



UNIT - 1

Prepared by: Prof. Disha H. Parekh

Installation

- **What is XAMPP?**
- XAMPP is an open source cross platform web server, MySQL database engine, and PHP and Perl package. It is compiled and maintained by apache. The acronym XAMPP stands for;
- X – [cross platform operating systems] meaning it can run on any OS Mac OS , Windows , Linux etc.
- A – Apache - this is the web server software.
- M – MySQL - Database.
- P – PHP
- P – Perl – scripting language

Installation

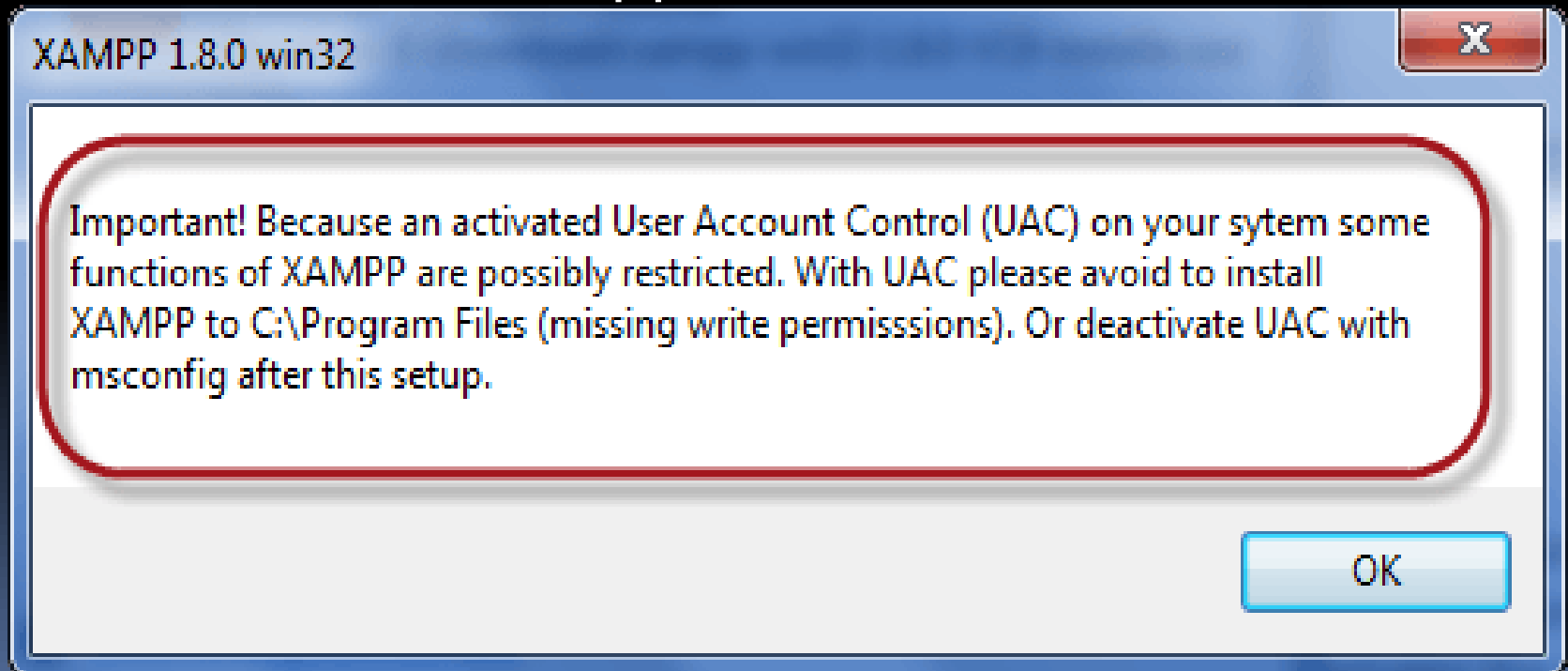
- **Why use XAMPP?**
- In order to use PHP, you will need to install PHP, Apache and may be even MySQL. It's not easy to install Apache and configure it. If you install Apache on its own, you will still have to set it up and integrate it with PHP and Perl among other things. XAMPP deals with all the complexity in setting up and integrating with PHP and Perl. Unlike Java that runs with the Java SDK only, PHP requires a web server to work
- XAMPP provides an easy to use control panel to manage Apache, MySQL and other programs such as Tomcat, filezilla etc. You don't have to memorize commands for starting apache, MySQL etc.

Installation

- **How to Download and Install XAMPP**
- We look into step by step process to install XAMPP for Windows. For Other Operating Systems, installation steps are similar.
- Download the XAMPP installer from <http://www.apachefriends.org/en/xampp-windows.html>
- Installing XAMPP is just like installing any other windows program. There are however, a few things that we must note.

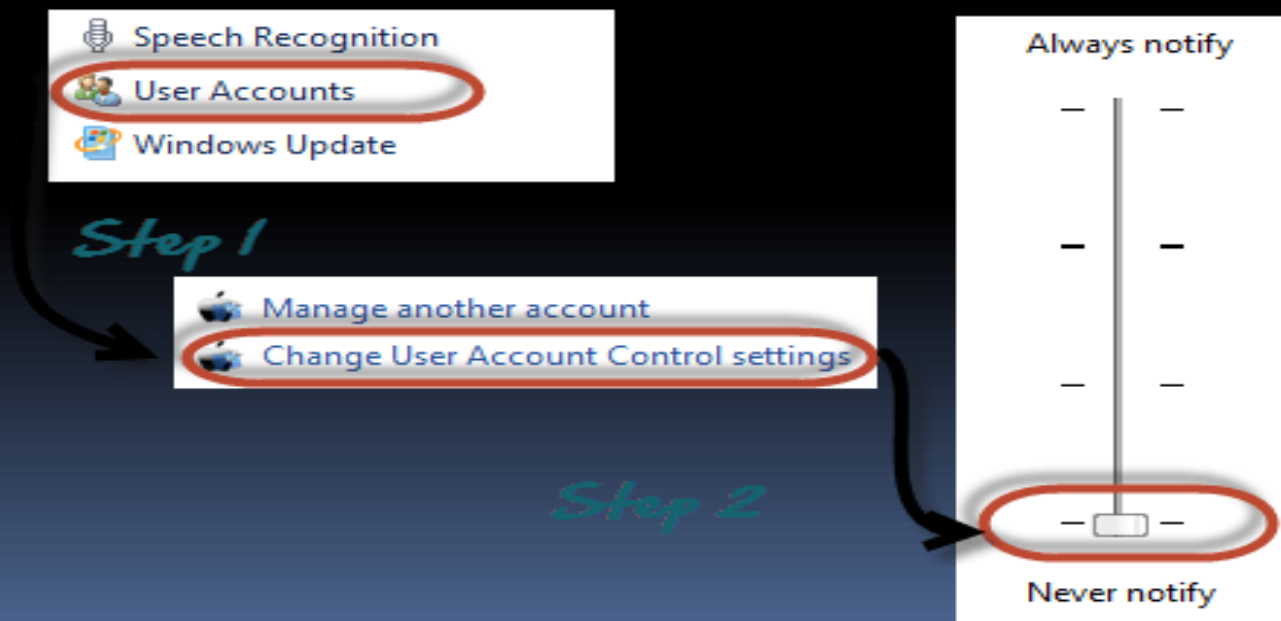
Installation

- After you have downloaded XAMPP, run the setup. The warning message dialog window shown below appears.



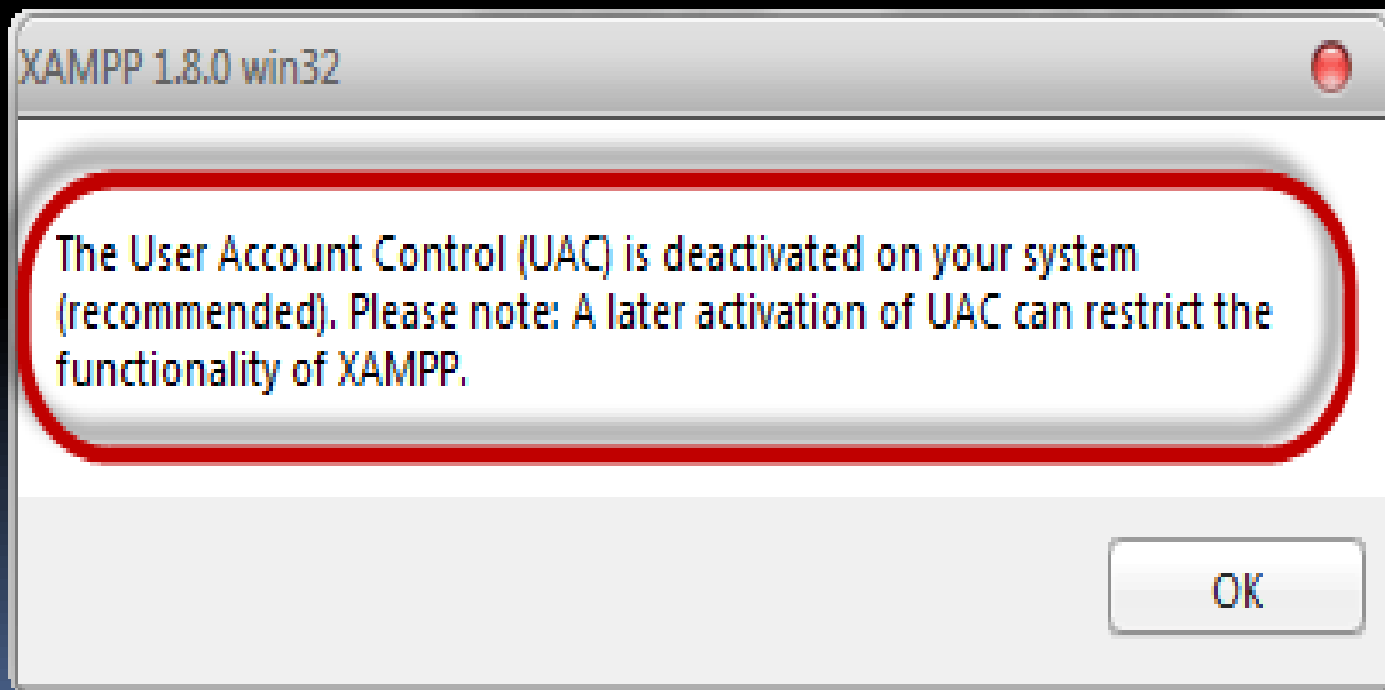
Installation

- If you are using windows Vista or Windows 7, make sure that you deactivate the User Account Control feature. To do this, Select Control Panel > User Accounts > Change User Access Control settings. The diagram below illustrates the main steps.



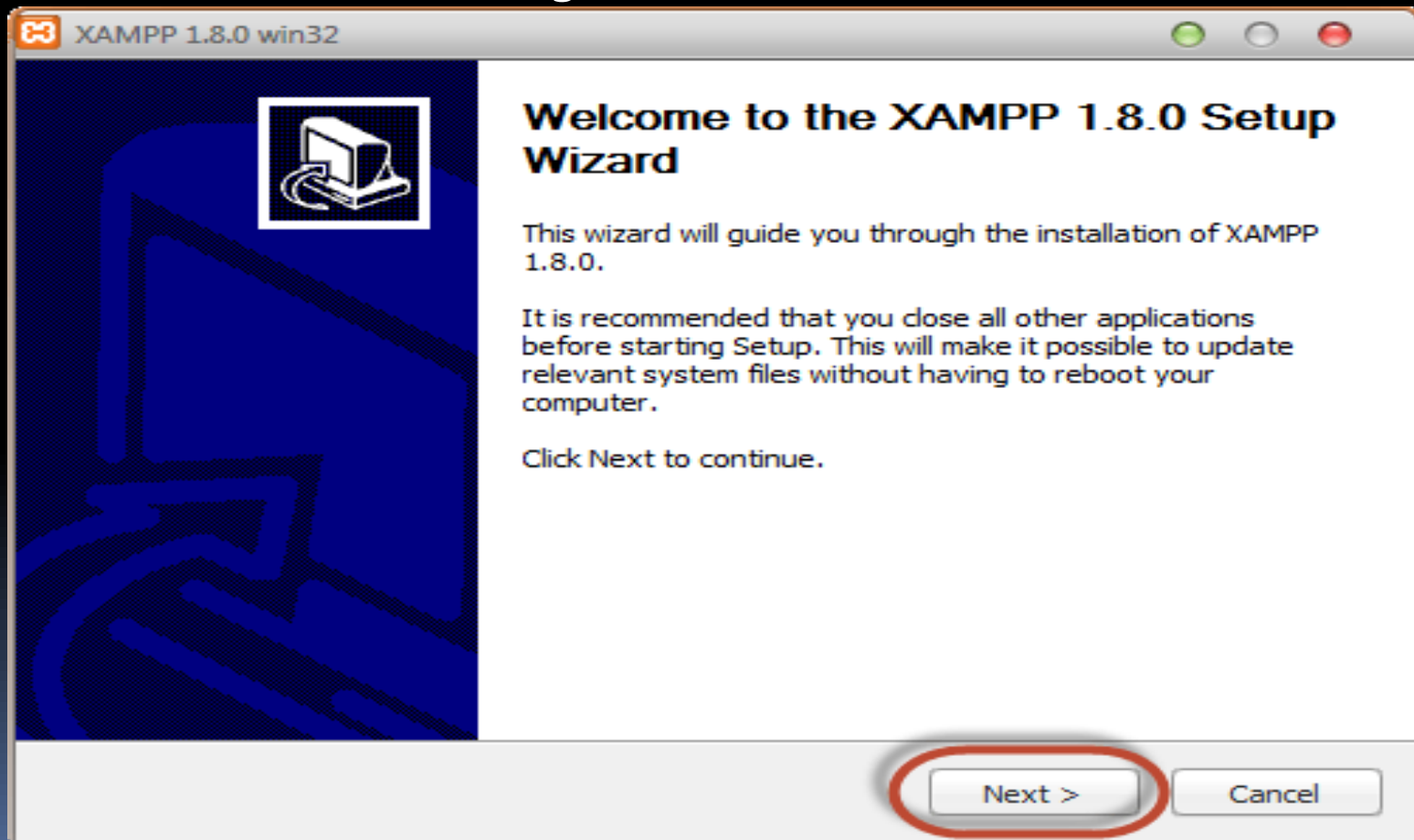
Installation

- After you have deactivated the User Account Control, click on OK button on the warning message box.
- This time you get following message



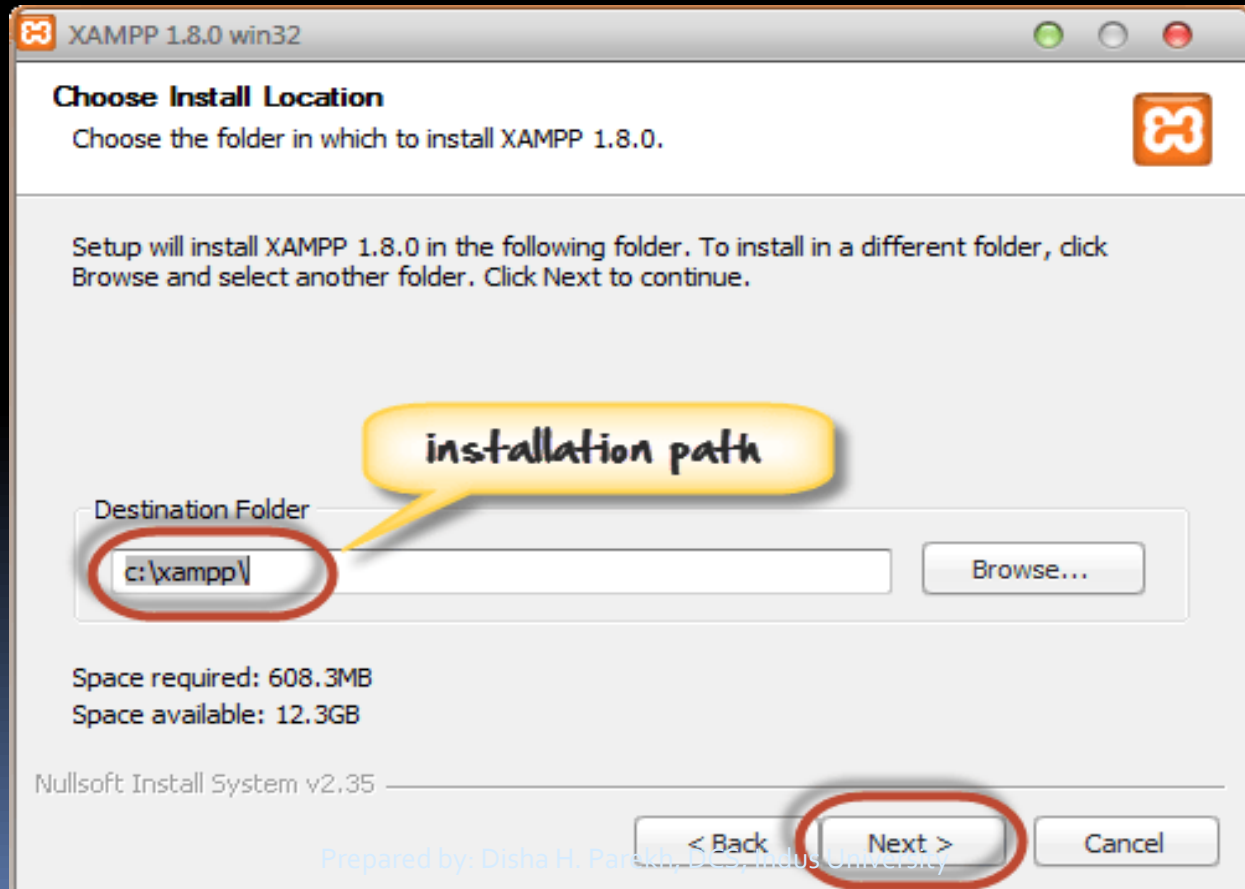
Installation

- In the succeeding screen, click next



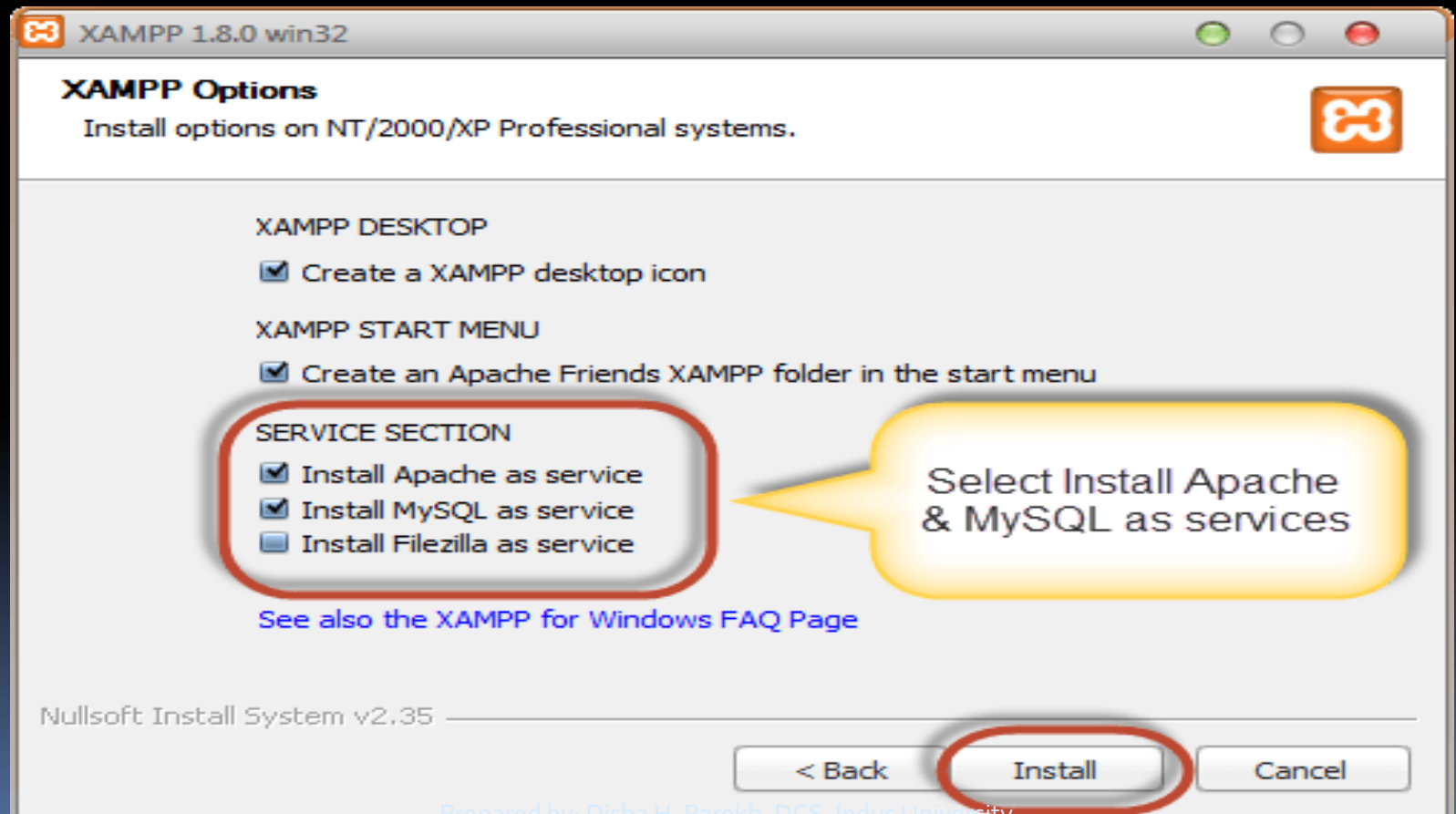
Installation

- In the next screen, Change the installation path if required. Click Next



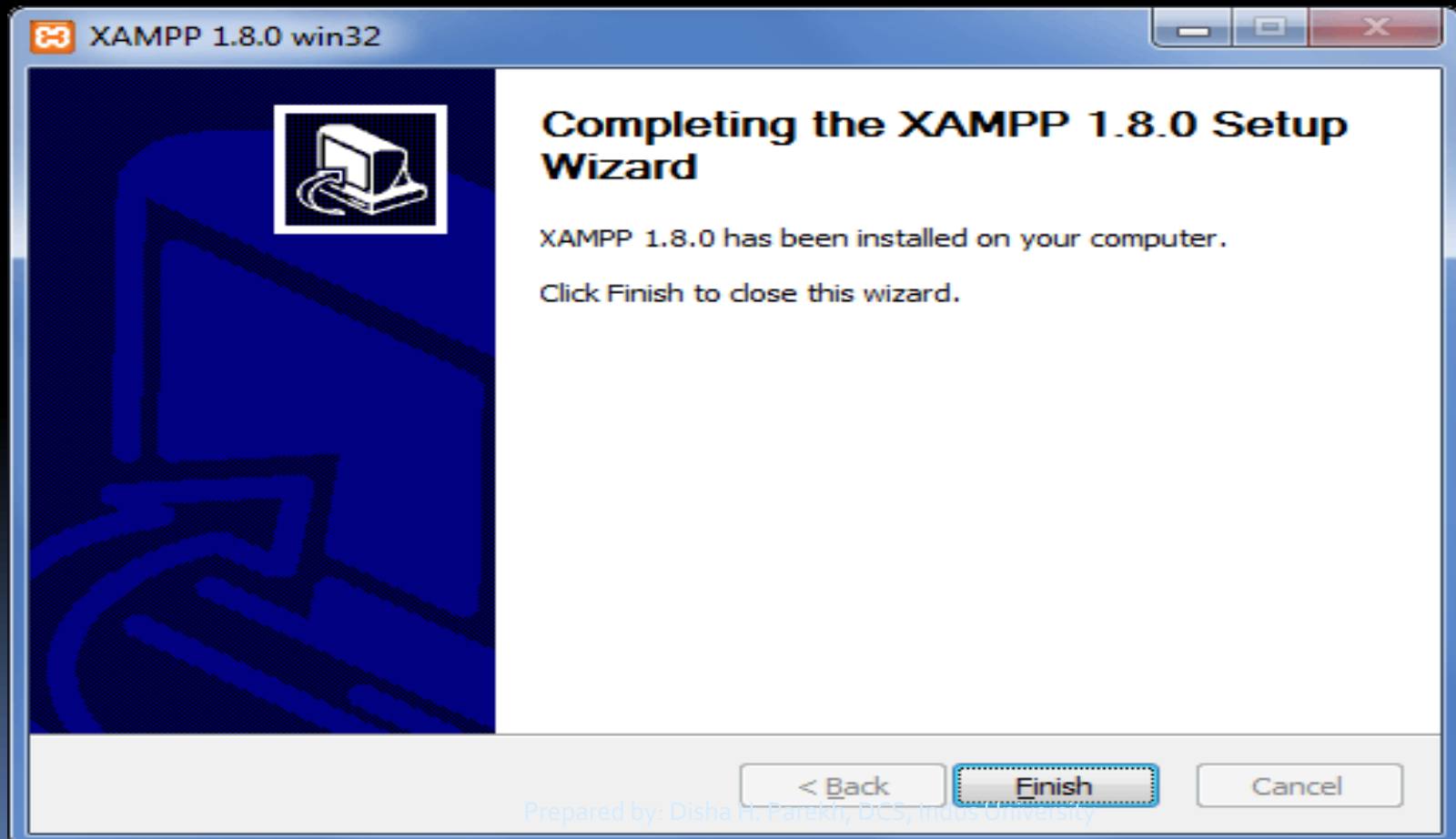
Installation

- In the next screen select Apache and MySQL. You may optionally select FileZilla (FTP Client) if needed. Click



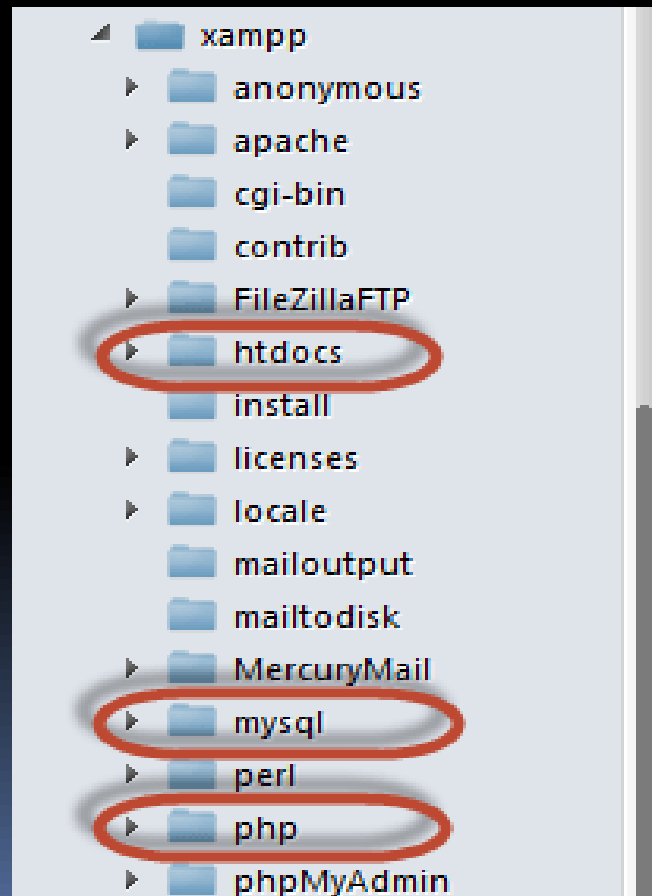
Installation


- On successful completion of installation, you will see following window



Basic Web server configuration

- The following is a list of the basic directories that you are supposed to be aware of.





Basic Web server configuration

- **htdocs**; this is the web root directory. All of our PHP codes will be placed in this directory.
- **mysql** – this directory contains all the information related to MySQL database engine, by default it runs on port 3306.
- **php** – this directory contains PHP installation files. It contains an important file named php.ini. This directory is used to configure how PHP behaves on your server.

XAMPP Control Panel

- The control panel is used to manage programs installed via XAMPP. To open the XAMPP control panel,
- Click on start menu
- Explore the programs directory and locate Apache Friends then XAMPP as shown in the diagram below

XAMPP Control Panel

XAMPP Control Panel v3.0.12 [Compiled: June 24th 2012]

Modules

Service	Module	PID(s)	Port(s)	Actions
<input checked="" type="checkbox"/>	Apache	1680	80, 443	Stop Admin Config Logs
<input checked="" type="checkbox"/>	MySQL	652	3306	Stop Admin Config Logs
<input checked="" type="checkbox"/>	FileZilla			Start Admin Config Logs
<input type="checkbox"/>	Mercury	1		Start Admin Config Logs
<input checked="" type="checkbox"/>	Tomcat			Start Admin Config Logs

3 Config
Netstat
XAMPP-Shell
Explorer
Win-Services
Help
Quit

2

1

4

12:10:09 [main] XAMPP Installation Directory: "c:\xampp\
12:10:10 [main] Initializing Modules
12:10:10 [apache] XAMPP Apache Service is already running on port 80
12:10:10 [apache] XAMPP Apache Service is already running on port 443
12:10:10 [mysql] XAMPP MySQL Service is already running on port 3306
12:10:10 [main] Starting Check-Timer
12:10:10 [main] Control Panel Ready

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XAMPP Control Panel

This section lists the installed services, modules and the process IDs PID(s). A green tick means the module has been installed as a service. The red mark means it has not been installed as a service. To install a service, click on the red mark. If the button shows a green tick and you click on it, the control panel will ask you if you want to uninstall the system.

This section shows Port(s) associated with the modules. The actions section is for; starting and stopping modules

- Open the administrative windows for Apache and MySQL
- Open configuration files for Apache, MySQL etc. to make changes
- View log files for the modules

This section contains useful utilities such as Netsat, windows services short cuts etc.

This section displays status information on the modules. The control panel can be used to;

- Install and uninstall services such as Apache, MySQL etc. that are installed via XAMPP
- Start and stop services.
- Open configure files etc.



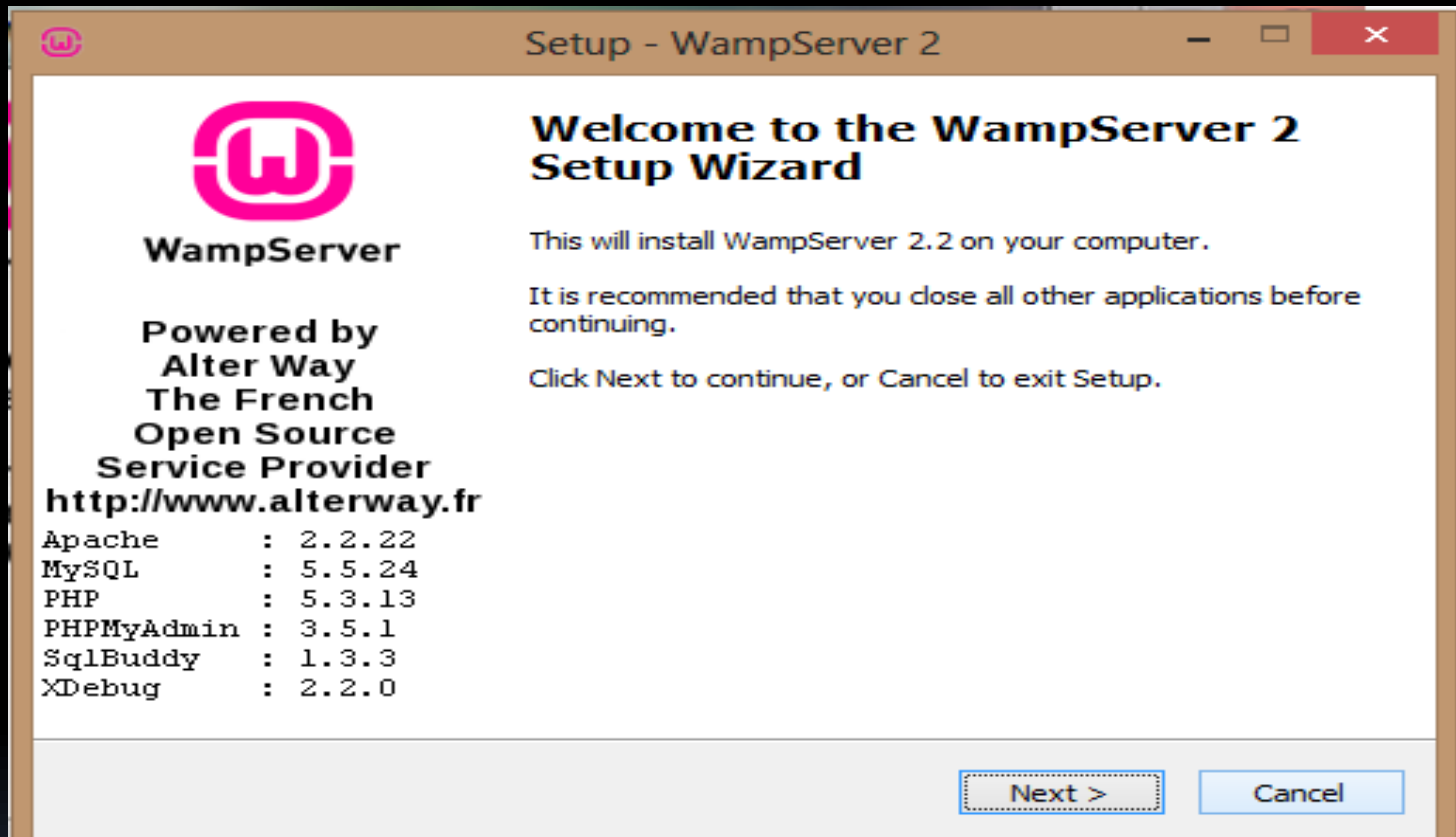
Installing and Configuring a WAMP

Download a copy of WAMP



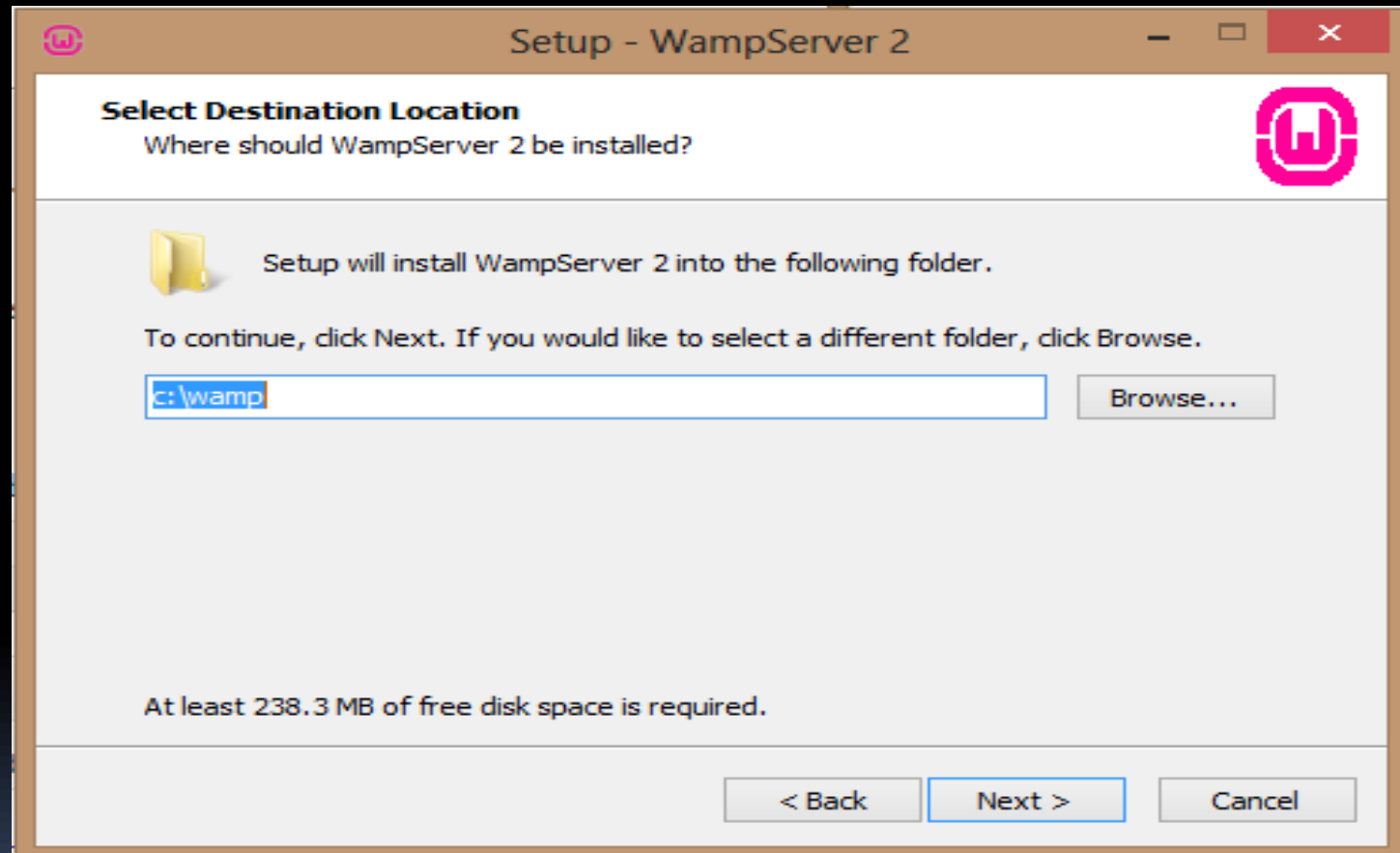
First you will need to download WAMP from <http://www.wampserver.com/en/download.php>. You will have the option to choose either the 32-bit or 64-bit version your choice depends upon your computer's configuration.

Install the software



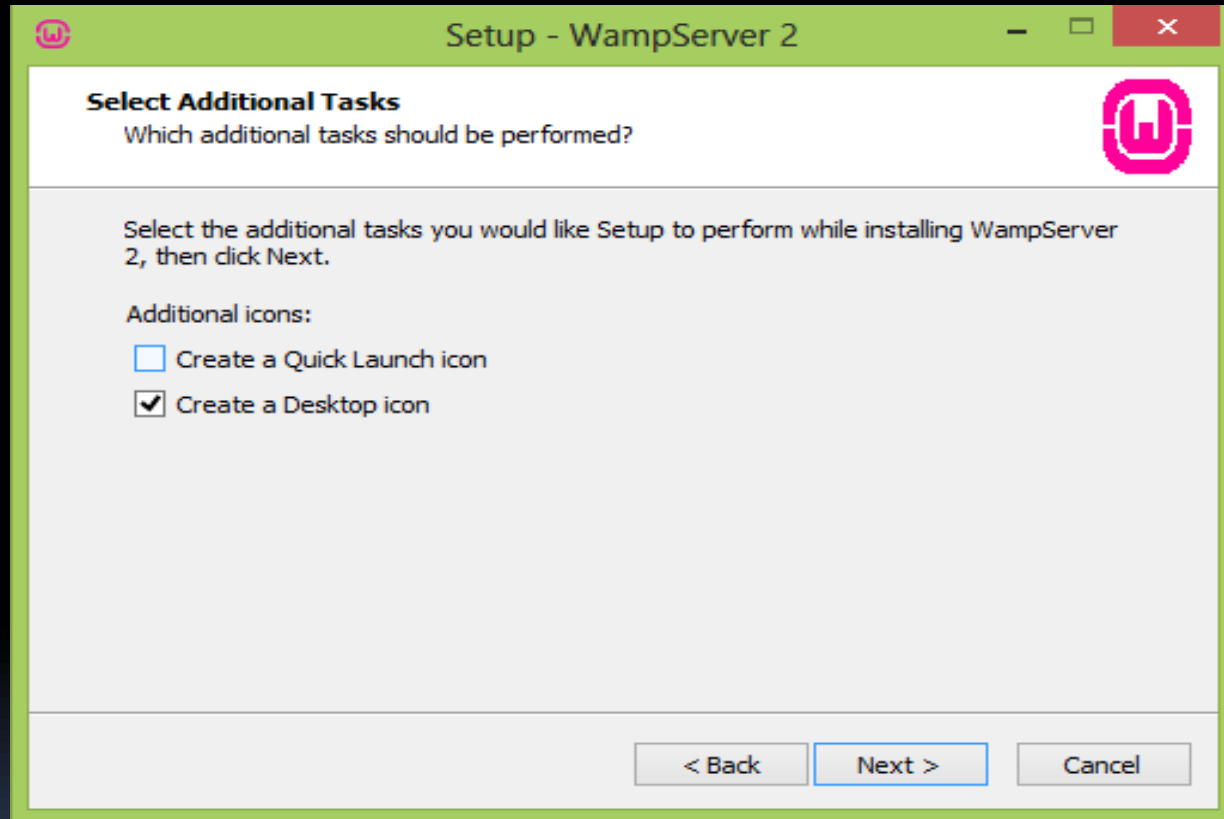
When you click next you will be asked to accept the license agreement. Basically it's a GPL license you are free to do just about anything with it so you can go ahead and accept it.

Destination Location



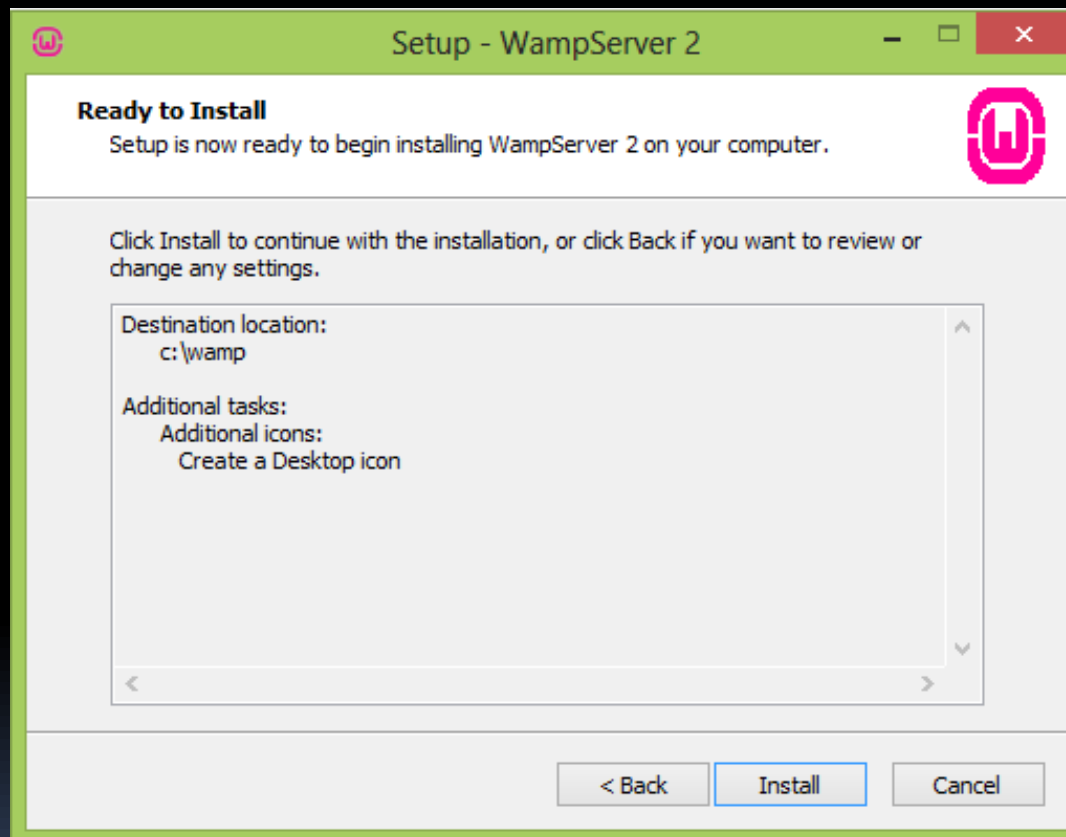
The next step is to select where you would like to install WAMP . The default will be c:wamp however you can change to which ever directory or partition you choose that please you.

Additional Tasks



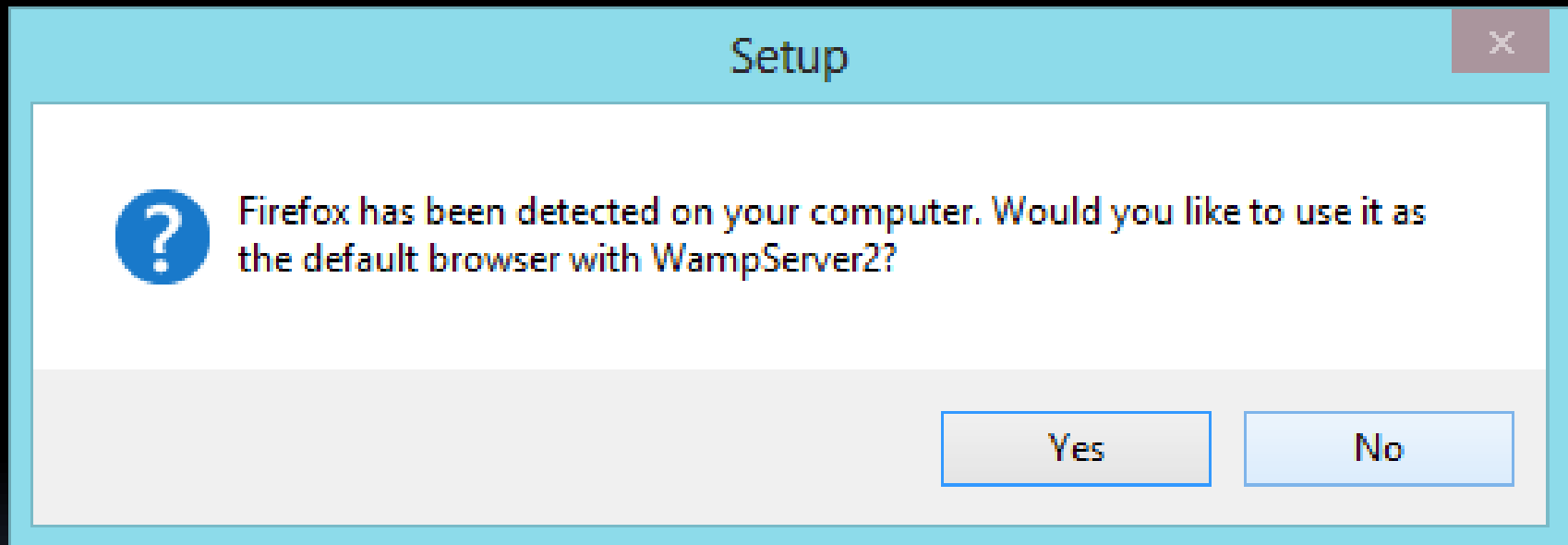
After you choose your directory you will have the option to setup icons. If you noticed only one option is selected but you can select the best option for you.

Ready to Install



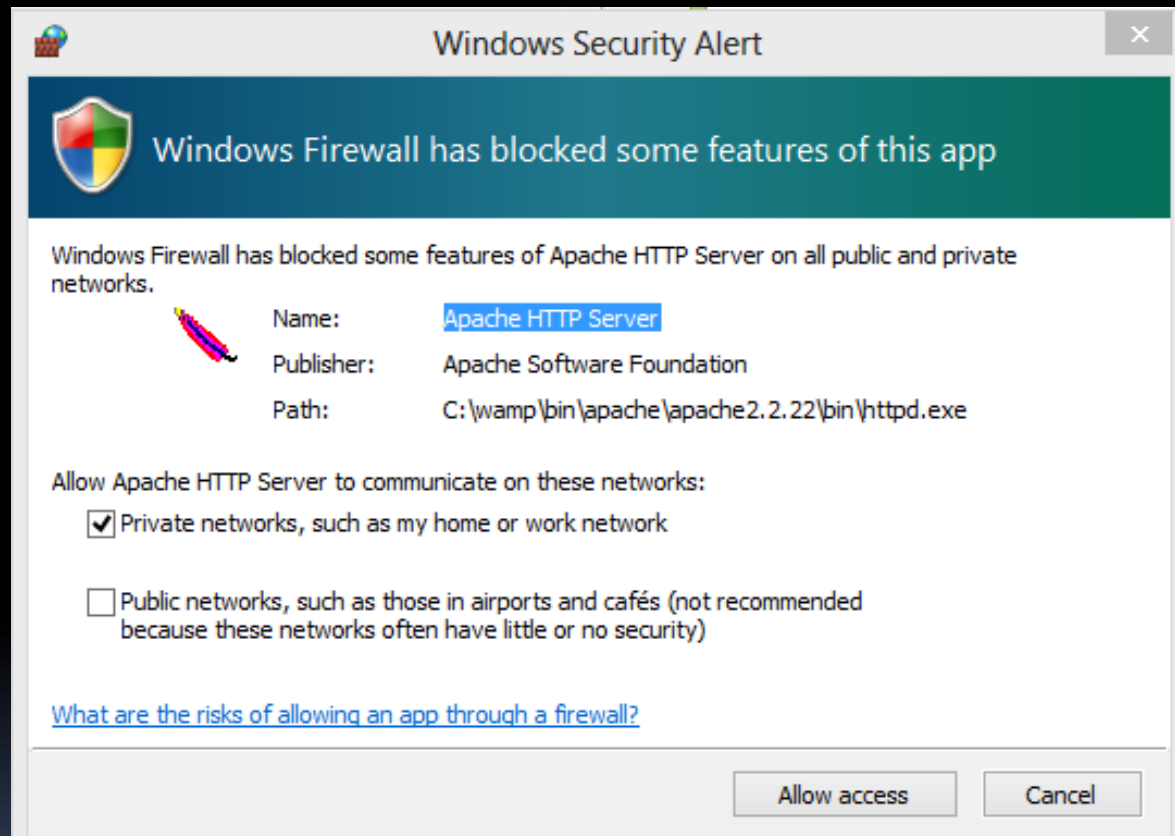
Once you decide on this click Next and then confirm the installation settings again by clicking Install.

Default Browser



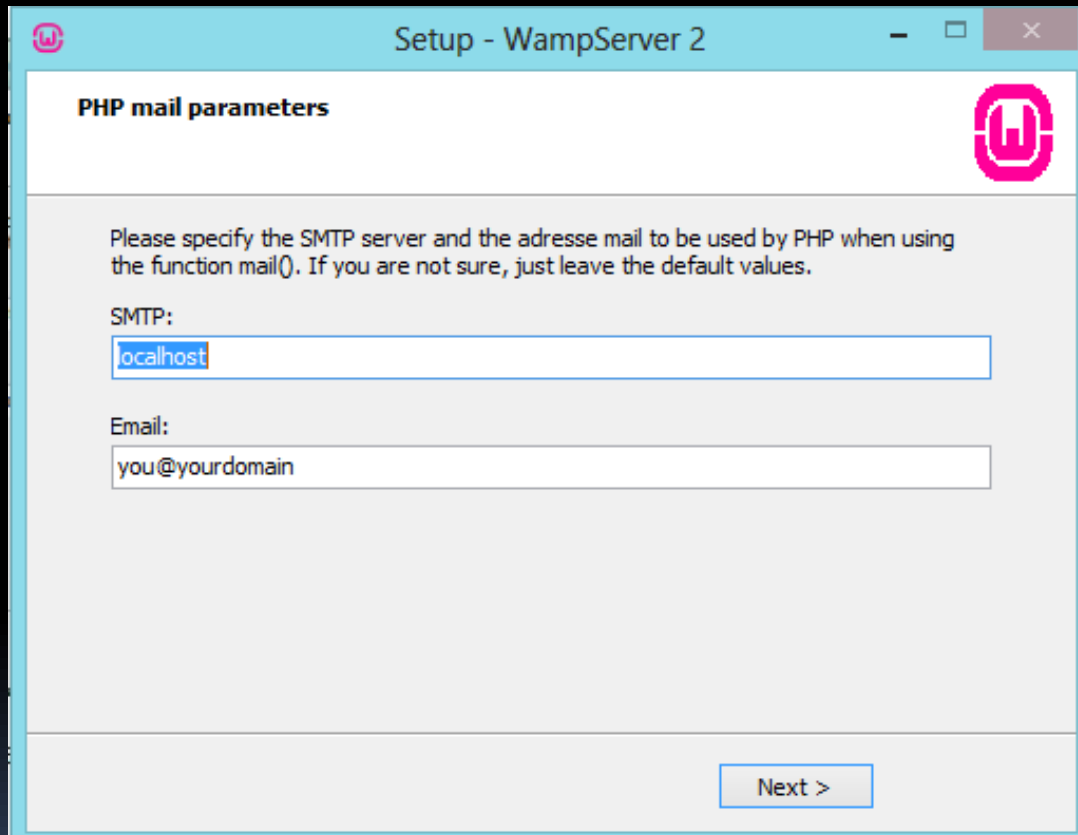
Once the installation finish installing its files WAMP will detect which is your default browser at the moment but you can select no and navigate your way to any other browser of your choosing.

Firewall



NB – if your Windows firewall pops up at this point make sure to grant Apache access.

PHP Mail Parameters



Setup - WampServer 2

PHP mail parameters

Please specify the SMTP server and the adresse mail to be used by PHP when using the function mail(). If you are not sure, just leave the default values.

SMTP:

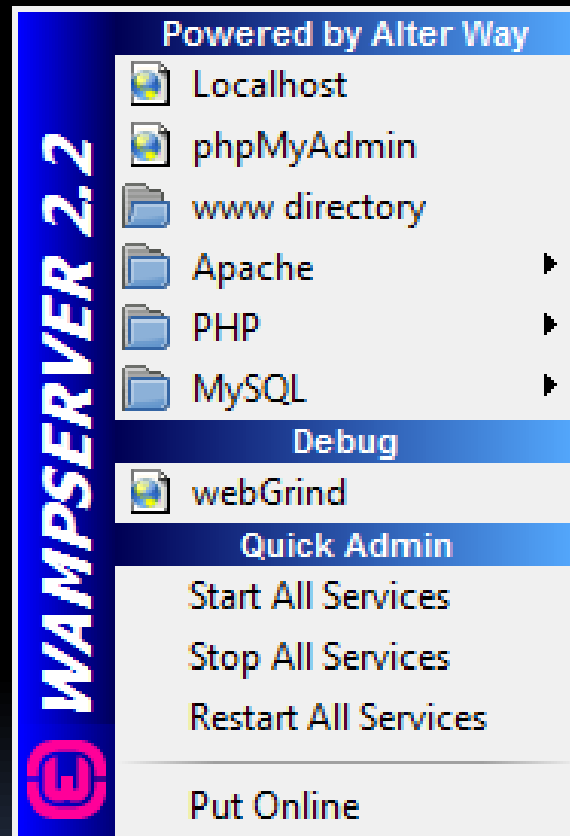
Email:

Next >

The next decision you will have to make is to set the PHP mail parameters. Most people leave this set to the defaults when setting up a testing server on their local computer. If you wish to configure it to connect to a SMTP server you may do so now all you need to do is click Next.

WAMP is now installed on your computer.

Testing



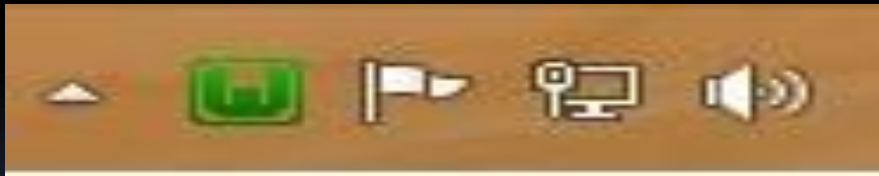
Now that everything has been installed let's test everything out.

Using one of the icons you created, or Start → start WampServer, you can launch the management console. Once opened, it will appear in the lower right hand corner of your screen

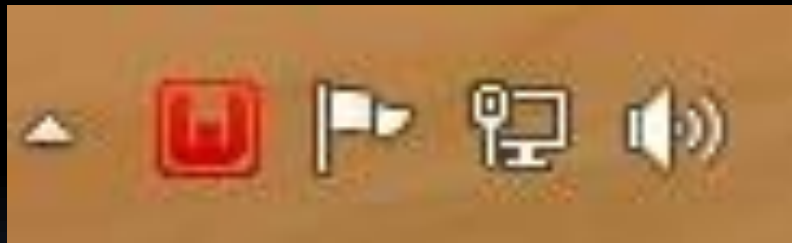
Running

If WAMP is not started go ahead and click Start All Services.

If you are not sure whether or not WAMP is running, look for the small green W icon in your toolbar.

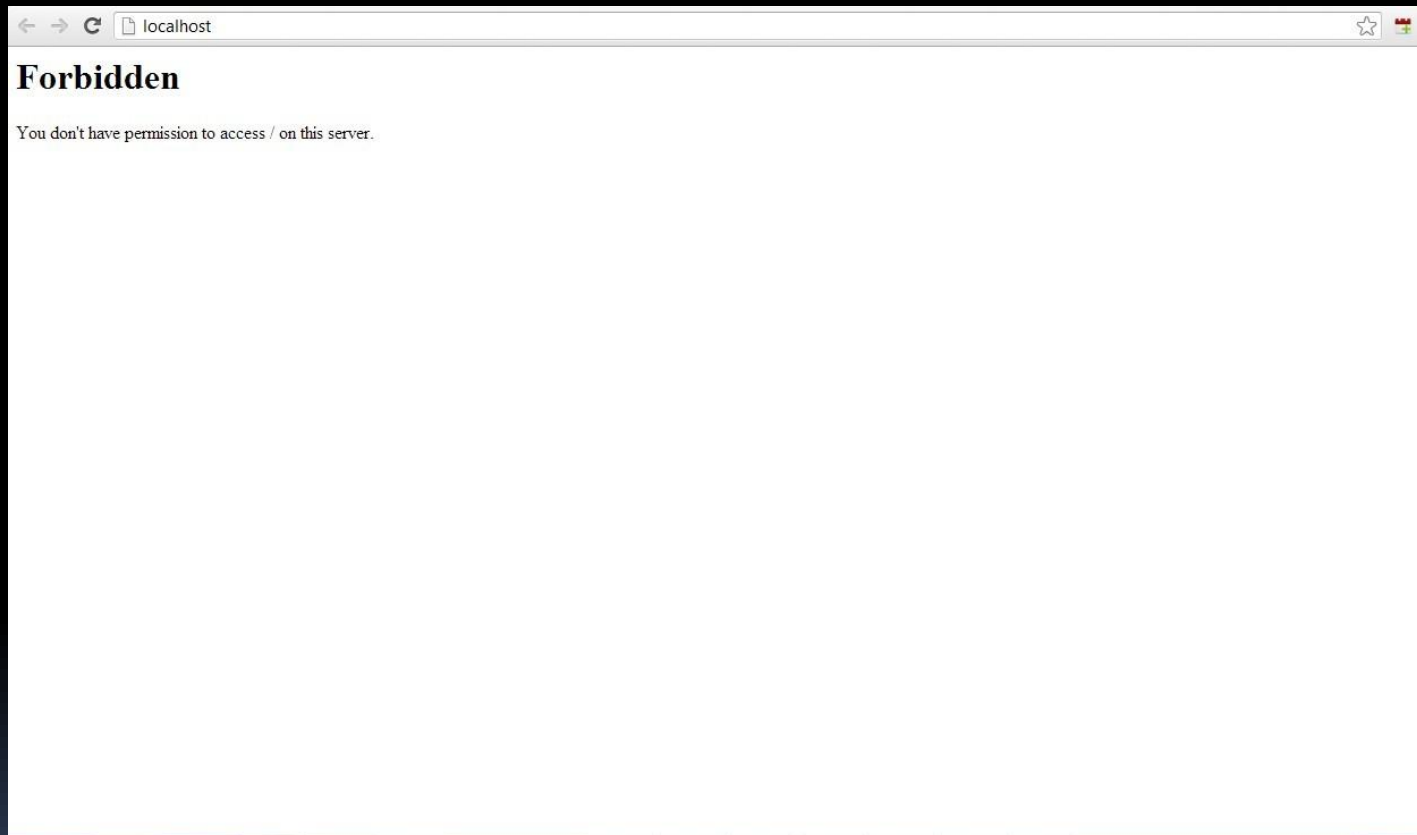


Stopped or some services running



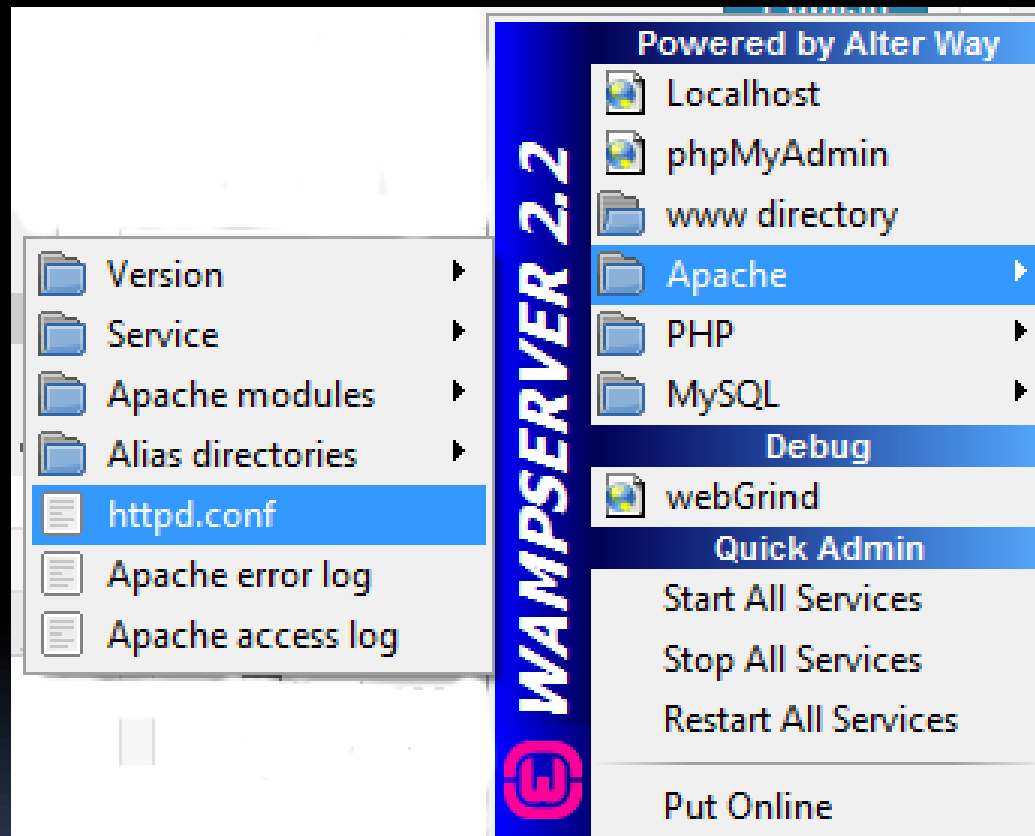
If it is red, WAMP services are stopped, green means everything is running while orange means some services are running.

Forbidden



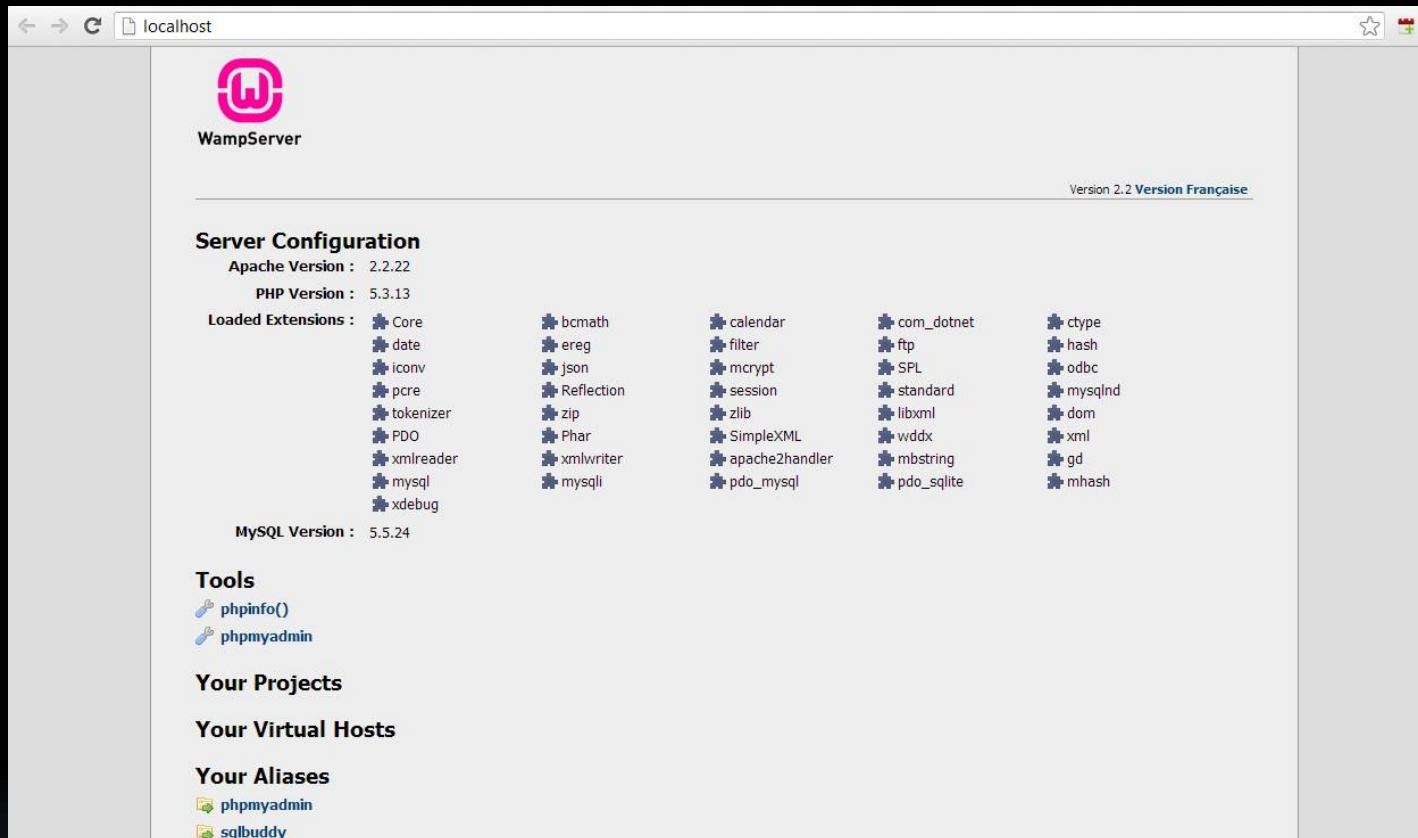
Now its time to check if everything was installed correctly. In the WAMP management console, click on Localhost. If you see the following screen pop up in your browser then everything is working but you only need to edit a few files to access WAMP via the <http://localhost> link.

Fixing LocalHost



Open the WAMP management console highlight Apache then click on httpd.conf

Localhost



From the text editor find the line "Allow from 127.0.0.1" and add "Allow from ::1" below it now save the file and close it.

Then next step is to restart all services go to the WAMP management console and click restart all services after WAMP has restarted all the services reopen your web browser if you closed it to <http://localhost> or just reload the page .If you see the following screen you did everything right so far now for the finishing touches .



Prepared By: Disha H. Parekh

CONFIGURING PHP ON IIS

Install IIS

- You can use the Web Platform Installer (Web PI) to install IIS, and applications that run on IIS.
- Web PI installs the latest versions of available Web Platform offerings with just a few simple clicks.
- Using Web PI, you can download and install any new tools or updates, including PHP.

To install IIS on Windows

- On the Start page, type Control Panel, and then click the Control Panel icon in the search results.
- In Control Panel, click Programs, and then click Turn Windows features on or off.
- In the Windows Features dialog box, click Internet Information Services, note the preselected features that are installed by default, and then select CGI. This selection also installs FastCGI, which is recommended for PHP applications.
- Click OK.
- To verify that IIS installed successfully, type the following into a web browser: <http://localhost>
- You see the default IIS Welcome page.

Install PHP by using Web PI

- **To install PHP by using Web PI**
 - Open a browser to the following website: [Microsoft Web Platform Installer 3.0](#).
 - Click **Download It Now**, and then click **Run**.
 - At the top of the **Web Platform Installer** window, click **Products**.
 - Click **Frameworks**, and then select the current version of PHP.
 - Click **Install**. The **Web Platform Installation** page displays the version of PHP and its dependencies that will be installed.
 - Click **I Accept**. Web PI installs the PHP packages.
 - Click **Finish**.

Install PHP by using Web PI

- To test your PHP installation
 - Open a text editor, for example Notepad, as Administrator.
 - In a new file, type the following text: `<?php
phpinfo(); ?>`
 - Save the file as `C:\inetpub\wwwroot\Phpinfo.php`.
 - Open a browser and enter the following URL:
<http://localhost/phpinfo.php>
 - A nicely formatted webpage is displayed showing the current PHP settings.



UNIT - 1: EMBEDDING PHP AND HTML



Prepared By: Prof. Disha H. Parekh

Embedding php and html

- From PHP you can produce clean HTML viewable with any browser; in other words, the user's browser does not need to understand PHP.

- For eg:

```
<html>
```

```
<head>
```

```
<title>A simple html demo</title>
```

```
</head>
```

```
<body>
```

```
<h1>HTML & php embedding</h1>
```

```
<?php
```

```
echo '<p>A simple php demo</p>';
```

```
?>
```

```
</body>
```

```
</html>
```

Embedding php and html

- This example illustrates the concept of server-side scripting in a nutshell. The PHP has been interpreted and executed on the web server, as distinct from JavaScript and other client-side technologies interpreted and executed within a web browser on a user's machine.
- The code that you now have in this file consists of four types of text:
 - HTML
 - PHP tags
 - PHP statements
 - Whitespace
- You can also add comments.
- Most of the lines in the example are just plain HTML.

PHP Tags

- The PHP code in the preceding example began with `<?php` and ended with `?>`.
- This is similar to all HTML tags because they all begin with a less than (`<`) symbol and end with a greater than (`>`) symbol.
- These symbols (`<?php` and `?>`) are called *PHP tags*.
- They tell the web server where the PHP code starts and finishes.
- Any text between the tags is interpreted as PHP. Any text outside these tags is treated as normal HTML. The PHP tags allow you to *escape* from HTML.

PHP Tags

There are actually two styles of PHP tags; each of the following fragments of code is equivalent:

- **XML style**

- `<?php echo '<p>Text</p>'; ?>`
 - This is the tag style that we use generally. It is the preferred PHP tag style. The server administrator cannot turn it off, so you can guarantee it will be available on all servers, which is especially important if you are writing applications that may be used on different installations. This tag style can be used with Extensible Markup Language (XML) documents.

PHP Tags

□ Short style

- `<? echo '<p>Order processed.</p>'; ?>`
 - This tag style is the simplest and follows the style of a Standard Generalized Markup Language (SGML) processing instruction. To use this type of tag—which is the shortest to type—you either need to enable the `short_open_tag` setting in your config file or compile PHP with short tags enabled. You can find more information on how to use this tag style in Appendix A. The use of this style is not recommended for use in code you plan to distribute. It will not work in many environments as it is no longer enabled by default.

PHP Statements

You tell the PHP interpreter what to do by including PHP statements between your opening and closing tags. The preceding example used only one type of statement:

- `echo '<p>Text</p>';`
- As you have probably guessed, using the echo construct has a very simple result: It prints (or echoes) the string passed to it to the browser. The result Text appears in the browser window.

Notice that there is a semicolon at the end of the echo statement.

Semicolons separate statements in PHP much like periods separate sentences in English.

Leaving off the semicolon is a common syntax error that is easily made. However, it's equally easy to find and to correct.

Whitespace

Spacing characters such as newlines (carriage returns), spaces, and tabs are known as *whitespace*. As you probably already know, browsers ignore whitespace in HTML, and so does the PHP engine. Consider these two HTML fragments:

- `<h1>Welcome to HTML World</h1><p>HTML has various tags to remember</p>`

and

- `<h1>Welcome to Bob's
Auto Parts! </h1>
<p>What would you like
to order today?</p>`

Whitespace

- These two snippets of HTML code produce identical output because they appear the same to the browser.
 - However, you can and are encouraged to use whitespace sensibly in your HTML as an aid to humans—to enhance the readability of your HTML code.
 - The same is true for PHP. You don't need to have any whitespace between PHP statements, but it makes the code much easier to read if you put each statement on a separate line.
 - For example,
 - ```
echo 'hello';
echo 'world';
```
    - and
    - ```
echo 'hello ';echo 'world';
```
- are equivalent, but the first version is easier to read.

Comments

- Comments are exactly that: Comments in code act as notes to people reading the code.
- Comments can be used to explain the purpose of the script, who wrote it, why they wrote it the way they did, when it was last modified, and so on. You generally find comments in all but the simplest PHP scripts.
- The PHP interpreter ignores any text in comments.
- Essentially, the PHP parser skips over the comments, making them equivalent to whitespace.
- PHP supports C, C++, and shell script–style comments.

Comments

The following is a C-style, multiline comment that might appear at the start of a PHP script:

- `/* Author: Bob Smith`

- `Last modified: April 10`

- `This script processes the customer orders.`

- `*/Multiline comments should begin with a /* and end with */. As in C, multiline comments cannot be nested.`

You can also use single-line comments, either in the C++ style:

- `echo '<p>Text</p>'; // Start printing order or in the shell script style:`

- `echo '<p>Text</p>'; # Start printing order`

Comments

- With both of these styles, everything after the comment symbol (# or //) is a comment until you reach the end of the line or the ending PHP tag, whichever comes first.
- In the following line of code, the text before the closing tag, here is a comment, is part of a comment. The text after the closing tag, here is not, will be treated as HTML because it is outside the closing tag:
`// This is a comment ?> And this is not a comment`



UNIT - 1

HOW IS PHP CODE PARSED?



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How is php code parsed?

- The web browser requests a document with a .php extension.
- The web server says, "Hey! Someone wants a PHP file, which means this is a file that needs to be parsed," and sends the request on to the PHP parser.
- The PHP parser finds the requested file and scans it for PHP code.
- When the PHP parser finds PHP code, it executes that code and places the resulting output (if any) into the place in the file formerly occupied by the code.
- This new output file is sent back to the web server.
- The web server sends it along to the web browser.
- The web browser displays the output.
- Because the PHP code is parsed on the server, this method of code execution is called *server-side code*. When code is executed in a browser, such as JavaScript, it is called *client-side code*.

PHP Start and End Tags

PHP Start and End Tags

- The PHP parser recognizes a few types of PHP start and end tags. It will attempt to execute anything between these tags, so it had better be valid code!
- Study below the table to learn the three main sets of start and end tags recognized by the PHP parser.

Opening Tag	Closing Tag
<code><?php</code>	<code>?></code>
<code><?</code>	<code>?></code>
<code><script language="php"></code>	<code></script></code>

PHP Start and End Tags - Examples

- Type the following code, which uses the first tag type:
 - ▣ `<?php echo "<P>This is a test using the first tag type.</P>";
?>`
- Type the following code, which uses the second tag type:
 - ▣ `<? echo "<P>This is a test using the second tag type.</P>";
?>`
- Type the following code, which uses the third tag type:
 - ▣ `<script language="php"> echo "<P>This is a test using the
third tag type.</P>"; </script>`



UNIT – 1

FEATURES OF PHP



Prepared by: Prof. Disha H. Parekh

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Simple and Easy

Error Reporting

Simplicity

Open Source

Interpreted

Case Sensitive

Efficiency



Flexibility

Familiarity

Sitesbay.com

More Faster

Platform Independent

Sitesbay.com

Real-Time Access Monitoring

Sitesbay.com

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Features of php

■ The main features of php is; it is open source scripting language so you can free download this and use. PHP is a server site scripting language. It is open source scripting language. It is widely used all over the world. It is faster than other scripting language.

Features of php

Some important features of php are given below:

- Simple
- Faster
- Interpreted
- Open Source
- Case Sensitive
- Simplicity
- Efficiency
- Platform Independent
- Security
- Flexibility
- Familiarity
- Error Reporting
- Loosely Typed Language
- Real-Time Access Monitoring

Features of php

Simple

- It is very simple and easy to use, compare to other scripting language it is very simple and easy, this is widely used all over the world.

Interpreted

- It is an interpreted language, i.e. there is no need for compilation.

Faster

- It is faster than other scripting language e.g. asp and jsp.

Open Source

- Open source means you no need to pay for use php, you can free download and use.

Platform Independent

- PHP code will be run on every platform, Linux, Unix, Mac OS X, Windows.

Features of php

Case Sensitive

- PHP is case sensitive scripting language at time of variable declaration. In PHP, all keywords (e.g. if, else, while, echo, etc.), classes, functions, and user-defined functions are NOT case-sensitive.

Error Reporting

- PHP have some predefined error reporting constants to generate a warning or error notice.

Real-Time Access Monitoring

- PHP provides access logging by creating the summary of recent accesses for the user.

Loosely Typed Language

- PHP supports variable usage without declaring its data type. It will be taken at the time of the execution based on the type of data it has on its value.