

# CS 547

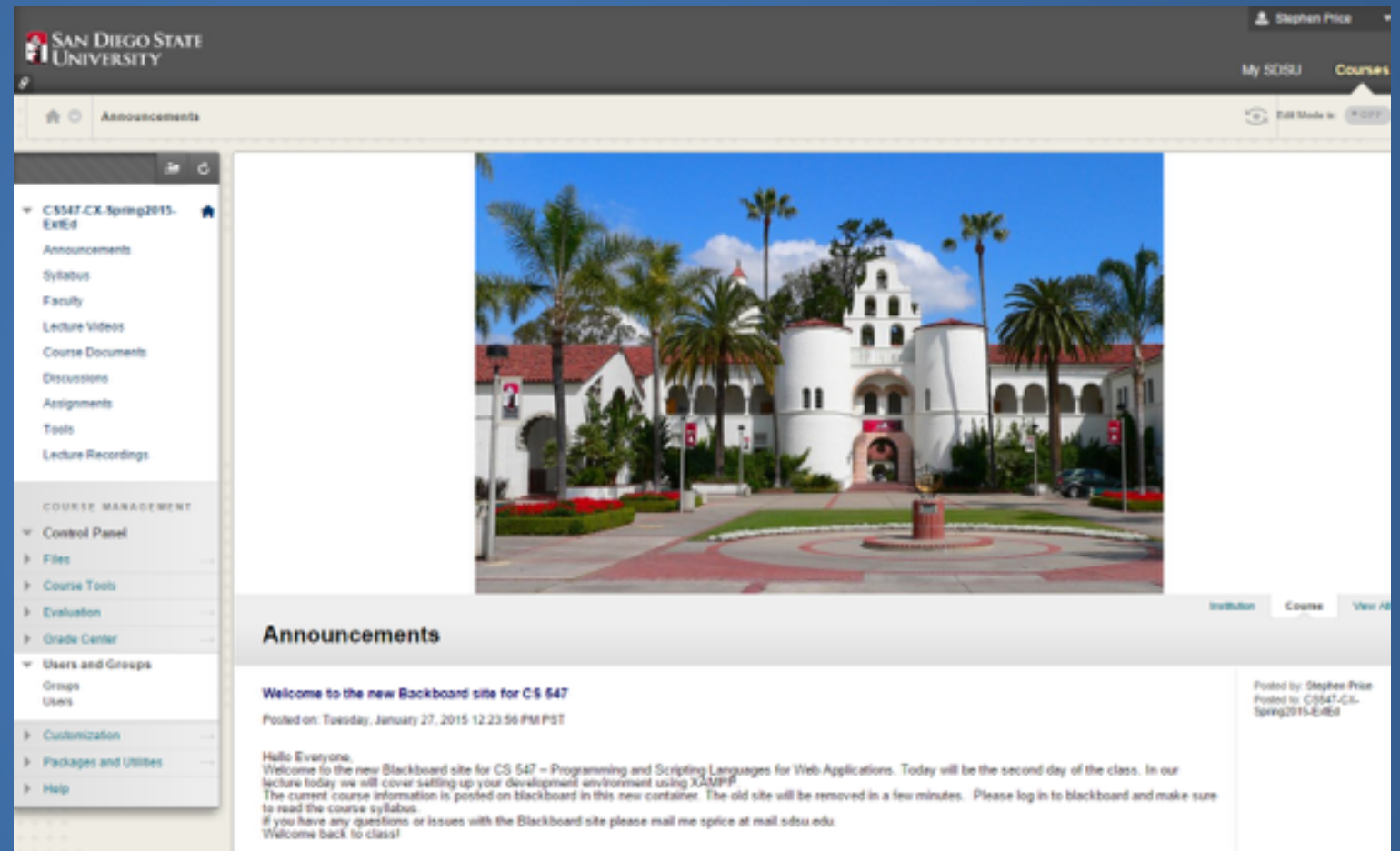
## Week 1 Day 1 Tools Installation

# Agenda

- Announcements
- Review of course syllabus and content
- Installation of Development Tools

# Announcements

- New black board container for course



# Syllabus

Syllabus is accessible from the black board container

# Development Tools

- We will be using a full stack development environment named XAMPP from [apachefriends](http://apachefriends.org)

# Dev Tools: XAMPP

- XAMPP is a cross platform popular development platform,
- X == Windows, OS X, or Linux platform
- A == Apache Web server
- M == MySQL data base
- P == PHP, Perl, and Later we will add Python

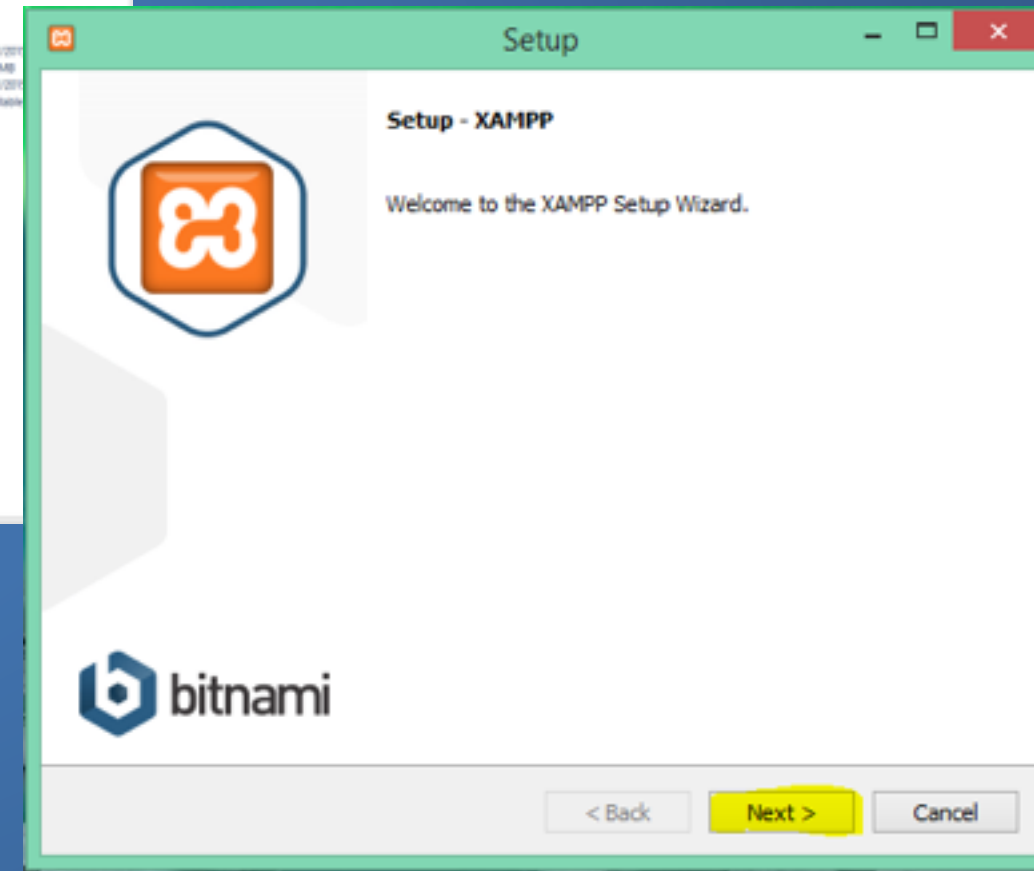
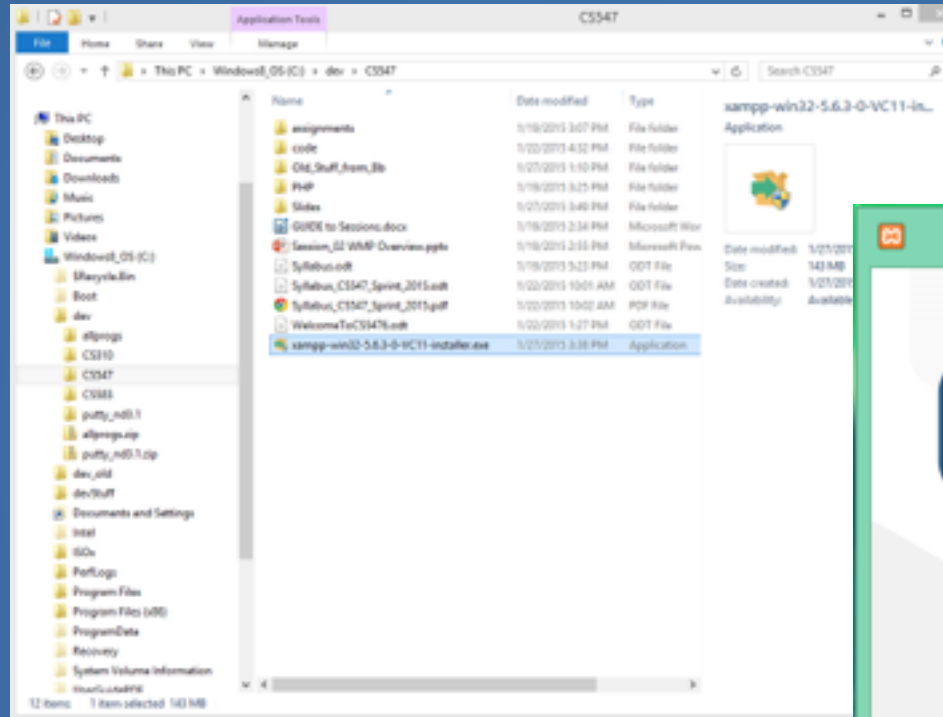
# Dev Tools: Download

Download XAMPP from [ApacheFriends.Org](http://ApacheFriends.Org) web site.



# Dev Tools: XAMPP Installer

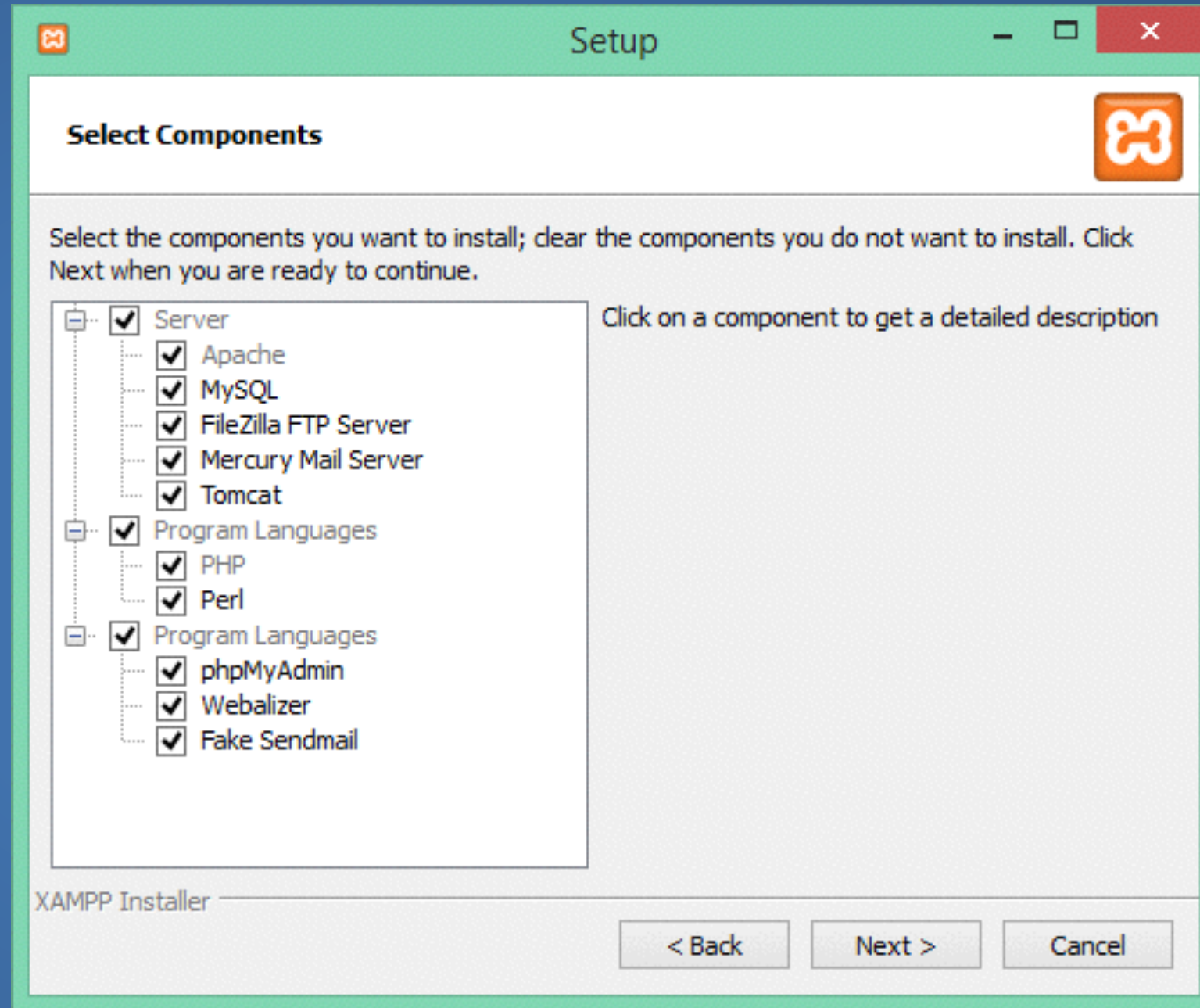
Note, the installer will bother you about user permissions  
And having anti virus software running





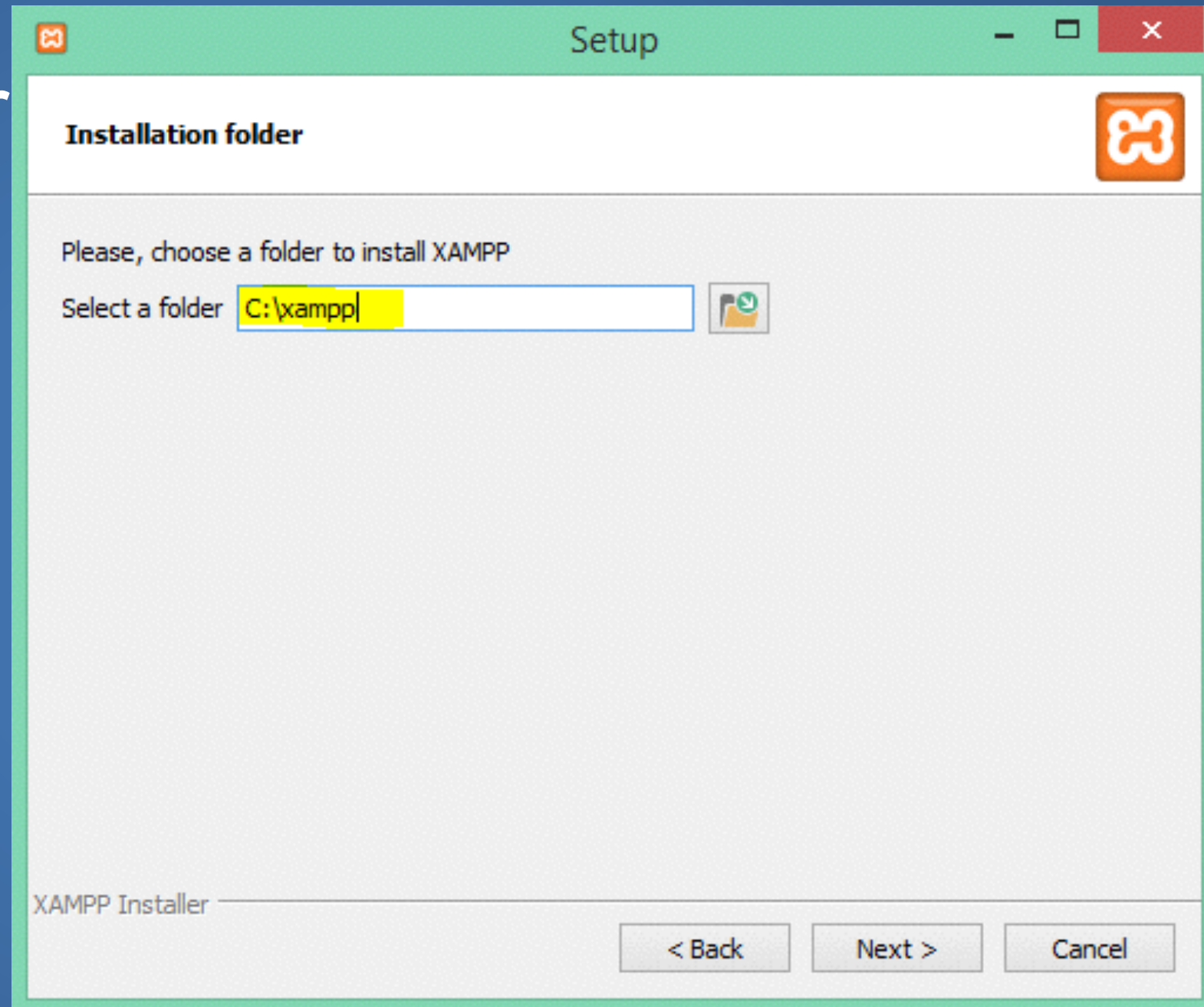
# XAMPP Installer

Select the options you want to install...



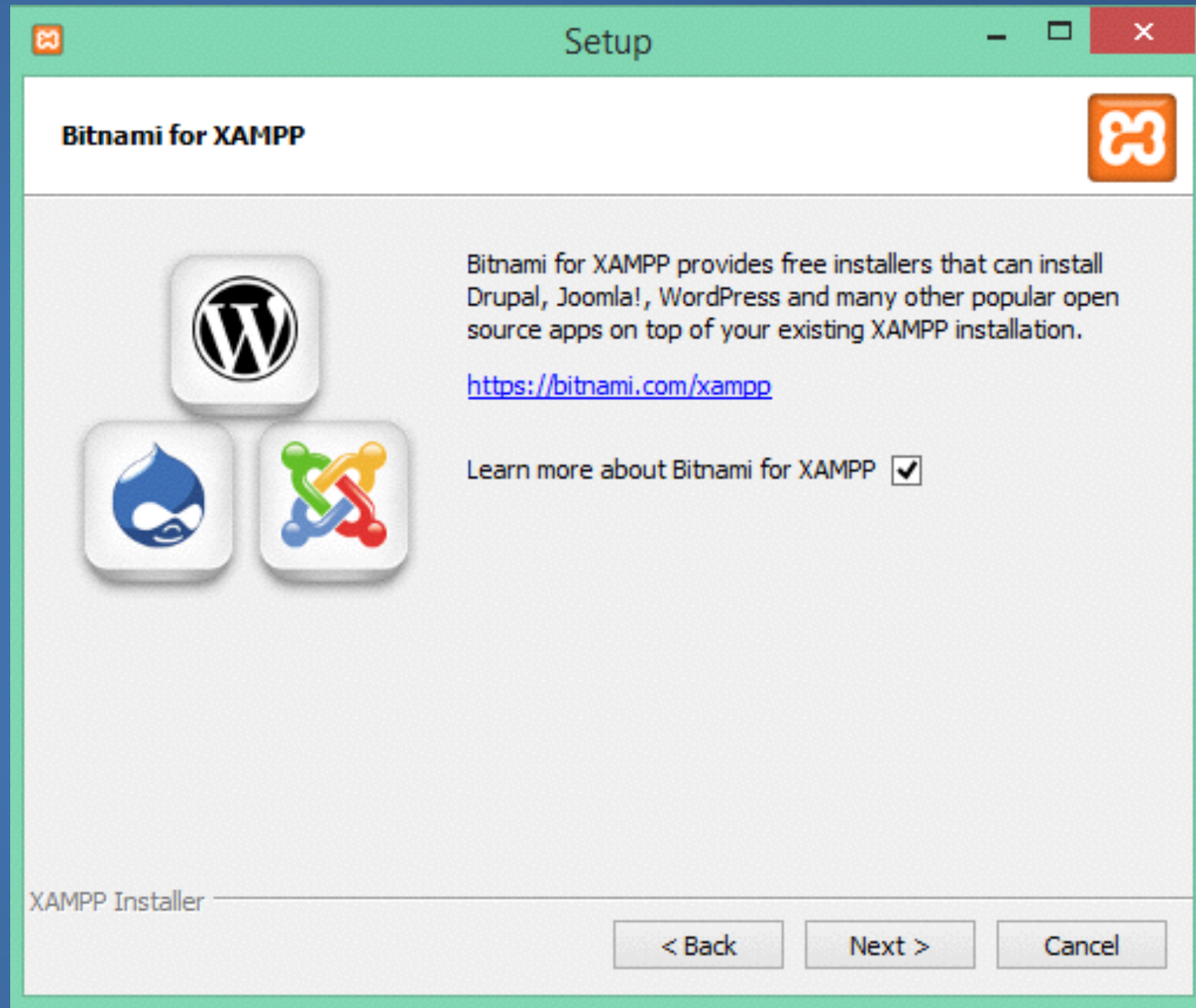
# XAMPP Installer

Select the folder where you want to install.



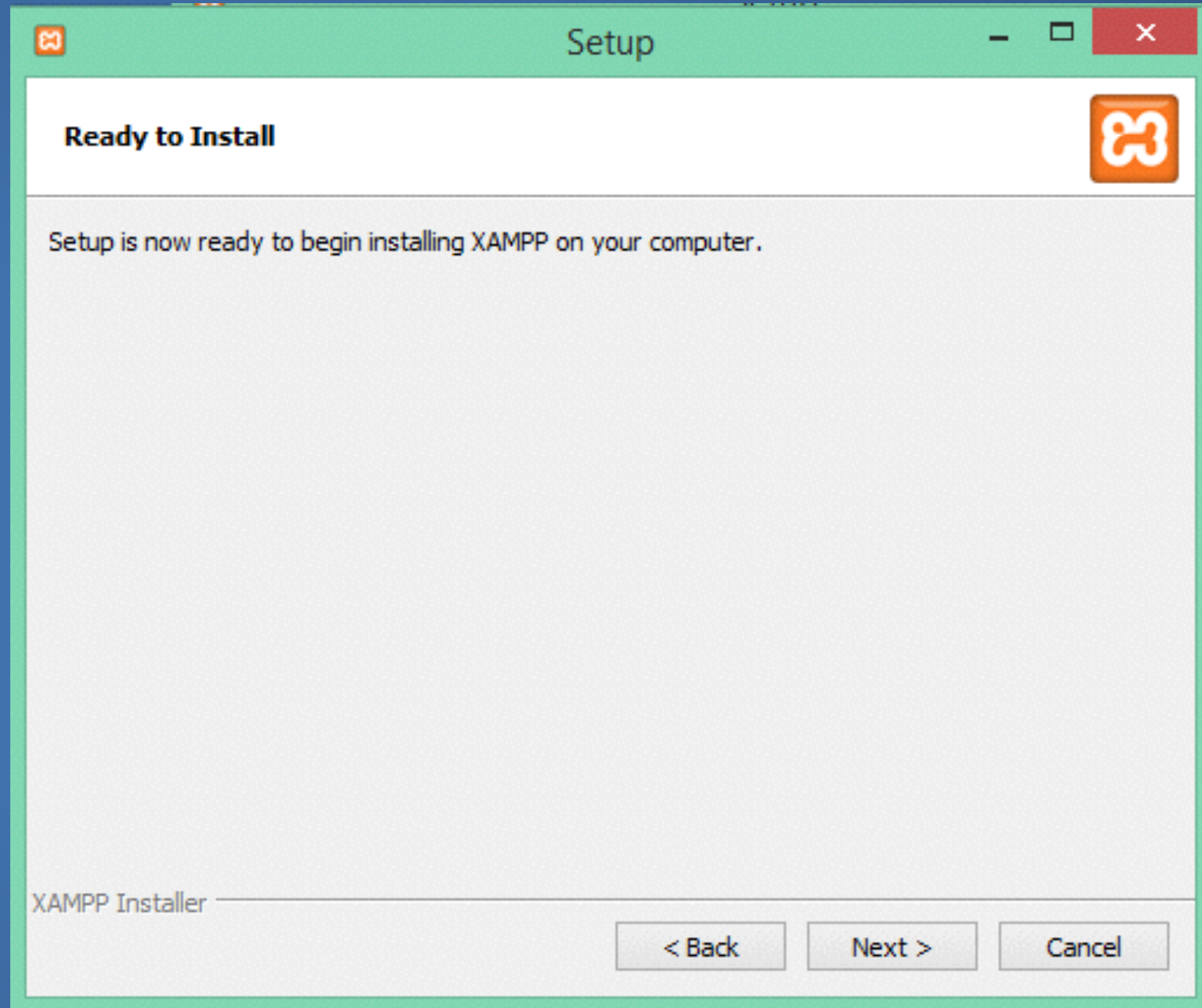
# XAMPP Installer

Learn about optional packages. These are not used in our class.



# XAMPP Installer

Ready  
Set  
Go!





# XAMPP Installer

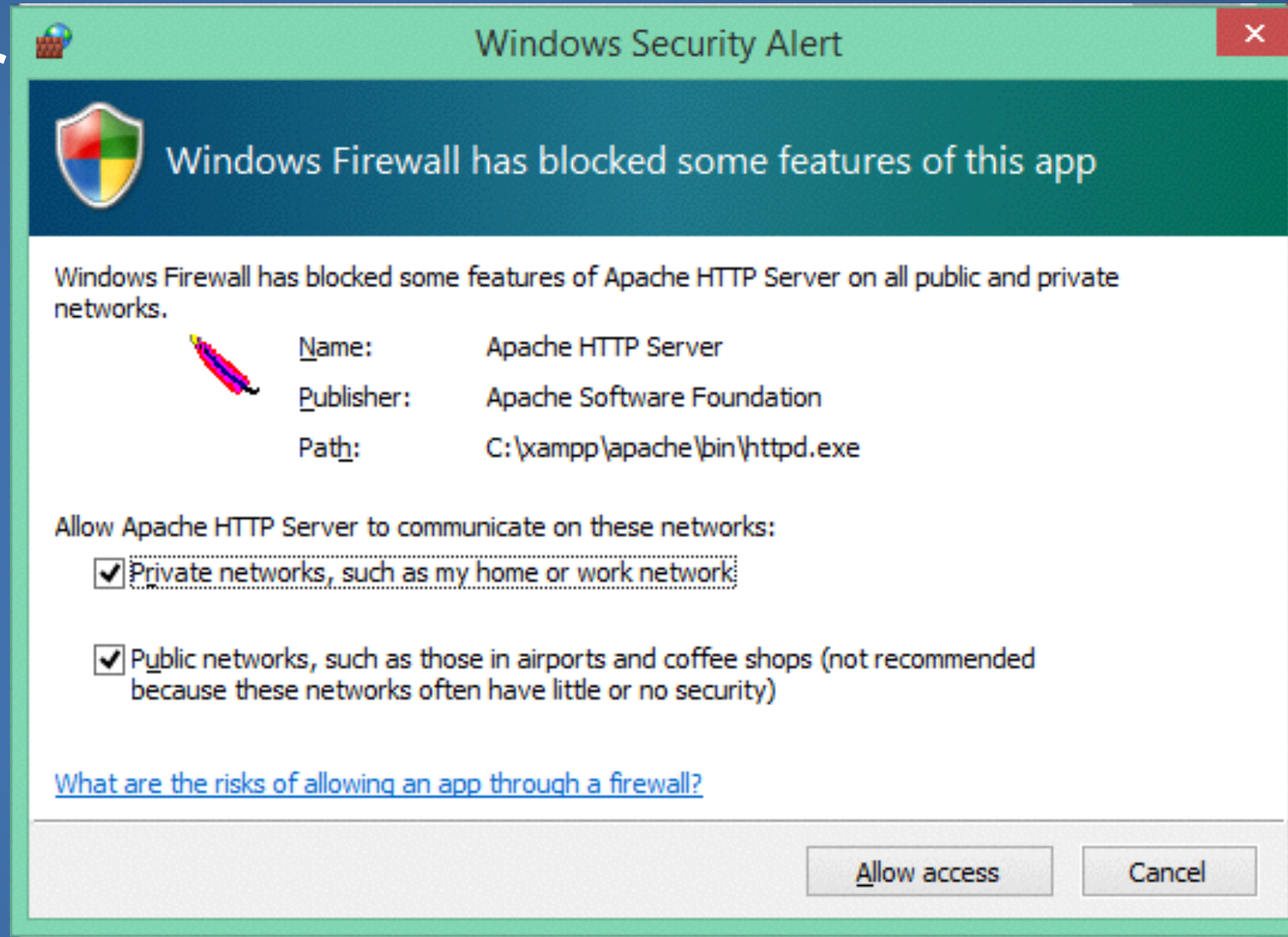
Wait till it finishes.



# XAMPP Installer

You may see something like this...

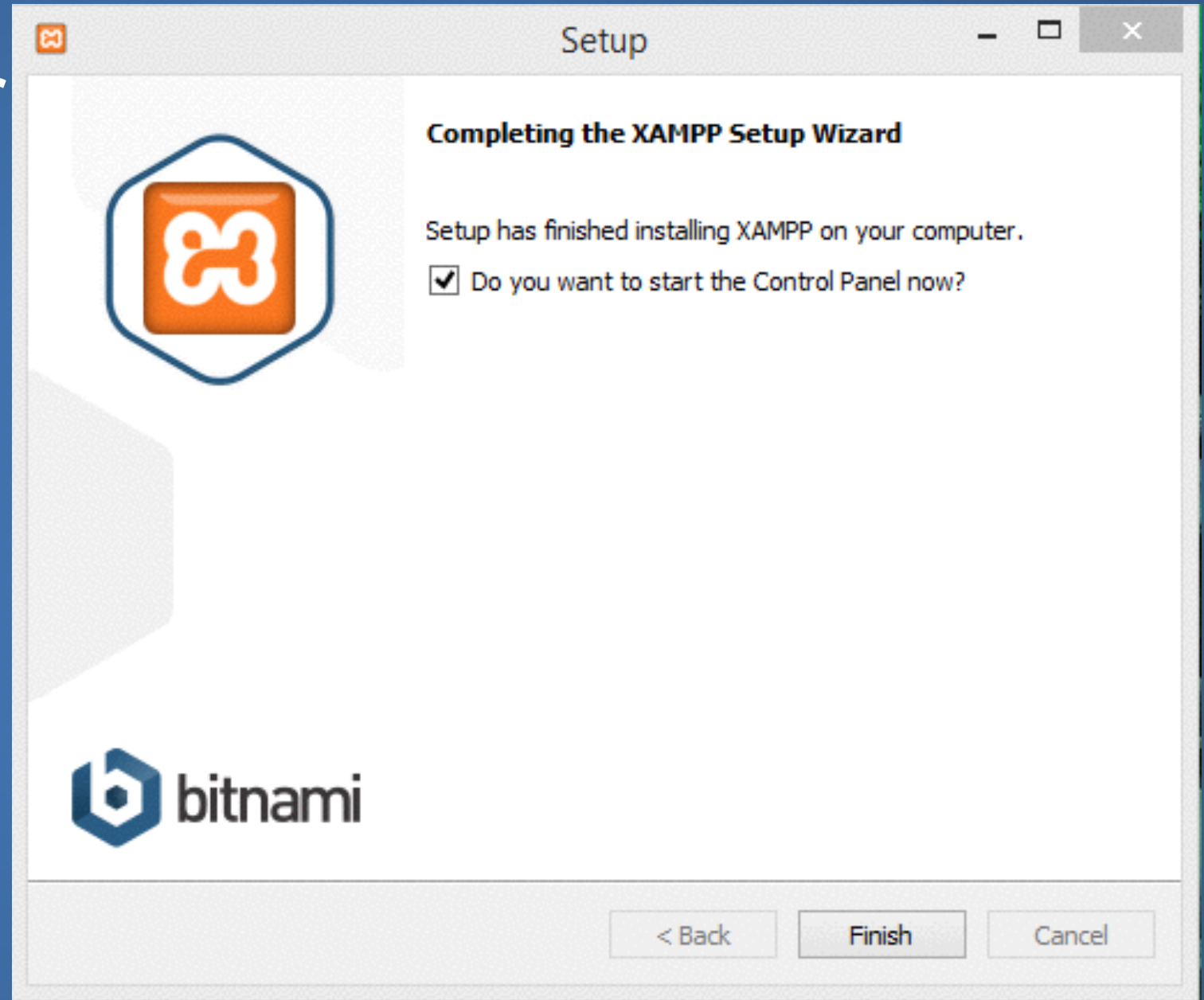
Choose wisely!



# XAMPP Installer

Are we there yet???

Yes!



# XAMPP Installer

Now what do we do?

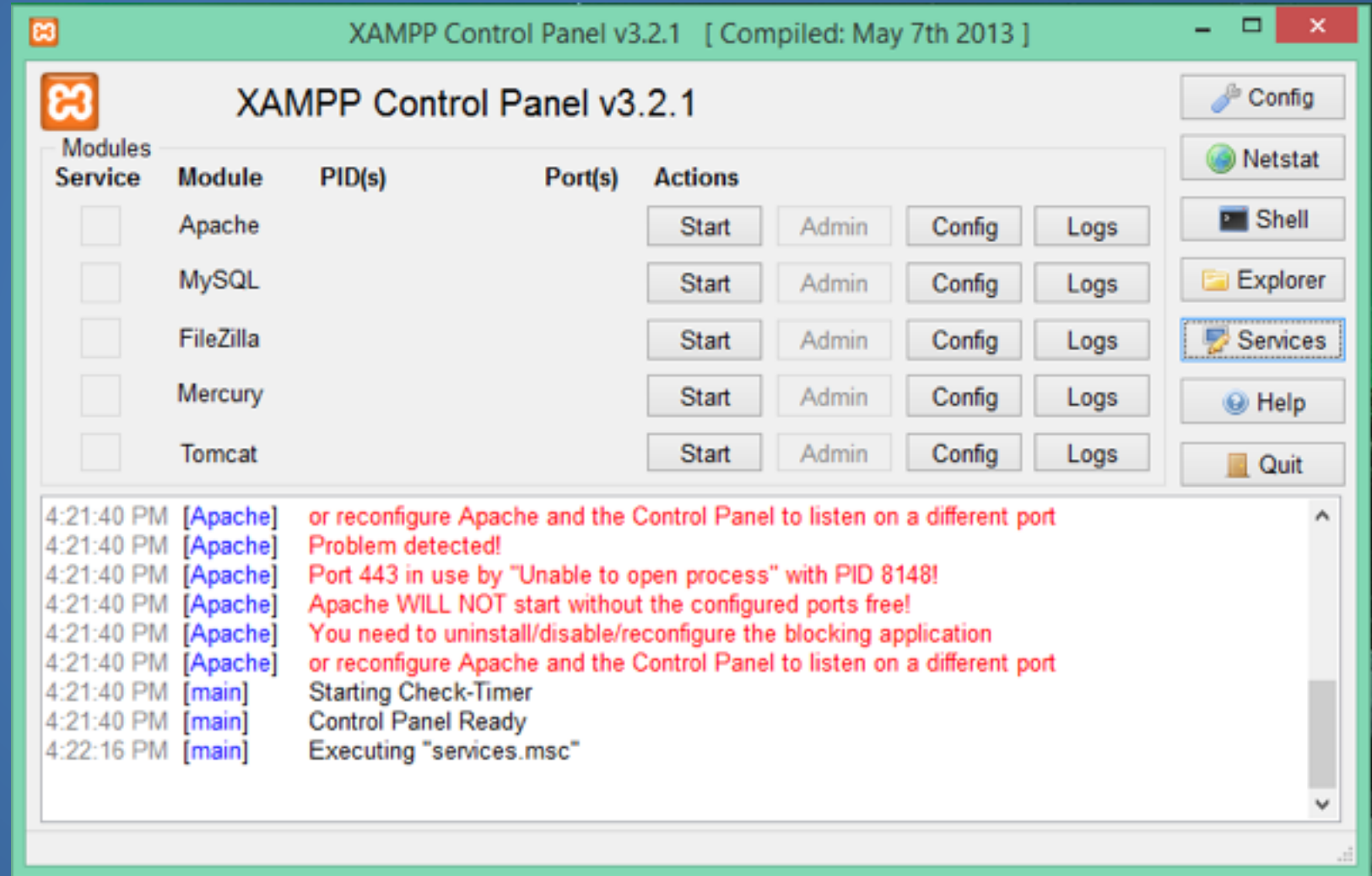
depends on your OS...



# XAMPP Control Panel

To the rescue!

Use to start, stop and  
configure basic  
functionality



# XAMPP Live Demo

Switch to XAMPP Control Panel for live demonstration

# PHP Language

# PHP Language

PHP – an acronym that stands for PHP: Hypertext Preprocessor

Originally called the Personal Home Page

# PHP Language

Server side language

Type less language

Very powerful use for building dynamic web sites

# PHP Syntax

PHP files are text files that end in a .php extension

PHP code lives in a php file and is inbetween the php script delimiters

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

# PHP Language: Comments

PHP uses 'c' style comments

- Single Line using `//` This is a comment
- Single Line using `#` This is also a comment
- Block using `/* ... */`  
This is a  
block comment  
section.  
`*/`

# PHP Language Case Sensitivity

In php all keywords (e.g. if, else, while, echo, etc.), classes, functions, and user-defined functions are NOT case-sensitive.

```
<?php  
ECHO "Hello Class";  
echo  "Hello Class";  
EcHo "Hello Class";  
?>
```



# PHP Language Case Sensitivity

However; all variable names are case-sensitive.

```
<?php
$color = "red";
echo "My car is " . $color ;
echo "My house is " . $COLOR ;
echo "My boat is " . $coLOR ;
?>
```

# PHP Variables

- All variables start with a \$

**\$index = 0;**

# PHP Variables

Because PHP is a loosely typed language one can have

```
$index = 1;  
...  
$index = "One";
```

# PHP Variable rules

Must start with the \$ sign, followed by the name of the variable

Must start with a letter or the underscore character

Cannot start with a number

Only contains alpha-numeric characters and underscores (A-z, 0-9, and \_)

Variable names are case-sensitive

# PHP Special Variables

There are several 'magic' Predefined constant for you in PHP

Name	Meaning
<code>__LINE__</code>	<i>The current line number of the file.</i>
<code>__FILE__</code>	The full path and filename of the file with symlinks resolved. If used inside an include, the name of the included file is returned.
<code>__DIR__</code>	<i>The directory of the file. If used inside an include, the directory of the included file is returned. This is equivalent</i>
<code>__FUNCTION__</code>	The function name.

# PHP Special Variables – Magic Constants

Name	Meaning
<code>__CLASS__</code>	<i>The class name. The class name includes the namespace it was declared in (e.g. Foo\Bar). Note that as of PHP 5.4 <code>__CLASS__</code> works</i>
<code>__TRAIT__</code>	The trait name. The trait name includes the namespace it was declared in (e.g. Foo\Bar).
<code>__METHOD__</code>	<i>The class method name.</i>
<code>__NAMESPACE__</code>	The name of the current namespace.

# PHP Variable Scope

PHP has three different variable scopes:

Local – Variables defined within a function

Global– Variables defined outside a function

Static – Variable exists inside a function, but does not lose its value when execution leaves this scope.

