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COMP 333: Software Engineering, 2023
XAMPP Instructions

Install a local web server as a development environment on your computer with XAMPP, which is a variation of LAMP that contains the Apache web server, the database MariaDB (a fork of MySQL), and support for the scripting languages PHP and Pearl. We use XAMPP so that our computer has both a web browser as well as a web server. That way, we can test our web app in a development environment without deploying it.

- Download XAMPP and install it as any other program

  If you have difficulties, please work with your teammate or come to office hours.

  For macOS:
  https://sourceforge.net/projects/xampp/files/XAMPP%20Mac%20OS%20X/8.2.4/

  Important: It is assumed that you have the most recent macOS installed. Please make sure that is the case.

  For Windows:
  https://sourceforge.net/projects/xampp/files/XAMPP%20Windows/8.2.4/xampp-windows-x64-8.2.4-0-VS16-installer.exe/download

  Common Errors:

  If you are getting an error because of a previous XAMPP version you installed, check the following: https://stackoverflow.com/a/45966180.

  If the server does not start (e.g., you get an error message about a mac address), if you are on macOS, try installing XAMPP via the package manager homebrew: https://formulae.brew.sh/cask/xampp.

  You would need to first uninstall your current version of XAMPP and install homebrew if you do not have it yet (https://docs.brew.sh/Installation).

  It may also help **changing the protocol** from http to https or vice versa, **changing the port number** from 8080 to 8443 or vice versa, or **omitting or adding the port number**.

- Open XAMPP and start the web server under the General tab.

- If your download does not work check the download settings in your browser, for example, chrome://downloads/.

- Follow the instructions for your OS.

For macOS:

- You may get a security warning that a program downloaded from the Internet could not be installed. If so, check your settings under macOS -> Settings -> Privacy & Security. Click "Open Anyway" and confirm the subsequent prompts to install XAMPP.
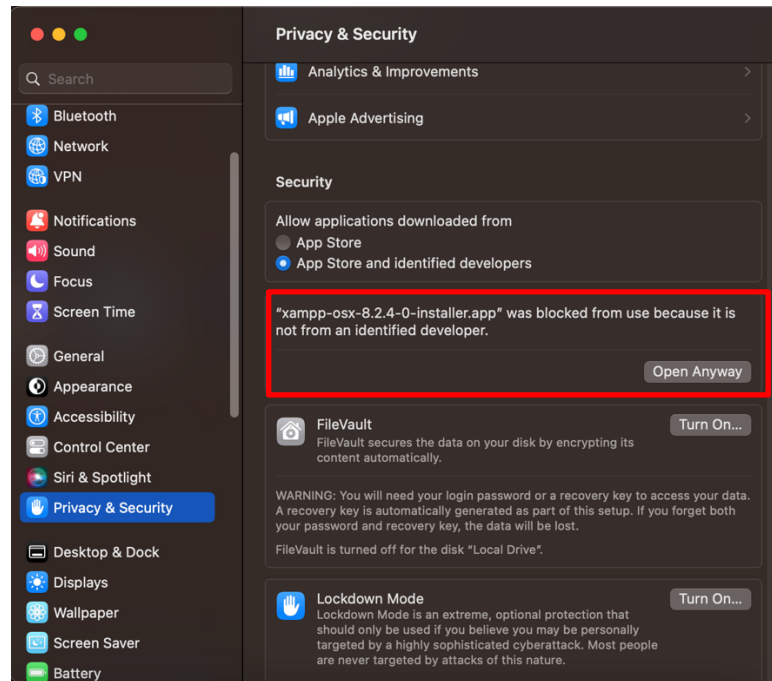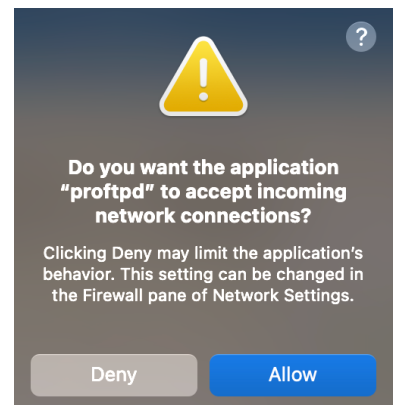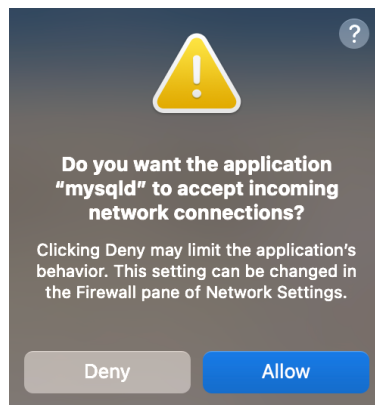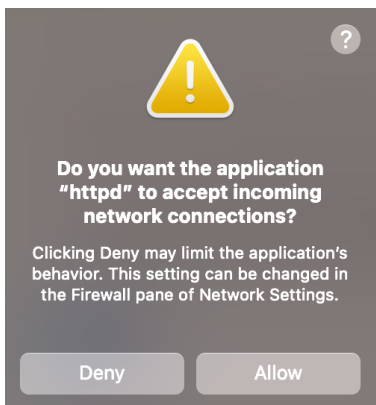

- Please install (at least) the XAMPP Core Files.
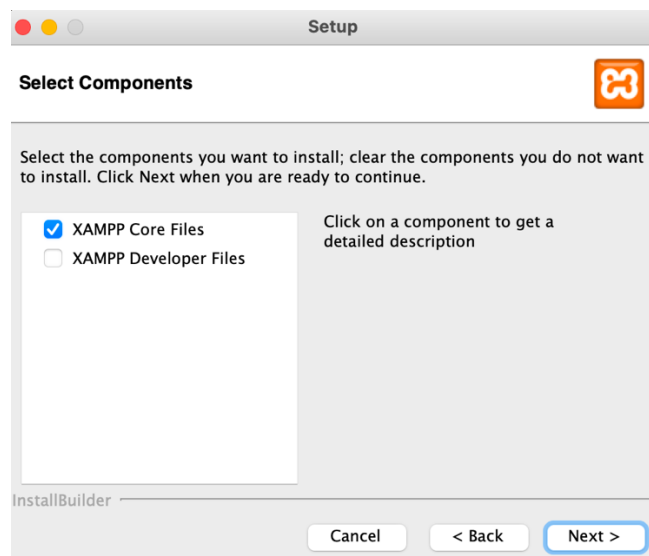
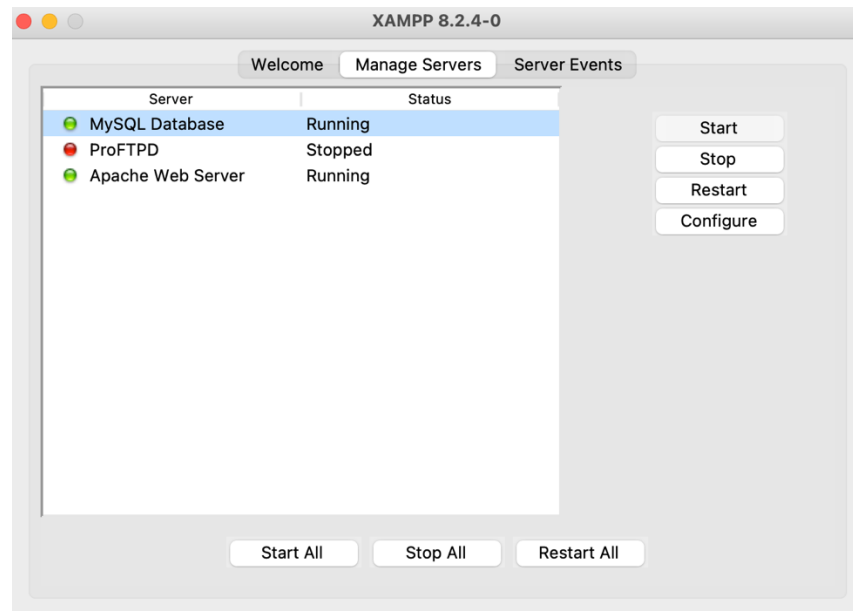- The install process may take a few minutes.
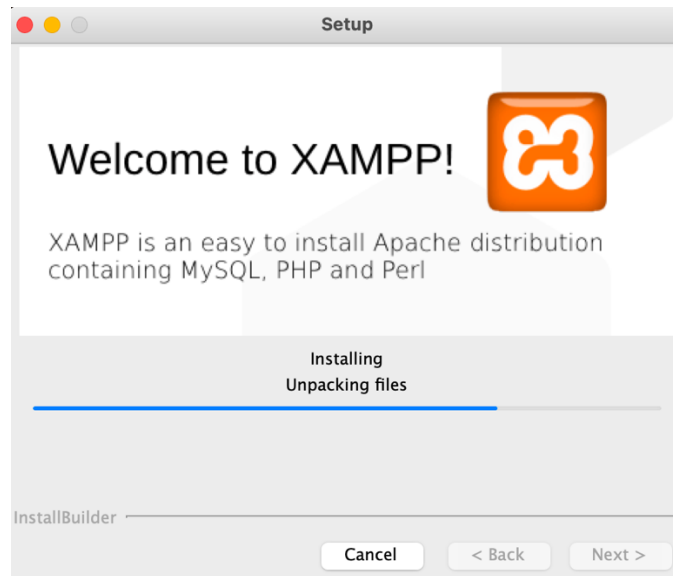
- Once installed, you may see a few prompts asking for various permission. Please grant the permissions.

- You can start XAMPP from the following directory:

applications -> XAMPP -> xamppfiles-> manager-osx.app

Start the Apache Web Server and the MySQL Database (since we are only working with the web, i.e., HTTP, we do not need to enable ProFTPD, which is for the FTP protocol)
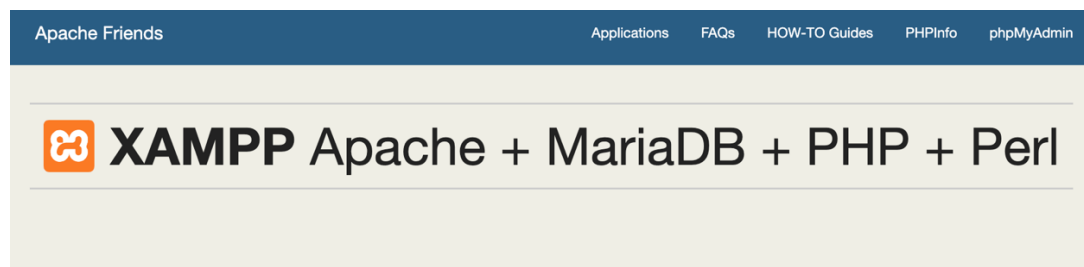

- In your browser navigate to

http://localhost/

or

http://thenameofyourcomputer.home/

You should see a screen similar to below:

- The files you are looking at are served from the applications -> htdocs directory. You can delete all of them and instead replace them with your own HTML, PHP, and other files. Add a minimal working example PHP file from the tutorial and check if it is being served (e.g., name it index.html or, if you are using a different name, give the file path in your URL bar).

- Your browser may need permission to access those files. If that is the case, open your terminal and give such. For example, you can cd into the root directory and run

```
sudo chmod -R 0755 ./htdocs
```


For Windows (note: I have not recently tested XAMPP on Windows; please come to office hours if you encounter difficulties):
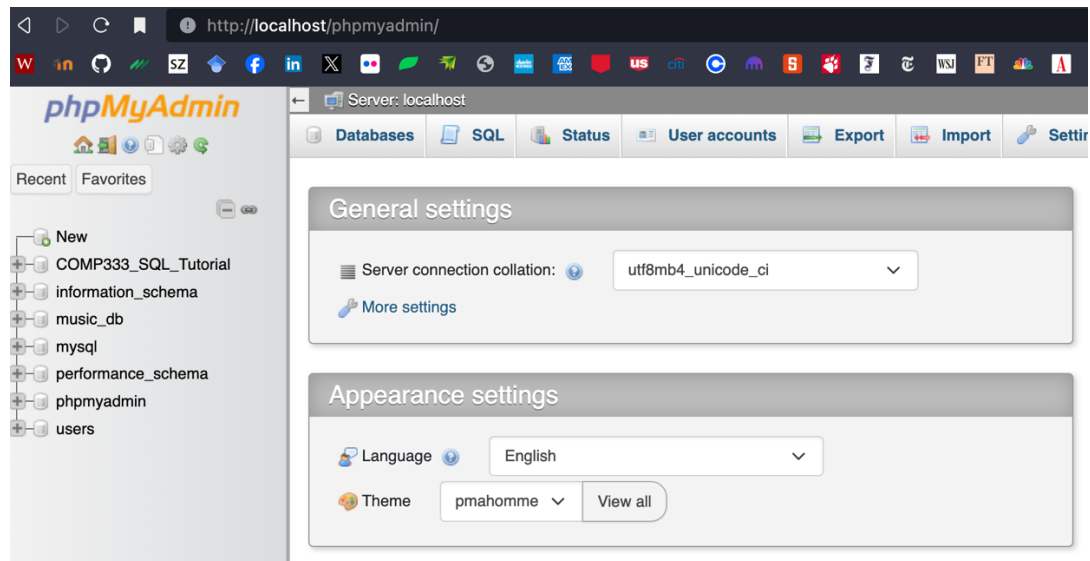
- Click Apache -> config button and open httpd.conf.

- Change Listen 80 to Listen 8080.

- Change ServerName localhost:80 to ServerName localhost:8080.

- Save the httpd.conf file.

- Start Apache and MySQL.

- Place all files (.html, .php, …) that you create into the lamp/htdocs directory.

- At http://localhost:8080/ you should see the starting files being served.

    If the server does not show up on your browser (1) make sure that you have turned it on and (2) try it without a port number in your URL.

For both OS (after the previous steps):

- Under http://localhost/phpmyadmin/ or

    http://thenameofyourcomputer.home/phpmyadmin/ or

    http://localhost:8080/phpmyadmin

    you should see the phpMyAdmin interface similar as shown below:

Note: If your sites or phpMyAdmin take a minute too load, wait an hour while you keep the server running, then try again. Whenever I had this issue it automatically resolved itself. This issue may have something to do with the Domain Name Server (https://serverfault.com/questions/408550/connecting-to-mysql-from-php-is-extremely-slow).

Alternative

As an alternative to installing XAMPP, you can try Docker (https://www.docker.com/) with Docker-LAMP (https://hub.docker.com/r/mattrayner/lamp).