CS100: Software Tools & Technologies Lab I

Lab-5: Practice Problems (PHP)

Date: 15-April-2023

Instructions:
1. Try to complete lab problems during the lab hour and submit it through canvas. If you can't complete it within the lab time, you can submit it by the end of today. There will be a penalty if you don't submit on the same day.
2. Prepare all your solution files in a zip file and name it as <ROLLNO.zip> and submit on canvas.

Setting up PHP:

Please follow the below instructions to set up PHP in your lab machine.

1. Login to ubuntu using the following credentials:
   Username: user
   Password: password
2. Type the following commands to setup PHP
   a. sudo apt update
   b. sudo apt install php libapache2-mod-php
   c. sudo systemctl restart apache2
3. If the above steps are successful, PHP and Apache server are installed. You can check if the server is working by typing the below URL in the browser.
   http://localhost/
4. Now, you can start writing your PHP codes on the server (presently the server is installed on your own machine) at the below directory.
   /var/www/html
5. You should give 777 permissions to www directory and all subdirectories (by typing the below command) so you can write your server codes.
   a. chmod -R 777 /var/www

Please follow the below steps If the PHP is not successful.

1. I have already installed PHP on my machine, you can directly access it using the below.
   a. http://vishweshwork.iitbhilai.ac.in/
2. You can login to my server machine as follows.
   a. ssh cs100@vishweshwork.iitbhilai.ac.in
   b. Password: lab4cs100
3. A terminal will appear you can start writing your codes inside /var/www/html directory
4. You should create a directory as <ROLL> inside /var/www/html and start writing your codes

Reference Link:
https://linuxize.com/post/how-to-install-php-on-ubuntu-20-04/

Problem-1:

1. Download the Lab-4 demo files from canvas.
2. Unzip and put them under /var/www/html and check if you are able to get all of them working.
3. Try to understand these problems and how they are working.

Problem-2:
1. Create a simple html form inside "login.html using POST method. The file should have 3 fields
   a. Username as text box
   b. Password as text box (but password characters should be visible as dots)
   c. Submit button
2. The user can enter any values. If the username and password both are **cs100,** you should display the message as "Login is successful" in the welcome.php file, otherwise, you should display it as "Login is unsuccessful".

Problem-3:

1. Create a simple html form inside "calculator.html using GET method. The file should have 3 fields
   a. Operand 1 (as number)
   b. Operand 2 (as number)
   c. Operator (which can be ADD, SUB, MUL)
2. Write another php calculate.php which takes these values and perform the operation as specified the user and prints the result on the calcuate.php

Problem-4:

1. Create a simple html form inside "userdetails.html using POST method. The file should have 4 fields
   a. Name
   b. Email Address
   c. Contact Number
   d. Country
3. Write another php user.php which takes the input values and displays a table in the below format. In the below example, assuming the Name, Email, Contact, Country are supplied as CS100, cs100@iitbhilai.ac.in, 123456789, India, respectively. Please note the header should be in bold text.

Name	Email	Contact	Country
CS100	cs100@iitbhilai.ac.in	123456789	India