

Web Development with PHP

Practical -1

Introduction & Installation of XAMPP , Running php script on XAMPP server

A local server is a server that is hosted locally on your machine or local computer. With the help of a local server, you can test your website as many times you want before updating it to the web server. It saves your time as well as it is easy to use.

XAMPP, WAMP, LAMP, MAMP are local servers that are mainly used while developing PHP websites. This software is mainly used to test the website locally. With these local servers, the programmers can test their website locally, before uploading it to the main server. By testing locally, we can find out the errors and bugs before uploading. The major difference between XAMPP, WAMP, LAMP, and MAMP is its operating system.

- (ie) XAMPP is for X-OS, Apache, Mysql, PHP, Perl.
- WAMP is for Windows
- LAMP is for Linux
- MAMP is for Mac OS X

XAMPP

The full form of XAMPP stands for Cross-platform, Apache, MariaDB(Mysql), PHP and Perl. It is one of the simplest and light-weight local servers that is used to test your website locally. It is an open source platform. This includes X-OS because it works in all major operating systems like Windows, Linux, Mac etc. It includes features like Filezilla, mercury mail, supporting Perl and much more. One of the main advantages is that you can perform as many testing and update the content in your website testing locally. Since it is an open source, you can easily download and install in your system. You can perform a number of tests installing it at once.

WAMP

The full form of WAMP stands for Windows, Apache, Mysql, and PHP. This server works only on Windows operating systems. It is an open source platform and uses the Apache web server. It also uses the MySQL relational database management system and PHP object-oriented scripting language. The important part of WAMP is Apache that is used to run a web server on windows. By running this local server on windows, the web developer can test their web pages without publishing them live.

LAMP

The full form of LAMP stands for Linux, Apache, Mysql, and PHP. It is an open source platform and works on the Linux operating system. It uses Apache web server, MySQL relational database management system, and PHP object-oriented scripting language. Since this platform has four layers, it can also be called a LAMP stack. It is highly secured working with Linux OS. The LAMP is easy to code with PHP. LAMP server can generate dynamic web pages that run PHP code and load data from a MySQL database.

MAMP

The full form of MAMP stands for Mac, Apache, Mysql, and PHP. MAMP is an open source platform and it works on Mac operating systems. As the above local server, MAMP uses Apache web server, Mysql relational database management system, and PHP object-oriented language. It gives you all the tools that you run WordPress on your machine, for the purpose of development and testing.

Installing XAMPP

Step 1: Download XAMPP


XAMPP is a release made available by the non-profit project Apache Friends website.

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

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Download

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

 **XAMPP for Windows 8.0.28, 8.1.17 & 8.2.4**

Version	Checksum	Size
8.0.28 / PHP 8.0.28 What's Included?	md5 sha1 Download (64 bit)	144 Mb
8.1.17 / PHP 8.1.17 What's Included?	md5 sha1 Download (64 bit)	148 Mb
8.2.4 / PHP 8.2.4 What's Included?	md5 sha1 Download (64 bit)	149 Mb

Documentation/FAQs

There is no real manual or handbook for XAMPP. We wrote the documentation in the form of FAQs. Have a burning question that's not answered here? Try the Forums or Stack Overflow.

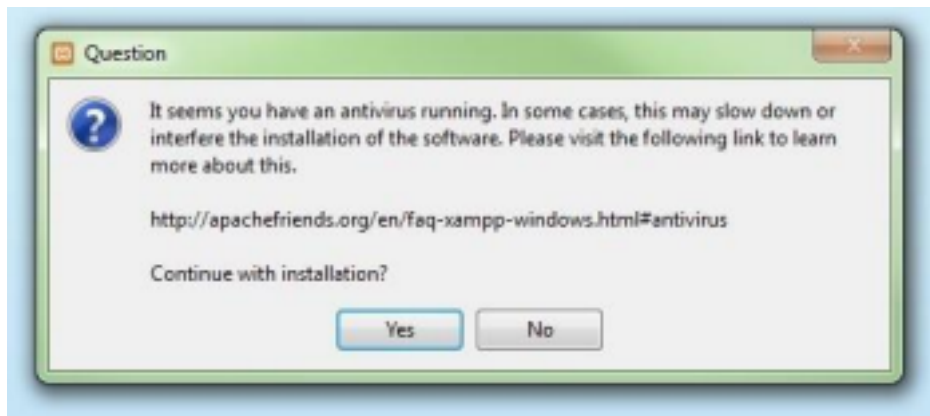
- [Linux FAQs](#)
- [Windows FAQs](#)
- [OS X FAQs](#)
- [OS X XAMPP-VM FAQs](#)

Step 2: Run .exe file

Once the software bundle has been downloaded, double clicking on the file with the ending [.exe](#).

Step 3: Deactivate any antivirus software

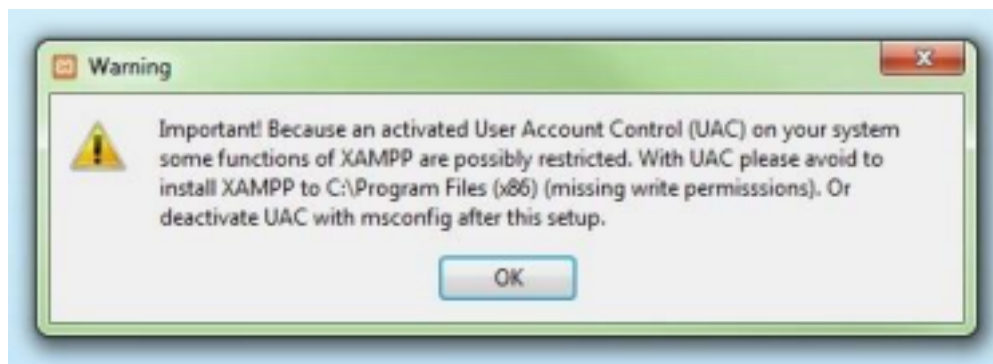
Since an active antivirus program can negatively affect the installation process, it's recommended to temporarily pause any antivirus software until all XAMPP components have successfully been installed.



Before installing XAMPP, it is advisable to disable the anti-virus program temporarily

Step 4: Deactivate UAC

User Account Control (UAC) can interfere with the XAMPP installation because it limits writing access to the C: drive, so we recommend you deactivate this too for the duration of the installation process. To find out how to turn off your UAC, head to the [Microsoft Windows support pages](https://support.microsoft.com/en-us/topic/windows-user-account-control-how-it-works-44398431).



User account control can affect the installation of XAMPP

Step 5: Start the setup wizard

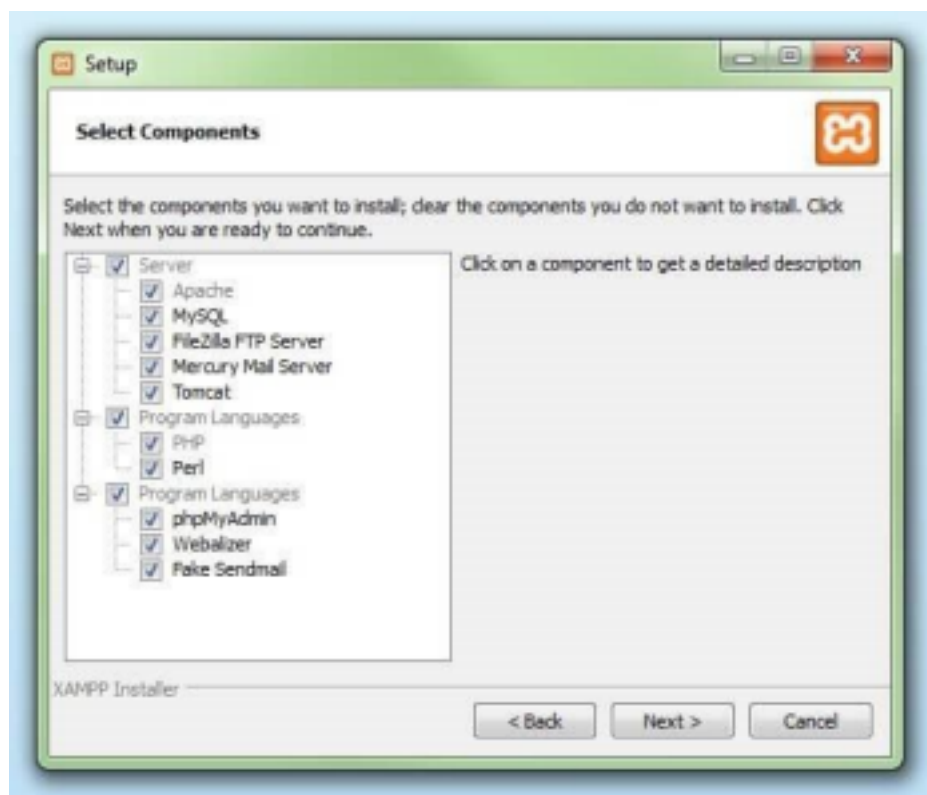
After you've opened the .exe file (after deactivating your antivirus program(s) and taken note of the User Account Control, the start screen of the XAMPP setup wizard should appear automatically. Click on 'Next' to configure the installation settings.



You can start the setup on the startup screen

Step 6: Choose software components

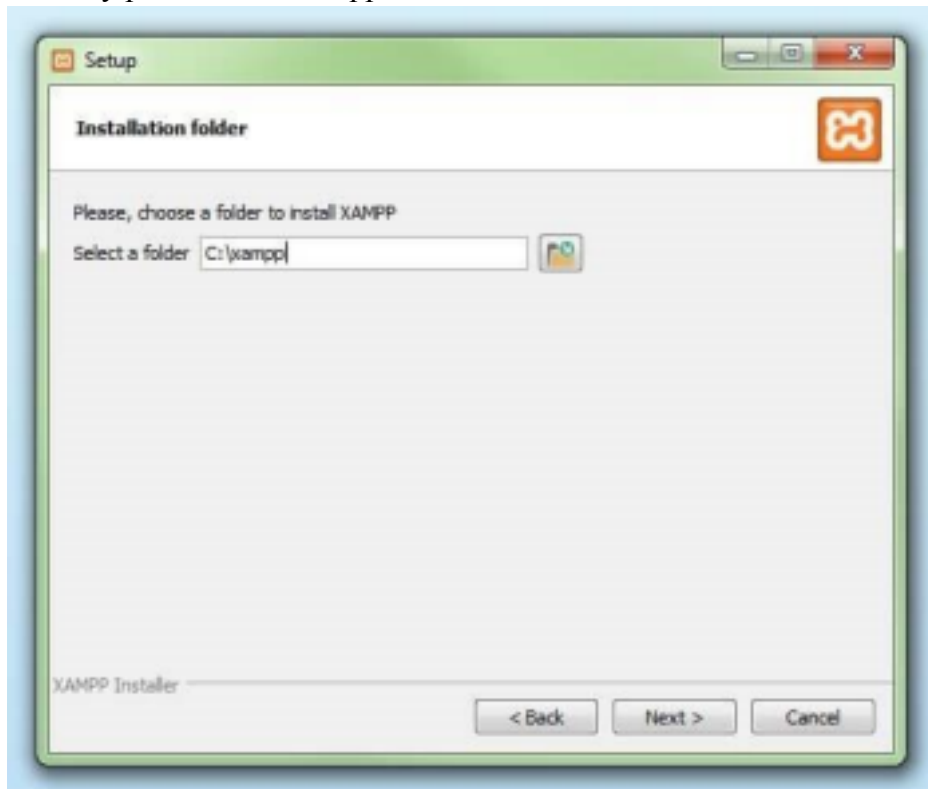
Under 'Select Components', you have the option to exclude individual components of the XAMPP software bundle from the installation. But for a full local test server. Install standard setup and all available components. After making your choice, click 'Next'.



In the dialog window entitled 'select components', you can choose the software components before installation

Step 7: Choose the installation directory

Select the directory path where XAMPP is installed.



For the next step, you need to select the directory where XAMPP should be installed

Step 8: Start the installation process

Click Next to start the installation. The setup wizard will unpack and install the selected components and save them to the designated directory.



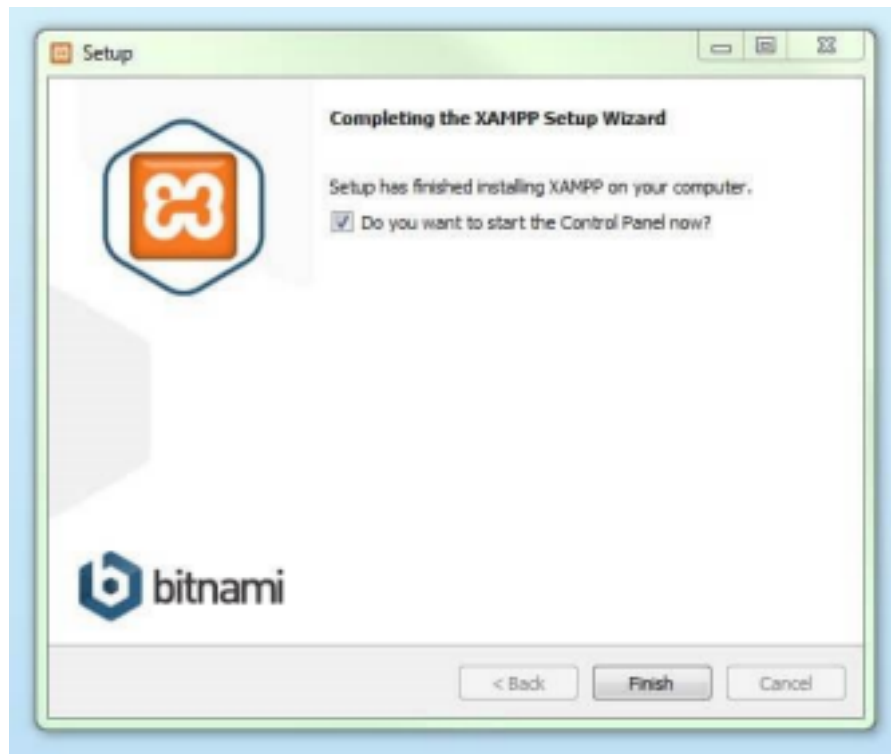
According to the default settings, the selected software components are unpacked and installed in the target folder

Step 9: Windows Firewall blocking

Your Firewall may interrupt the installation process to block the some components of the XAMPP. Use the corresponding check box to enable communication between the Apache server and your private network or work network. Remember that making your XAMPP server available for public networks isn't recommended.

Step 10: Complete installation

Once all the components are unpacked and installed, you can close the setup wizard by clicking on 'Finish'. Click to tick the corresponding check box and open the XAMPP Control Panel once the installation process is finished.



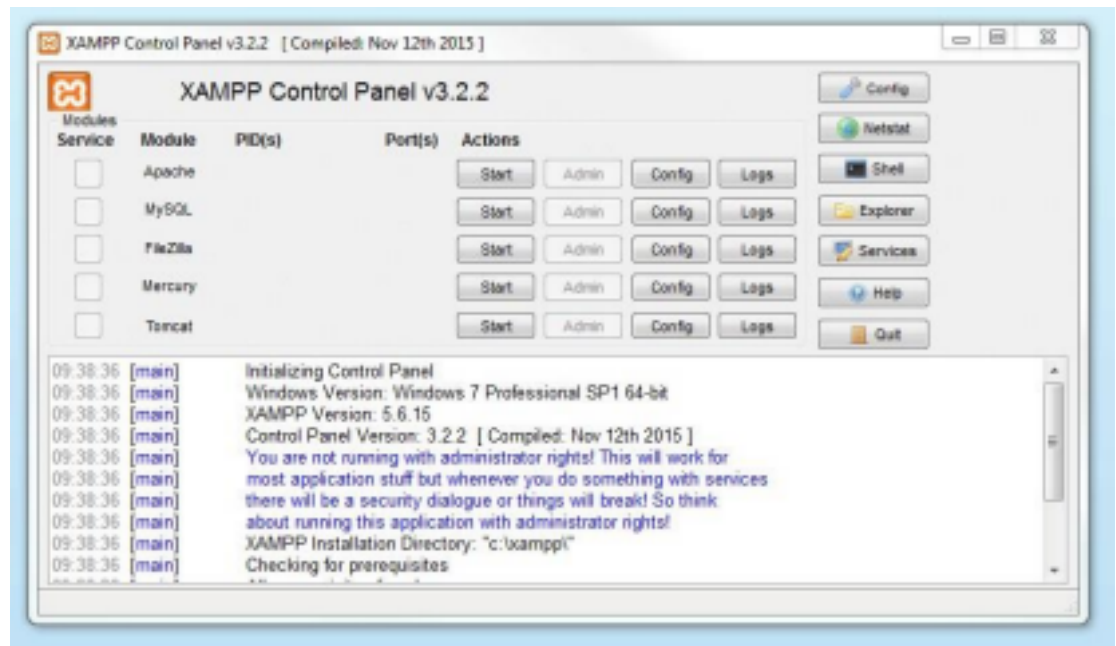
By clicking on 'finish', the XAMPP Setup Wizard is completed

Step 11: Open the XAMPP Control Panel

The XAMPP Control Panel

Controls for the individual components of your test server can be reached through the XAMPP Control Panel. The XAMPP Control Panel also offers you various other buttons, including:

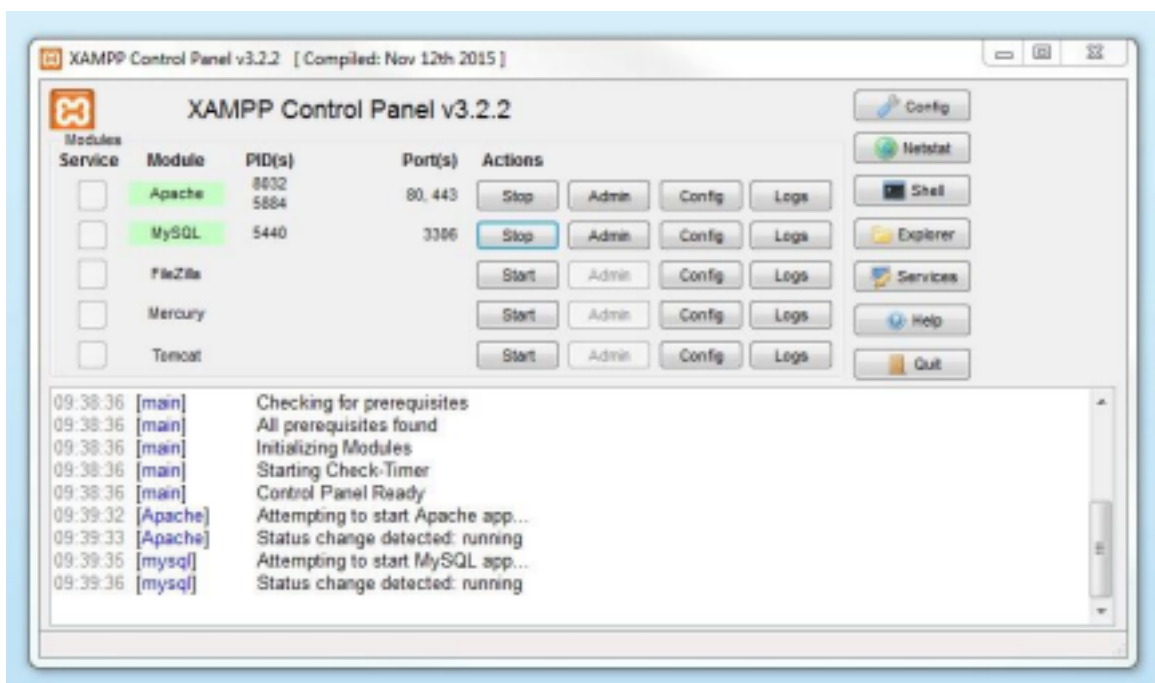
- **Config:** allows you to configure the XAMPP as well as the individual components
- **Netstat:** shows all running processes on the local computer
- **Shell:** opens a UNIX shell
- **Explorer:** opens the XAMPP folder in Windows Explorer
- **Services:** shows all services currently running in the background
- **Help:** offers links to user forums
- **Quit:** closes the XAMPP Control Panel



In the Control Panel, you can start and stop individual modules By click start and stop button respectively

Starting modules

Individual modules can be started or stopped on the XAMPP Control Panel through the corresponding buttons under 'Actions'. You can see which modules have been started because their names are highlighted green under the 'Module' title.



An **active module** is marked in green in the Control Panel

If a module can't be started as a result of an error, you'll be informed of this straight away in red font. A **detailed error report** can help you identify the cause of the issue.

Setting up XAMPP

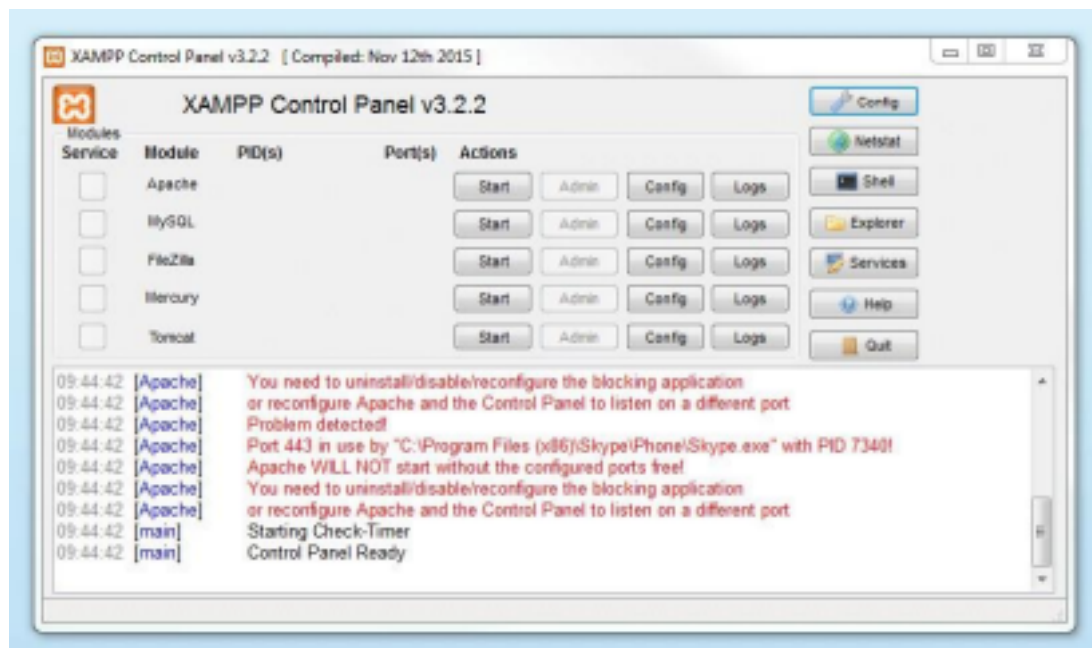
- A common source of error connected with Apache is **blocked ports**. If you're using the standard setup, then XAMPP will assign the web server to main port **80** and the **SSL port 443**.

Change the XAMPP module port settings:

- Click the Config button for the module in question and open the files *httpd.conf* and *httpd-ssl.conf*. **Replace port number 80** With 8081 in *httpd.conf* and port number **443** in *httpd-ssl.conf* with **4430**.

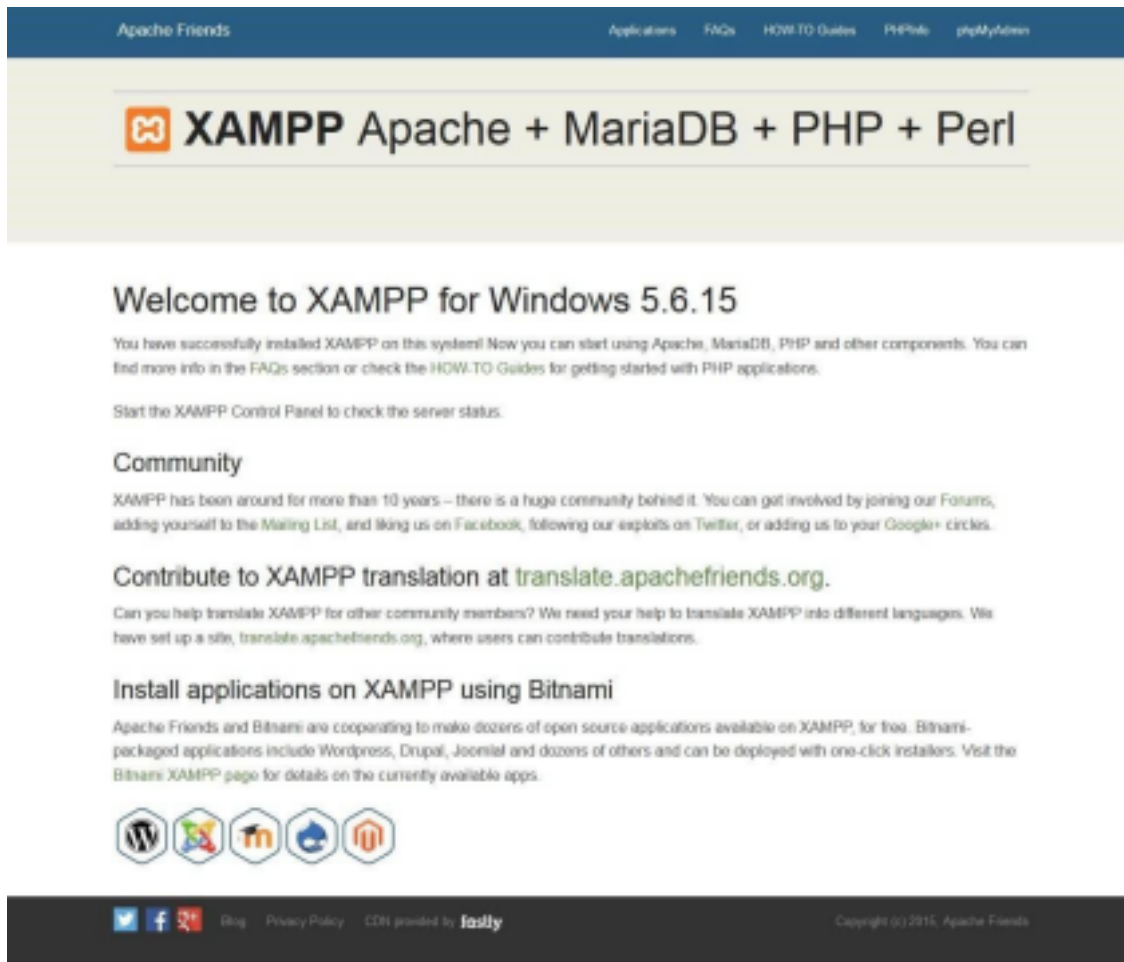
Change Mysql port setting [optional if mysql is already installed]

- Click on config. Open my.ini .. change the port from 3306 to desired port.



Modules that can't be started will be shown in red. The user will also receive an error report to help solve the problem

Open the browser and type *localhost:8081*.



Running PHP Program using XAMPP

- Step 1 : Run xampp control panel
- Step 2 : Click on the start button of Apache server.
- Step 3 : After starting Apache , open the browser and type localhost: *portnu* e.g
localhost:8081 for open the dashboard
- Step 4 : create first.php file in notepad

```
<?php  
    echo "hello world" ;  
?>
```

- Step 5 : put the first.php under the xampp/htdocs directory.
- Step 6 : type localhost:8081/first.php in browser.

Exercise

1. List out steps for installation & configuration of XAMPP server.
2. Create a PHP script that displays “Hello World” on the web page.
3. Create PHP script which prints Name , Roll Number & sem 2 SPI on the web page.
4. Create a HTML page to display your resume related information. Create a decent/ professional design using CSS and/or javascript.
5. Design a user registration form in **HTML** for a technical and cultural fair of a university. Required information is Name, branch, semester, roll number, email id, contact number, subject of interest (out of - Cultural, Web Publishing, Technical, Finance, Publication, Reception and hosting) and signature. Also mention past experience of participation in such activity if any.
6. Design a user registration form in **HTML** for a social media platform. Required information is First Name, Middle Name, Last Name, Address, Email, Mobile Number, description. On submission of form display the information submitted in form of the GET request.

Hint: Use javascript to extract information. Analyze the problem if any.