**Lab 07 Server-side Programming using PHP (5)**

**Module Intended Learning Outcome (#1 and #2):**

**On completion of the module, students are expected to be able to:**

**• Understand basic server-side programming using PHP.**

**Lesson Intended Learning Outcome:**

**On completion of this lab, students are expected to be able to:**

**• Authenticate user credential with PHP and MySQL**

**• Apply state mechanism in web application**

redirect

post

post

get

redirect

post



Structure of the website:

* Main files:
  + frm*xxx*.php : HTML Form
  + db*xxx*.php : Retrieve data from DB
  + msg*xxx*.php : Reply message to the user
  + **login\_form.php : HTML Form and user authentication from DB**
  + **logout.php : session logout**
  + **debug.php : test cookie function and for debugging**
  + **registration\_form.php : admin account registration from**
  + **registration\_submit.php: process the data from registration\_form.php to create new admin account.**
  + **frmAdminUpdate.php : update admin account information form.**
  + **dbAdminUpdate.php: process the data from frmAdminUpdate.php to update the admin account information.**
* Include files:
  + db.inc.php : connect database; used by all db*xxx*.php, frmupdate.php and login.php
  + **session.inc.php : check if user has been logged in**

Unzip all files and put them into correct directories and

create folder **inc** on the lab7 directoryand put db.inc.php under inc folder.

/localhost/**lab7**/**inc**/db.inc.php

**Import database from file:**

Extract lab7.sql from the zip.

Use phpMyAdmin or MySQL workbench create the database and table.

**Task 1 Cookies**

1. Open debug.php, use var\_dump() to display the cookie array to check if there is no cookie.

echo password\_hash('123',PASSWORD\_DEFAULT);

var\_dump($\_COOKIE);

1. Create cookie information to save preferred language of the user. This cookie will be store in 5 minutes.

var\_dump($\_COOKIE);

setcookie('lang', 'en', time()+300);

1. Browse <http://localhost/lab7/debug.php> again to check if cookie information can be received by the server.

一張含有 文字, 字型, 白色, 筆跡 的圖片

自動產生的描述

1. Comment the line of setcookie immediately after the result is checked.

// setcookie('lang', 'en', time()+300);

1. Wait around 6 minutes and browse <http://localhost/lab7/debug.php> again.
2. Is the cookie still alive?

No.

A close up of a text

Description automatically generated

**Task 2 Hashing the password and registration form**

1. Open the debug.php
2. Create a hashed password in the program:

<?php

echo password\_hash('123',PASSWORD\_DEFAULT);

what is the output? Can you see the original password ?\

Answer: Cannot see the original password



1. Given the file registration\_submit.php with incomplete source code, complete it so that the source code can:
   1. Received the data from the form and trim it:

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自動產生的描述

* 1. Validate the data(already done for you)”

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自動產生的描述

* 1. Create hashed password:

一張含有 文字, 字型, 螢幕擷取畫面, 行 的圖片

自動產生的描述

* 1. Prepare an insert statement(already done for you):
  2. Bind parameters, username, email and hashed password:

一張含有 文字, 螢幕擷取畫面, 字型, 行 的圖片

自動產生的描述

1. Try to register with following data

|  |  |
| --- | --- |
| Username | *Your name* |
| Password | Testing123 |
| Email | testing@stu.vtc.edu.hk |

Example:

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自動產生的描述

一張含有 文字, 螢幕擷取畫面, 字型, 標誌 的圖片

自動產生的描述

一張含有 文字, 字型, 行, 螢幕擷取畫面 的圖片

自動產生的描述

**Task 3 Session - Login**

1. Browse <http://localhost/lab7/login_submit.php> . Check if the two links work.

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自動產生的描述

1. Open login\_submit.php. Copy the following source code and paste it to the corresponding location, complete the missing part.

**//select the user data**

**$stmt = $pdo->prepare("SELECT \* FROM \_\_??\_\_ WHERE username = :username");**

**$stmt->bindParam(':\_\_??\_\_, \_\_??\_\_);**

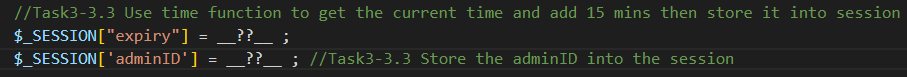
**$stmt->execute();**

1. Complete the following step to complete the program:
   1. use password\_verify function to verify the password whether is match.



* 1. use session\_regenerate\_id to regenerate session ID.



* 1. Use time function to get the current time and add 15 mins then store it into session; Store the adminID into the session.

1. Try to login with:
   1. Incorrect password :

Username: sam; password: 123

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自動產生的描述

一張含有 文字, 螢幕擷取畫面, 字型, 標誌 的圖片

自動產生的描述

* 1. Incorrect username :

Username: helloworld; password: Sam01

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自動產生的描述

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自動產生的描述

* 1. Correct username and password:

Username: sam; password: Sam01

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自動產生的描述

一張含有 文字, 螢幕擷取畫面, 字型, 標誌 的圖片

自動產生的描述

一張含有 文字, 螢幕擷取畫面, 字型, 數字 的圖片

自動產生的描述

**Task 4 Session – Checking Session Data**

1. After login, edit debug.php to show session data:

**//echo password\_hash('123',PASSWORD\_DEFAULT);**

**session\_start();**

**//var\_dump($\_COOKIE);**

**//setcookie('lang', 'en', time()+300);**

**var\_dump($\_SESSION);**

1. Do you understand the value of the current datetime?

Show expiry and current datetime:

var\_dump($\_SESSION);

**date\_default\_timezone\_set('Asia/Hong\_Kong');**

**echo 'Expiry:'.date( DateTime::COOKIE, $\_SESSION['expiry'] );**

**echo 'Now:'.date( DateTime::COOKIE, time() );**

**Task 5 Session – Checking Login Status**

1. Create session.inc.php in c:\wamp\lab7\**inc**\
2. Copy the source codes from Lec7 P.15 and paste them to session.inc.php
3. In dbstu.php, include session.inc.php on line 2.

<?php

require\_once "./inc/session.inc.php";

require\_once "./inc/db.inc.php";

1. Browse <http://localhost/lab7/logout.php> to logout. Then click ‘Select All Students’, can you browse the page?
2. Login the system. Can you browse the dbstu.php right now?
3. Repeat the same steps to check login status on frmupdate.php, dbupdate.php and msgupdate.php .
4. Browse <http://localhost/lab7/logout.php> to logout. Click all the links and make sure they cannot browse the pages.

**Task 6 Update admin login status**

1. Given the incomplete file frmAdminUpdate.php. compelte the mission part to get the admin id from session:

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自動產生的描述

1. Given the incomplete file dbAdminUpdate.php compelte the mission part to get the admin id from session:

一張含有 文字, 字型, 螢幕擷取畫面, 數字 的圖片

自動產生的描述

1. Login the account with username **sam** and password **Sam01**, update the password from Sam01 to Testing123 and update the email from [sam@gmail.com](mailto:sam@gmail.com) to sam@stu.vtc.edu.hk

一張含有 文字, 螢幕擷取畫面, 字型, 數字 的圖片

自動產生的描述

一張含有 文字, 字型, 螢幕擷取畫面, 行 的圖片

自動產生的描述

一張含有 文字, 螢幕擷取畫面, 字型, 標誌 的圖片

自動產生的描述

1. Check the database and login the account again with the new password.

一張含有 文字, 字型, 行, 螢幕擷取畫面 的圖片

自動產生的描述

一張含有 文字, 螢幕擷取畫面, 字型, 標誌 的圖片

自動產生的描述