CSIS 311 Server Site Scripting

Assignment 4

INSTRUCTIONS

In this assignment, students are required to create **PHP** programs that will allow an authorized user enter mentor information into a form. The collected data is then submitted to a database.

Step 1 (15pts)

- 1) Create php program, named *login.php*, using skeleton code provided. This code is expect to function as follows:
 - a) to provide a user a form that has the contents of Table 1.
 - b) to use POST method for submitting the form.
 - c) to use header() function to redirect authenticated users to a page, mentors.php,
 - d) It is possible that a user is already logged in. Write code to check this, using a boolean variable \$logged_in. If the user is already logged in, your code should redirect the user to a page, mentors.php. (See page 346). Skeleton code has been provided, login.php, which you are to modify.
 - e) Create a simple php code, logout.php. When executed code should simply say "You are logged out."

Table 1

Label for mentor	Component to accept Input	
Username	Use input type, text	
Password	Use input type, password	

Step 2 (10pts)

2) Your code will use sessions to remember if your site user is already logged in. The skeleton code *msessions.php* has been provided. Modify this code so that either of the following two users can log in and use the mentor system and update the Mentors table in the database using the specified credentials.

a) User 1 (Username: amaka; Password: amakapassword

b) User 2 (Username: peter; Password: peterpassword

Step 3 (25pts)

- 3) From the previous steps, if a user is successfully authenticated, the user will be redirected to *mentors.php*. Here, you will create code, *mentors.php* and it is expected to function as follows:
 - a) When a user is redirected to mentors.php, include html code to say "Welcome Amaka" or "Welcome Peter" (see page 33).
 - b) It will contain a form for data input as indicated in table 2.
 - c) Form will use POST method.

d) Use htmlspecialchars() function in appropriate parts of your code to reduce the risk of cross site scripting attacks.

The skeleton code, mentors-skeleton-code.php, has been provided for use, here.

Table 2

Label for mentor	Component to accept Input
first name	Appropriate form component
last name	Appropriate form component
email	Appropriate form component
telephone	Appropriate form component
Address	Text Area
Highest Degree	Radio buttons (Bachelors, MSc., PhD.)
Graduation Year	Dropdown list (2012-2022)
Mentoring Interests	☐Computer Science
	☐ Cybersecurity
	☐ Computer Information Technology
	☐Computer Information Systems
NA	Save button - Will cause entries to be
	stored in database table
NA	Reset button - Will cause entries to be
	cleared

Step 4 (30pts)

- 4) In this step, you will create an SQL database, mentors-system.
 - a) Create an empty SQL database named mentors-system, using XAMPP.
 (Click on PHPmyAdmin > Click on New at the top of the database list > Enter the name of your new database; Use utf8mb4_unicode_ci; Click on Create)
 - b) Next, create a user for your new database. The user name should be your first name. Set your own password. Make a note of these credentials, as you will need them to connect to the database. See pages 394-395 of the course text.
 - c) You will write php code to create a table, called **mentors** in your newly created database.

Sample code, table-create.php have been given to you with the following sql statement

\$sql = "CREATE TABLE mentorsTest (id INT(6) NOT NULL AUTO_INCREMENT PRIMARY KEY,

firstname VARCHAR(30) NOT NULL,

lastname VARCHAR(30) NOT NULL,

email VARCHAR(50) NOT NULL UNIQUE);";.

Run this sample code first, on a database of your choice to see how it works.

Then, modify the sql statement contained in the sample code, table-create.php accordingly, so that the **mentors** table is created according to table 3.

Table 3

id	INT(6)	NOT NULL AUTO_INCREMENT PRIMARY KEY
firstname	VARCHAR (30)	NOT NULL
lastname	VARCHAR (30)	NOT NULL
email	VARCHAR (50)	NOT NULL UNIQUE
telephone	VARCHAR (30)	NOT NULL
Address	VARCHAR (200)	NOT NULL
HighestDegree	VARCHAR (30)	NOT NULL
GraduationYear	INT (4)	NOT NULL
Mentoringinterests	VARCHAR (50)	NOT NULL

Step 5 (20pts)

- 5) Here, you will augment the code you created for the form in step 3, **mentors.php** so that when the code is executed, it will cause data acquired from the form to be inserted into the mentors table in the database. (See page 250 in course text). Also, sample code has been provided, **mentor-insert-example.php**
 - a) Using the \$_SERVER global array, your code should check if the form has been submitted with HTTP POST.
 - b) If the form has been submitted appropriately, data is acquired from the \$_POST superglobal array to be sent back to the database table, mentors.
 - c) Use the form to collect data **for at least two different mentors** and store the data in the mentors table.

<u>Deliverables</u>

- 1. Your PHP codes for all the steps
- 2. A document (in MS Word or PDF) which includes screenshots demonstrating your program is functioning as required. The screenshot should indicate your name in the frame.

Screenshot should show data written to database.

Combine the above files together in a .zip file and then upload them.

3. Your README.txt document. The name of this document should be that exact spacing, spelling, and capitalization: "README.txt".

In the README.txt document, you will include an explanation of how to run your program, how to interpret the output, and how to determine if your program is working or not.

Additionally, you should have a description of the files that you are including in the .zip file along with instructions on how to run your program and information about the purpose of your program.

Submit deliverables to the appropriate assignment drop box on D2L.

Resources

- 1) Chapter 6: Getting data from Browsers, PHP and MySQL, Jon Duckett.
- 2) Chapter 12: Get & Show Data From a Database, PHP and MySQL, Jon Duckett.