Indian Institute of Information Technology, Vadodara

College HR Management and Payroll System

Instruction Manual

CS301 Software Engineering Project – Autumn 2015

team #02 - ninEngineers

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Sr. No	Roll No.	Name
01.	201351005	Abhijit Singh Panwar
02.	201351006	Yash Choubey
03.	201351017	Rahul Nalawade
04.	201351021	Manu Sharma
05.	201351023	Murtuza Bohra
06.	201351024	Shalinee Singh
07.	201351030	Ajay Shewale
08.	201352006	Nitin Kumar Singh
09.	201352013	Sameer Bhati

Author/ Reviewer:

Author/ Reviewer	New Version	Date
Ajay Shewale	v1.0	24th September 2015
Rahul Nalawade	v1.1	17th October 2015
Manu Sharma	v1.2	26th October 2015
Shalinee Singh	v1.3	16th November 2015

Introduction

Payroll system is the heart of any Human Resource system of an organisation. And there are lots of HR and Payroll management systems that serve many organisations under different circumstances. But, most of them are static and require modifications according to the organisational needs.

Our Institute is in its developing phase. And the existing HR and Payroll System is managed manually by the administration. Besides, current course on Software Engineering deliberately expects us to do a project that will help our institute somehow.

We have develop a software solution to address the efforts and time-consuming manual operations of existing Payroll management by incorporating the software engineering practices.

Setting Up a Local Web Server

Our website execute on a web server running PHP. So before you start using website you need following program installed on your computer.

- The Apache web server
- The PHP engine
- The MySQL database server
- phpMyAdmin

You can either install them individually or choose a pre-configured package for you operating system like Linux and Windows. Popular pre-configured package are LAMP and XAMPP.

LAMP is for Ubuntu and XAMPP is for windows operating system. Below are installation process for both.

How to install Linux, Apache, MySQL, PHP (LAMP) on Ubuntu

LAMP

LAMP stack is a group of open source software used to get web servers up and running. The acronym stands for Linux, Apache, MySQL, and PHP. Since the virtual private server is already running Ubuntu, the linux part is taken care of. Here is how to install the rest.

Step 1 : Install Apache

Apache is a free open source software which runs over 50% of the world's web servers.

To install apache, open terminal and type in these commands:

```
sudo apt-get update
sudo apt-get install apache2
```

That's it. To check if Apache is installed, direct your browser to your server's IP address (eg. http://12.34.56.789). The page should display the words "It works!" like this.

Step 2 : Install MySQL

MySQL is a powerful database management system used for organizing and retrieving data

To install MySQL, open terminal and type in these commands:

```
sudo apt-get install mysql-server libapache2-mod-auth-mysql
php5-mysql
```

During the installation, MySQL will ask you to set a root password. If you miss the chance to set the password while the program is installing, it is very easy to set the password later from within the MySQL shell.

Once you have installed MySQL, we should activate it with this command:

```
sudo mysql_install_db
```

Step 3 : Install PHP

PHP is an open source web scripting language that is widely use to build dynamic webpages.

To install PHP, open terminal and type in this command.

```
sudo apt-get install php5 libapache2-mod-php5 php5-mcrypt
```

After you answer yes to the prompt twice, PHP will install itself.

Step 4 : Restart Server

Your server should restart Apache automatically after the installation of both MySQL and PHP. If it doesn't, execute this command.

```
sudo /etc/init.d/apache2 restart
```

Step 5 : Check Apache

Open a web browser and navigate to http://localhost/. You should see a message saying It works!

Step 6 : Check PHP

You can check your PHP by executing any PHP file from within /var/www/. Alternatively you can execute the following command, which will make PHP run the code without the need for creating a file

```
php -r 'echo "\n\nYour PHP installation is working fine.\n\n\n";'
```

YEAH, YOU HAVE INSTALL UBUNTU LAMP SERVER

SUCCESSFULLY !!

For further queries visit :

https://www.digitalocean.com/community/tutorials/how-to-install-linux-apache-mysql-php-lamp-stack-on-ubuntu

How to install XAMPP on Windows

XAMPP

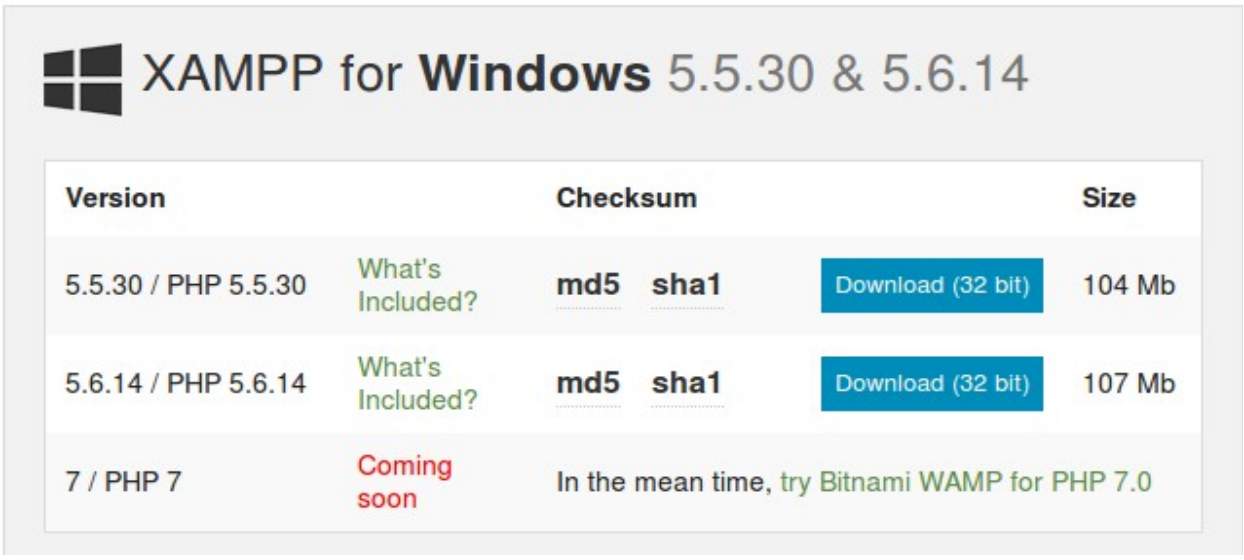
XAMPP is an Apache server distribution which has MySQL, PHP, PERL, and some other softwares like phpMyAdmin. A denotes Apache server, M stands for MySQL, P stands for PHP, and the last P is for PERL.

How to install?

Here is a link where you can download WampServer

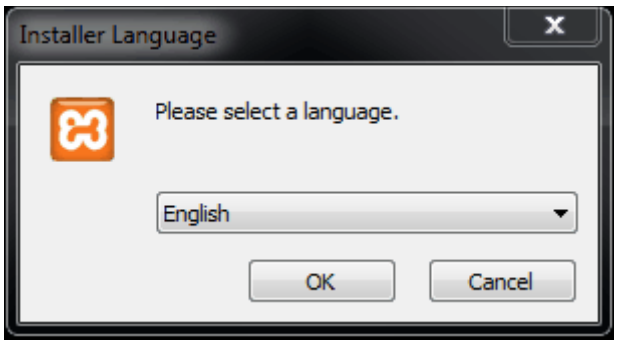
https://www.apachefriends.org/download.html

- First you need to download the XAMPP installer for Windows from above link
- This page will show latest versions of XAMPP for Windows and also for other operating systems like linux, mac etc.
- Now click on "Download" in the page, and then it will automatically download XAMPP installer.



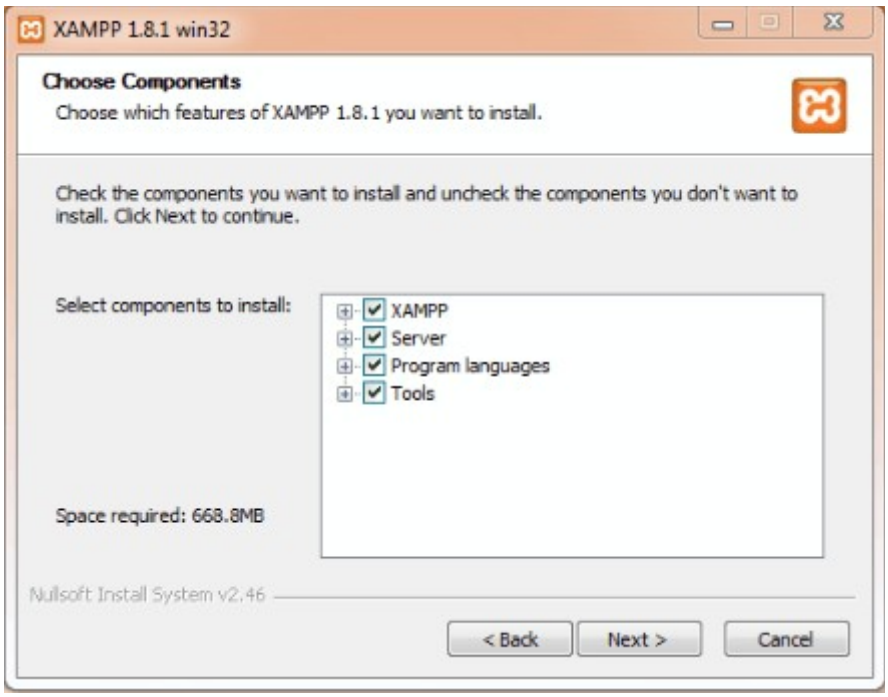
Installing XAMPP

Double click the downloaded *setup.exe* file to install XAMPP server as a *local sever* on your system. You'll see the following window.

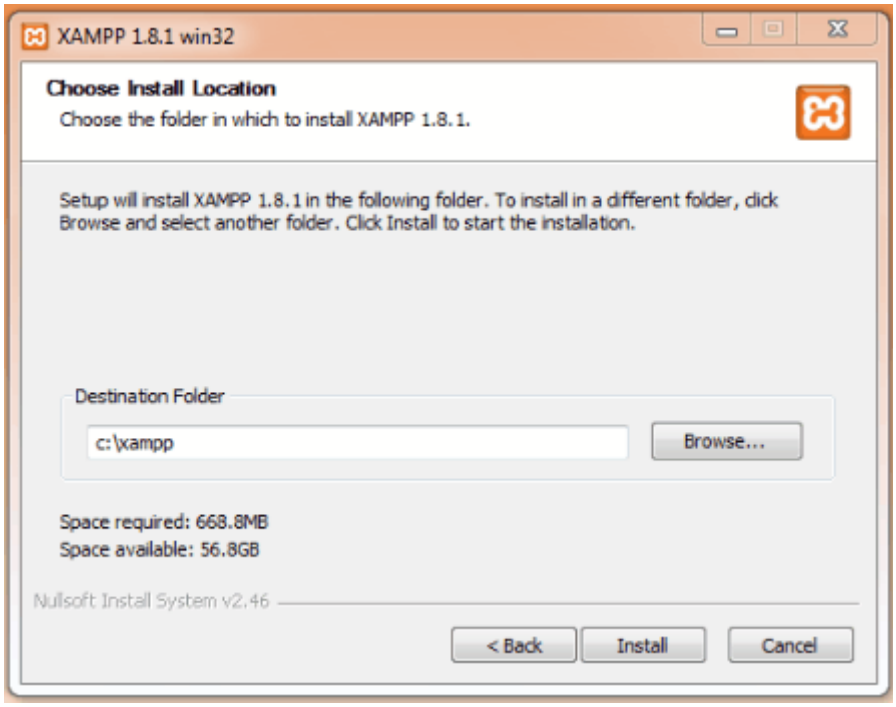


Select language

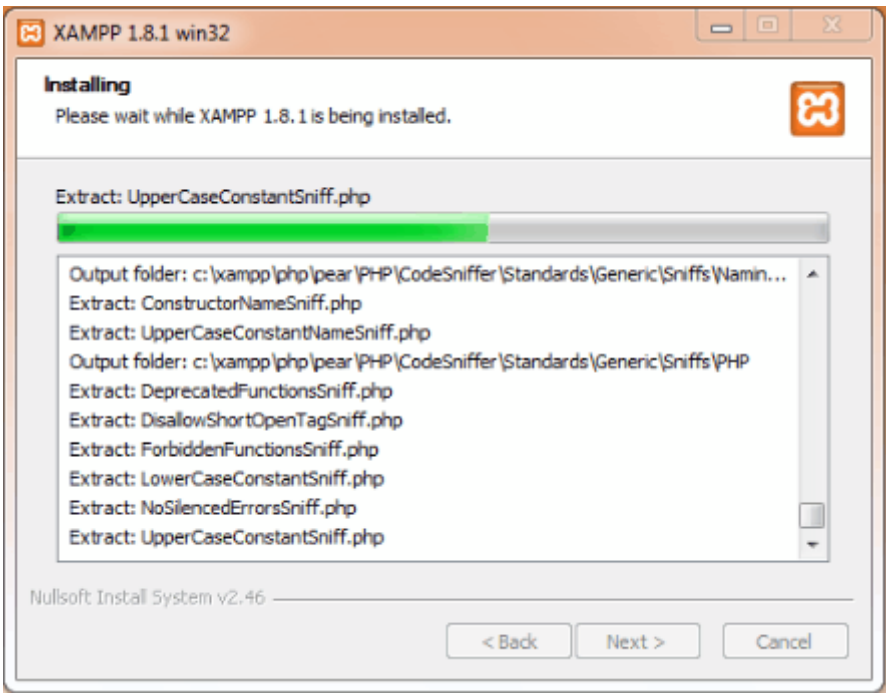
Click "next" to start installation process



Select all components to install and click “next”

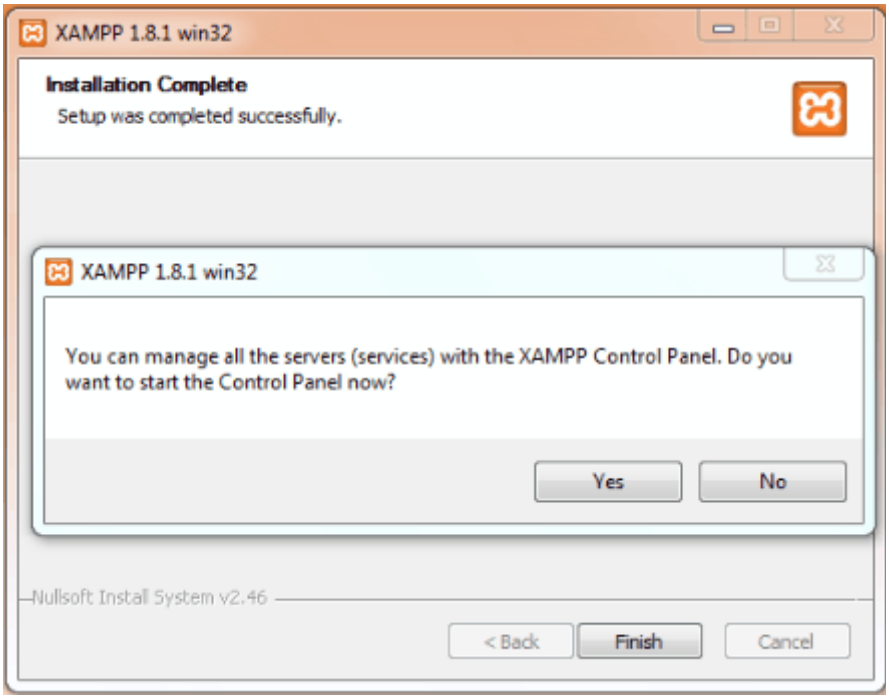


Choose install Location and click “install”

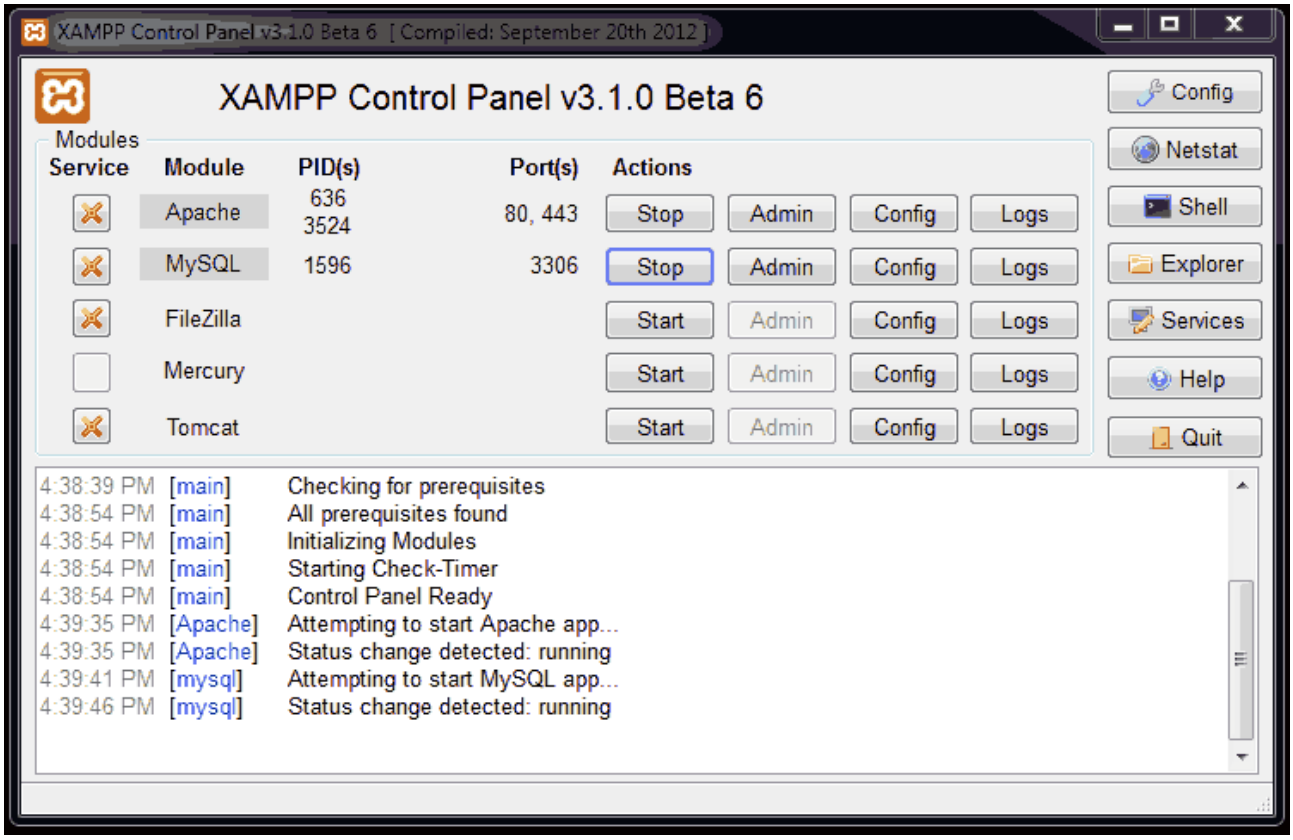


After Installing screen will be seen

Click on “finish” to finish installation process



Dialog box will ask to open XAMPP Control Panel. Click on "Yes" it will open XAMPP control panel.



Click on start button next to Apache and MySQL, wait for both to start. Both Apache and MySQL are running now.

Now open any browser and type *http//:localhost* in the address bar and hit *Enter!* The browser will direct you to page shown below.

Click on language you have to select and you are done.

CONGRATULATIONS, YOU HAVE SUCCESSFULLY INSTALL XAMPP ON WINDOWS !!

Creating MySQL database

A database created to hold all the website data and user information. We will set this database up using phpmyadmin.
To access phpMyAdmin you will need to know the IP address or domain name of your server.

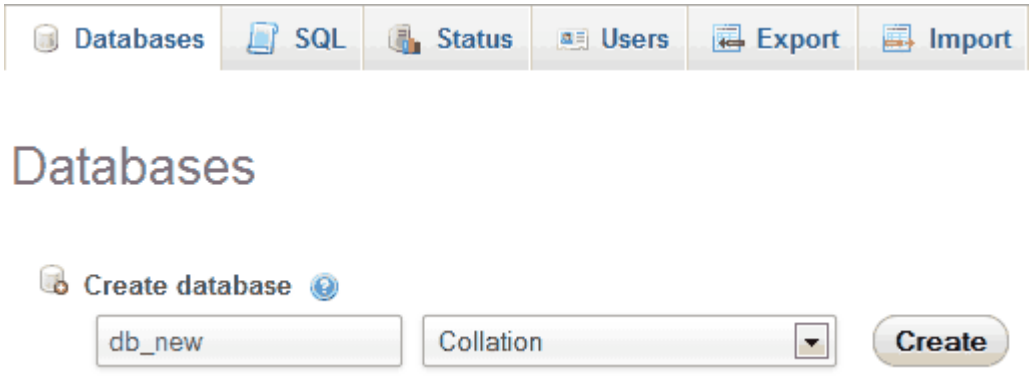
Open your browser and enter the the IP address or domain name of your server followed by /phpmyadmin

Login Page

Login to phpMyAdmin : Enter `root` as a username and enter your MySql password

in password field.

Create an empty database from the database tab

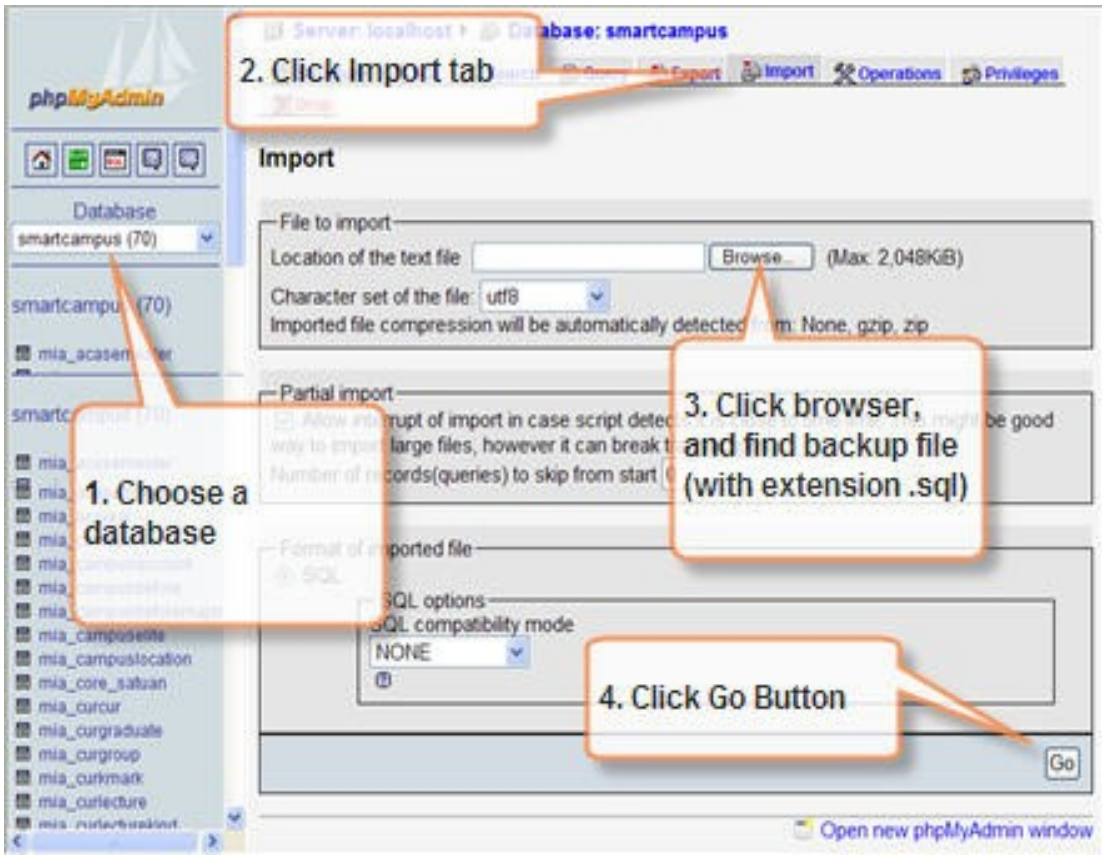


Write a database name in the "Create database" textfield, and click on Create button. A database will be created.

Import database

- Click the Import tab.

- Click the Browse button.
- Locate the file to be imported.
- Click Open or OK, depending on your browser.
- Select the proper collation from the drop-down.
- Select the format of the import file.
- Click Go.



Running scripts

Before running PHP files, they should be placed inside the web folder of a web server and then make a request to desired PHP file by typing its URL in the web browser If you installed a web server in your computer, usually the root of its web folder can be accessed by typing http://localhost in the web browser. So, if you placed a file called hello.php inside its web folder, you can run that file by calling http://localhost/hello.php.

Windows users: XAMPP

Under XAMPP root directory there is a folder called **htdocs**. That's where you should put your web site related stuff. For each web site you create, it's better to create a folder inside **htdocs** folder and then put content inside that to avoid conflicts.

For example, you can create a folder called Payroll inside **htdocs** folder and put employee.php inside that. Then you can access it via URL

http://localhoost/payroll/employee.php

It will look for an index file which is inside the folder. So if you have index file in Payroll folder you would see its output once you typed http://localhost/Payroll/.

Linux users: LAMP

To run scripts they must be in the folder `/var/www/` If you have a script called `Admin.php` you will have to browse to http://localhost/Admin to view it.

That's it.....

Reference

- https://www.digitalocean.com/community/tutorials/how-to-install-linux-apache-mysql-php-lamp-stack-on-ubuntu
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