit 8 (JDK8) and download the installer for Windows64x. It could be possible you need to create a free account with Oracle to be allow the download.

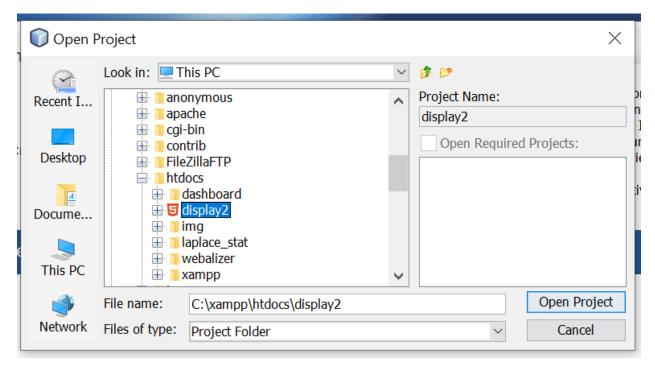


Install JDK 8 and then try to install Neatbeans again, there should be no warning message.

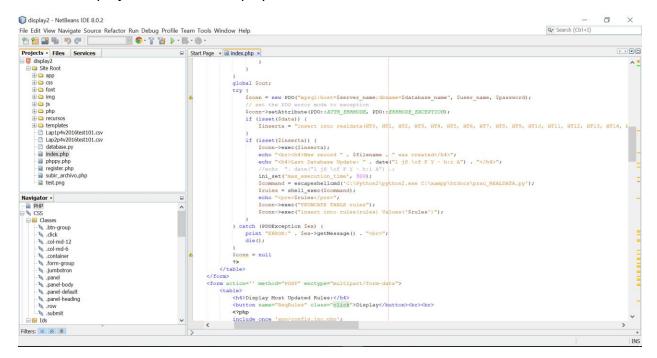


After you have installed Neatbeans, you can select Open Project, and find the folder display2 from

### C:\xampp\htdocs



Web server project files will be displayed as below:



GitHub link to download the following items:

- 1. Webserver\_packege.zip
- 2. Manual Installation for Web Server.pdf
- 3. User's Guide for Web Server Administrator Step by Step.pdf

https://github.com/cdiazcaez/webserver\_kim\_diaz.git