Computer Science 213 -01
Web Development with LAMP
Lab 1: Set up your LAMP environment
using Ubuntu Linux with VirtualBox

Due date: Monday, September 16 (before midnight)

1. Download **VirtualBox** from the Oracle site, and install it into your Windows/MaxOS laptop (and/or desktop at home). After the installation of VirtualBox, make sure that you also download and install **VirtualBox Extension Pack** from the same site below:

    https://www.virtualbox.org/wiki/Downloads

2. Next download "Ubuntu Destop 22.04.4" (iso file) desktop version from the site below.

    https://releases.ubuntu.com/22.04/?_gl=1*1ydmxbf*_gcl_au*MTMzMzkzMzk1OS4xNzI1MjIzNzY3Y3Y3Y3Y3Y3Y3Y3&_ga=2.5114035.1608257085.1725223765-1060768159.1725223765

3. Use VirtualBox to create a Ubuntu Linux virtual machine with the iso file. You can refer to the site below.
    https://protechnotes.com/create-ubuntu-vm-in-virtualbox-picture-guide/

    or Youtube video:
    https://www.youtube.com/watch?v=hYaCCpvjsEY

    Notes:
    - During the configuration and creation of your VM, make sure your Ubuntu virtual machine is configured to have sufficient memory **(4GB recommended,** not 1 GB as shown in the picture guide) and disk space (at least **30GB recommended**, not 10 GB as shown in the picture guide) for our lab assignments and course project.

    - During the installation of your VM, you'll be prompted for your name, username and password to create an admin account for you. Make sure that you type in your username with the combinations of your first name and the first letter of your Last name like "DanL" for "Dan Ling", "JohnD" for "John Doe", "MaryJ" for "Mary Johnson", etc. We (TA and myself) will look at these usernames to identify all your screenshots for your lab assignments. Please do not share your screenshots with anyone!

4. Refer to the handout instructions titled " Installing Google Chrome on Ubuntu", download and install *Google Chrome* browser for your Ubuntu Linux virtual machine. Add the Chrome browser app to the favorites.

5. Install *flameshot* (a free screenshot utility) from Ubuntu Software Center or using a terminal with the following command: $ sudo apt install flameshot

6. Install LAMP server using simple password "letmein" for your virtual machine. Please refer to the handout instructions titled "How to install LAMP server on Ubuntu 22.04".

7. To allow the web server's document root (/var/www/html) to be able to save PHP script files in there with programs like text editors, we need to change the permission:

    $ sudo chmod -R a+rwx /var/www/html

8. Use *gedit* to create a simple PHP script as shown below and save it as **info.php** into /var/www/html directory.
    $ gedit /var/www/html/info.php

```
<?php
     phpinfo();
?>
```
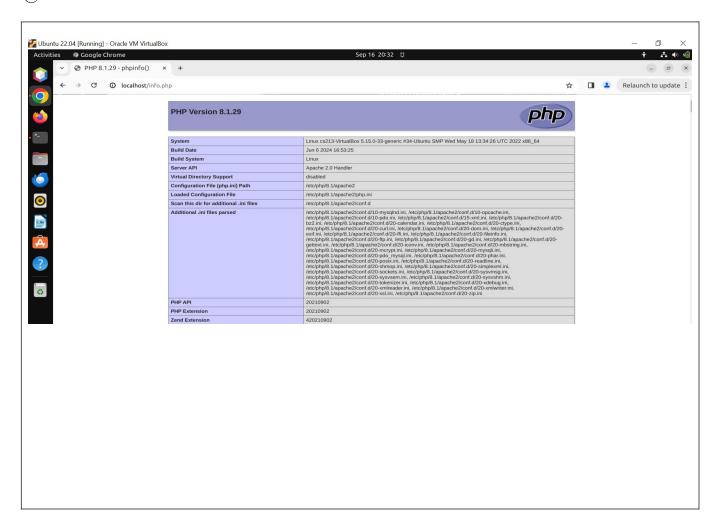
9. Open a Firefox or Chrome browser, and type in the URL: **http://localhost/info.php**

If you see the result similar to the following:

Then you can use Flameshot (or Snipping Tool in Windows) to take a screenshot of the browser including the top part of an open Terminal session showing your username like cs213@...., JohnD@...., MaryJ@... similar to the screenshot above, and paste your own screenshot into the table below.
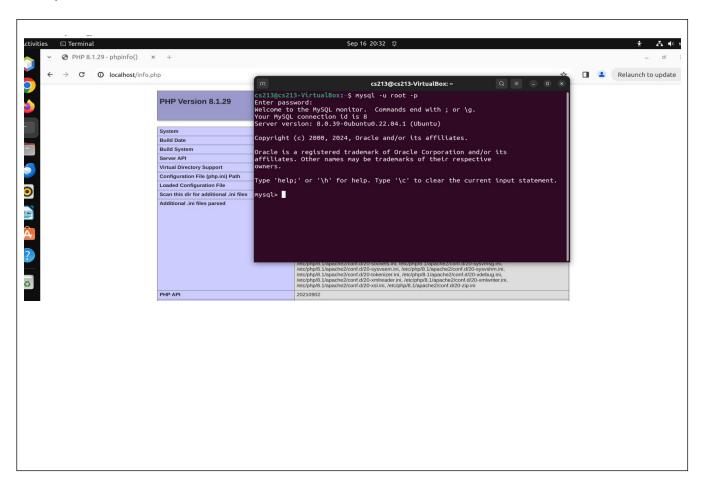
I AM USING THE 219 ISO FROM LAST YEAR AS I HAVENT TAKEN 213 YET, THE DE TOFAULT USER FOR THE ISO IS CS213@213, I WILL ASK IN LAB HOW TO CHANGE IT TO USER@213

10. Next login to your MySQL server using the simple password "**letmein**" as shown below:

Insert your screenshot into the table below:

Export this word document as a new PDF file. Submit the PDF file via <u>Lab1</u> on our Moodle page for marking by **Monday, September 16, 2024 (before midnight).**