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COMP2121 E-Business

Lab 9: MySQL and PHP Login and logout Systems

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Outline

1. Create a general connection file (using include)
2. Verify the registered email
3. Redirect and HTTP_REFERER
4. Login from redirect
5. Login with Session
6. Logout

Ex1: Create a PHP project in Apache Netbeans IDE

- Make sure that your Apache service is running.
- Create the new PHP application Project Name as *Lab09MySQL*
- Locate the new project in your local Apache's *htdocs* folder, for example,
 - D:\eBusinessKevinYuenLabs\Apache24\htdocs*Lab09MySQL*

Continue to the last exercise

Result Grid								
		Filter Rows:		Edit:		Export/Import:		
	id	name	pwd	email	gender	date	phone	check
	1	name	123	abc@abc.com	male	2010	777	yes
	2	kevin yuen	123	kf@kevin.yuen.hk	Male		333	yes
	3	kevin yuen	123	kf@kevin.yuen.hk	Male		333	yes
	4	kevin yuen	123	kf@kevin.yuen.hk	Male		333	yes
▶	5	Kevin Yuen	123	kevin.yuen@abc.com	Male	2020-11-02	678163273	yes
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

How can we solve the problems that clients' browsers post several times?

How can we prevent duplicated registration?

The simplest way:

1. Check email/phoneNo input before insert the data
2. Redirect the web after data are inserted

Ex 2: Create a general connection file

1. Copy the last file (ex7.php) from previous lab to the current project
2. Rename the file as ex2.php;
3. Create a new file name as connection.php;
4. Cut and paste the connection code in ex2.php into connection.php;
5. Include connection.php at the top php code of ex2.php.

connection.php

```
<?php
include "pwd.php"; // to hide my MySQL passwords;
$serverName = "localhost";
$username = "root";
$password = $yuenLocalPWD; //you may write your password directly
$dbname = "lab08";

$connection = new mysqli($serverName, $username, $password,$dbname);

//var_dump($connection->connect_error); // no error return NULL
//var_dump(!$connection->connect_error); // not NULL returns true
// -> is an object operator to access methods or attributes, similar to "." in Java
if (!$connection->connect_error) {
    echo "<br> Connected successfully <br>";
} else {
    die("Connection failed: " . $connection->connect_error);
}
```

Ex2.php

```

12 <body>
13 <?php
14
15 include "connection.php";
16
17 $name = $pwd = $pwd2 = $email = $gender = $date = $phone = $check = "";

```

Put in the top of php

```

73 if($isName && $isPWD && $isEmail1 && $isEmail2 && $isEmailMatched && $isPhone)
74 {
75     $sqlStatement = "INSERT INTO customer("
76         . "`name`,`pwd`,`email`,`gender`,`date`,`phone`,`check`" .
77         . "VALUES('$name','$pwd','$email','$gender','$date','$phone','$check')";
78
79     if ($connection->query($sqlStatement) === TRUE) {
80         echo "<br>Registration is successful! <br>";
81     } else {
82         echo "Error updating record: " . $connection->error;
83     }
84     $connection ->close();
85
86 }

```

Registration x

http://localhost/Lab09MySQL/ex2.php

100%

Connected successfully

Registration is successful!

Membership Registration

Name:

Password:

Retype Password:

Email:

Retype email:

Gender: ☐ Female ☒ Male ☐ Others

Date of Birth (optional):

Phone number:

Agree with the terms and services: ☐

Cookie name = Kevin Yuen
 Cookie pwd = 345
 Cookie email = kevin.yuen@hello.com
 Cookie gender = Male
 Cookie date =
 Cookie phone = 66666
 Cookie check = yes

name = Kevin Yuen
 pwd = 345
 pwd2 = 345
 email = kevin.yuen@hello.com
 gender = Male
 date =
 phone = 66666
 check = yes

Ex3: Verify the registered email

On the basis of ex2.php, create ex3.php

```
//validate email input
if (!filter_var($email, FILTER_VALIDATE_EMAIL)) {
    echo "Invalid email format.<br>";
} else{
    $isEmail1 = true;
}

if (!filter_var($email2, FILTER_VALIDATE_EMAIL)) {
    echo "Invalid retype email format.<br>";
} else{
    $isEmail2 = true;
}

if($email != $email2)
{
    echo "emails are not matched <br>";
} else{
    $isEmailMatched = true;
}
```

Which place will be the best location to verify if the email is registered or not?

Ex3: Verify the registered email

```
if($email != $email2)
{
    echo "emails are not matched <br>";
} else{
    $sqlStatement = "SELECT email "
        . "FROM customer where email='$email'";
    $result = $connection->query($sqlStatement);
    if ($result->num_rows == 0)
    {
        $isEmailMatched = true;
    } else {
        echo "your email has been registered <br>";
    }
}
```


Ex3: Verify the registered email

id	name	pwd	email	gender	date	phone	check
1	name	123	abc@abc.com	male	2010	777	yes
2	kevin yuen	123	kf@kevin.yuen.hk	Male		333	yes
3	kevin yuen	123	kf@kevin.yuen.hk	Male		333	yes
4	kevin yuen	123	kf@kevin.yuen.hk	Male		333	yes
5	Kevin Yuen	123	kevin.yuen@abc.com	Male	2020-11-02	678163273	yes
6	Kevin Yuen	345	kevin.yuen@hello.com	Male		66666	yes
7	Kevin Yuen	345	kevin.yuen@hello.com	Male		66666	yes
8	Kevin Yuen	345	kevin.yuen@hello.com	Male		66666	yes
9	Kevin Yuen	345	kevin.yuen@hello.com	Male		66666	yes
10	Kevin Yuen	345	kevin.yuen@hello.com	Male		66666	yes
11	H Yuen	345	kevin.yuen@hello3.com	Male		4444	yes
	NULL	NULL	NULL	NULL	NULL	NULL	NULL

- Rows 1-10 contain errors created previously.
- After row 11, no duplicated emails will be shown as the new email logic has been implemented.

Connected successfully
your email has been registered

Membership Registration

Name:

Password:

Retype Password:

Email:

Retype email:

Gender: ☐ Female ☒ Male ☐ Others

Date of Birth (optional):

Phone number:

Agree with the terms and services: ☐

Cookie name = Kevin Yuen
Cookie pwd = 345
Cookie email = kevin.yuen@hello.com
Cookie gender = Male
Cookie date =
Cookie phone = 66666
Cookie check = yes

name = Kevin Yuen
pwd = 345
pwd2 = 345
email = kevin.yuen@hello.com
gender = Male
date =
phone = 66666
check = yes

Connected successfully

Registration is successful!

Membership Registration

Name:

Password:

Retype Password:

Email:

Retype email:

Gender: ☐ Female ☒ Male ☐ Others

Date of Birth (optional):

Phone number:

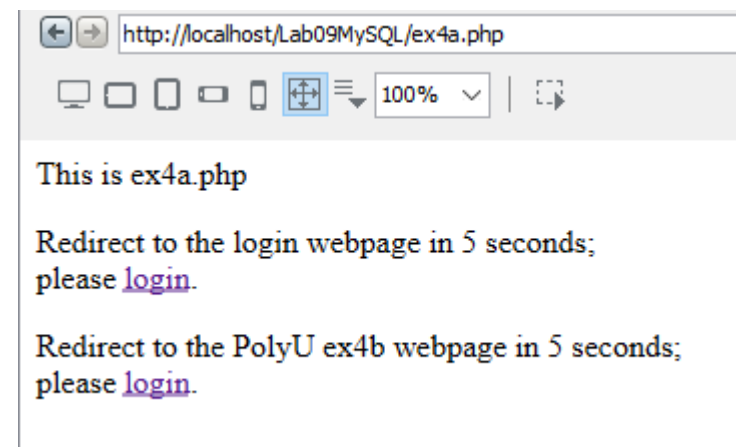
Agree with the terms and services: ☐

Cookie name = H Yuen
Cookie pwd = 345
Cookie email = kevin.yuen@hello3.com
Cookie gender = Male
Cookie date =
Cookie phone = 4444
Cookie check = yes

name = H Yuen
pwd = 345
pwd2 = 345
email = kevin.yuen@hello3.com
gender = Male
date =
phone = 4444
check = yes

Ex4: Redirect and HTTP_REFERER

```
1 <!DOCTYPE html>
2 <!--
3 COMP2121
4 Lab09
5 2020
6 Kevin Yuen
7 -->
8 <html>
9 <head>
10 <meta charset="UTF-8">
11 <title></title>
12 </head>
13 <body>
14 <?php
15 $time = 5 ;
16 echo "This is ex4a.php";
17 header("refresh:$time; url= ex4b.php");
18 ?>
19 <p>Redirect to the login webpage in <?php echo $time ?> seconds; <br>
20 please <a href="ex4b.php">login</a>. </p>
21 <p>Redirect to the PolyU ex4b webpage in <?php echo $time ?> seconds; <br>
22 please <a href="http://www4.comp.polyu.edu.hk/~kf2yuen/Lab09MySQL/ex4b.php">login</a>.
23 </p>
24 </body>
25 </html>
```



Ex4: Redirect and HTTP_REFERER

From redirect

login x

http://localhost/Lab09MySQL/ex4b.php

100%

http://localhost/Lab09MySQL/ex4a.php
Please use email for your login name:
Login Name:
Password:
Submit

Just open this webpage

login x

http://localhost/Lab09MySQL/ex4b.php

100%

No referrer.
Please use email for your login name:
Login Name:
Password:
Submit

```

1 <!DOCTYPE html>
2 <!--
3 COMP 2121
4 Lab09
5 2020
6 Kevin Yuen
7 -->
8
9 <html>
10 <head>
11 <meta charset="UTF-8">
12 <title>login</title>
13 </head>
14 <body>
15 <?php
16 if (isset($_SERVER['HTTP_REFERER']))
17 {
18     echo "<br>";
19     echo $_SERVER['HTTP_REFERER']; #display the previous (REFERER) webpage
20     echo "<br>";
21 } else {
22     echo "No referrer. <br>";
23 }
24 ?>
25 <form method="post" action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]);?>"
26     Please use email for your login name: <br>
27     Login Name: <input type="text" name="logName" required> <br>
28     Password: <input type="password" name="pwd" required> <br>
29     <input type="submit">
30
31 </body>
32 </html>
    
```

Ex5: Login from redirect

Copy ex3.php and rename as **ex5a.php**. Update the code as below.

```
if($isName && $isPWD && $isEmail1 && $isEmail2 && $isEmailMatched && $isPhone)
{
    $sqlStatement = "INSERT INTO customer("
        . "`name`,`pwd`,`email`,`gender`,`date`,`phone`,`check`) "
        . "VALUES('$name','$pwd','$email','$gender','$date','$phone','$check')";

    if ($connection->query($sqlStatement) === TRUE) {
        echo "<br>Registration is successful! <br>";

        //Redirect to login.php
        $time = 5 ;
        echo "this is ex5a.php";
        header("refresh:$time; url= ex5b.php");

        echo " <p>Redirect to the login webpage in $time seconds;
            <br> Or press <a href='ex5b.php'>login</a> directly. </p>";

    } else {
        echo "Error updating record: " . $connection->error;
    }

    $connection ->close();
}
```

Registration

http://localhost/Lab09MySQL/ex5a.php

100%

Connected successfully

Registration is successful!
this is ex5a.php

Redirect to the login webpage in 5 seconds;
Or press [login](#) directly.

Membership Registration

Name:

Password:

Retype Password:

Email:

Retype email:

Gender: ☐ Female ☒ Male ☐ Others

Date of Birth (optional):

Phone number:

Agree with the terms and services: ☐

Cookie name = Kevin Yuen
Cookie pwd = 123
Cookie email = kf@edu.hk
Cookie gender = Male
Cookie date =
Cookie phone = 333
Cookie check = yes

name = Kevin Yuen
pwd = 123
pwd2 = 123

Ex5: Login with Session

Copy ex4b.php and rename as **ex5b.php**. Update the codes as below.

1. On the top of the page, add the code

```
<?php
// Initialize the session
session_start();
$_SESSION['loggedin'] = false;
?>
```

3. Display from previous step

2. After the form, add the code

```
<?php
include "connection.php";
if ($_SERVER["REQUEST_METHOD"] == "POST" && isset($_POST['logName']))
{
    $logName = $_POST['logName']; //"kevin.yuen3@hello3.com";
    $pwd = $_POST['pwd']; //"345";
    $sqlStatement = "SELECT name,email, pwd FROM customer "
        . "WHERE email='$logName' AND pwd='$pwd'";
    $result = $connection->query($sqlStatement);

    if ($result->num_rows == 0)
    {
        echo "<p>login information is not correct.</p>";
        exit; // do not execute the rest code;
    } else {
        $resultValue = $result->fetch_assoc();
        var_dump($resultValue);

        $userName = $resultValue['name'];
        $_SESSION['name'] = $userName ;
        $_SESSION['loggedin'] = true;

        echo "<p>Hello $userName </p>";

        $time = 5;
        echo "<p>redirecting to content page with login "
            . "in $time seconds</p>";
        header("refresh:$time; url= ex5c.php");
        echo "<p>Press <a href='ex5c.php'>here</a>. </p>";
    }
}
```

Ex5: Login with Session

http://localhost/Lab09MySQL/ex5a.php

Please use email for your login name:

Login Name:

Password:

Connected successfully



http://localhost/Lab09MySQL/ex5b.php

Please use email for your login name:

Login Name:

Password:

Connected successfully

```
array(3) { ["name"]=> string(10) "Kevin Yuen" ["email"]=> string(9) "kf@edu.hk" ["pwd"]=> string(3) "123" }
```

Hello Kevin Yuen

redirecting to content page with login in 5 seconds

Press [here](#).

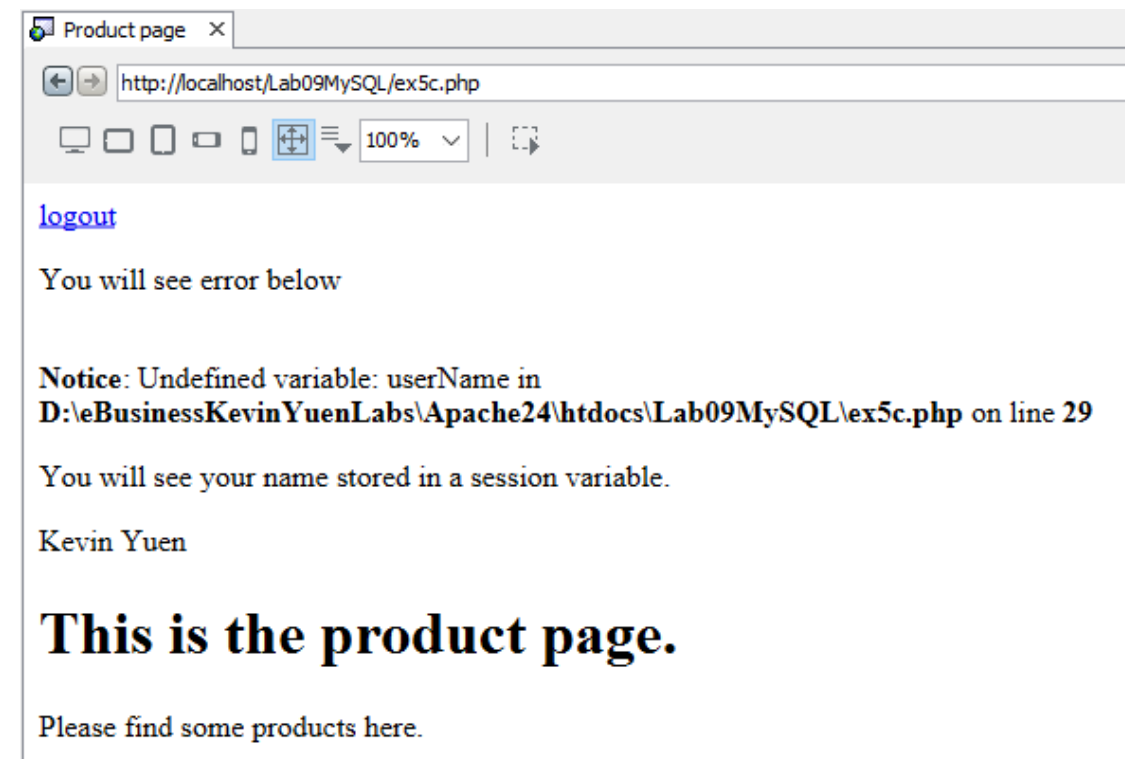
Ex5: Login with Session

Create a webpage, ex5c.php

```
<?php
// Initialize the session
session_start();
// Check if the user logged in or not.
if(!isset($_SESSION["loggedin"]) || $_SESSION["loggedin"] !== true ){
    echo "You cannot see this webpage if you do not login.";
    echo "<p>System will go to login page in 5 seconds.<p>";
    header("refresh:5; url= ex5b.php");
    echo "<p>Or press here <a href='ex5b.php'>login</a>. </p>";
    exit;
}
?>
<!DOCTYPE html>
<!--
Lab09
ex5c
Kevin Yuen
-->
<html>
<head>
<meta charset="UTF-8">
<title>Product page</title>
</head>
<body>
<a href="ex6.php"> logout </a>

<?php
echo "<p> You will see error below</p>";
echo "<p> $userName <p>";
echo "<p> You will see your name stored in a session variable.</p>";
echo $_SESSION['name'];
?>
<h1> This is the product page. </h1>
<p> Please find some products here. </p>

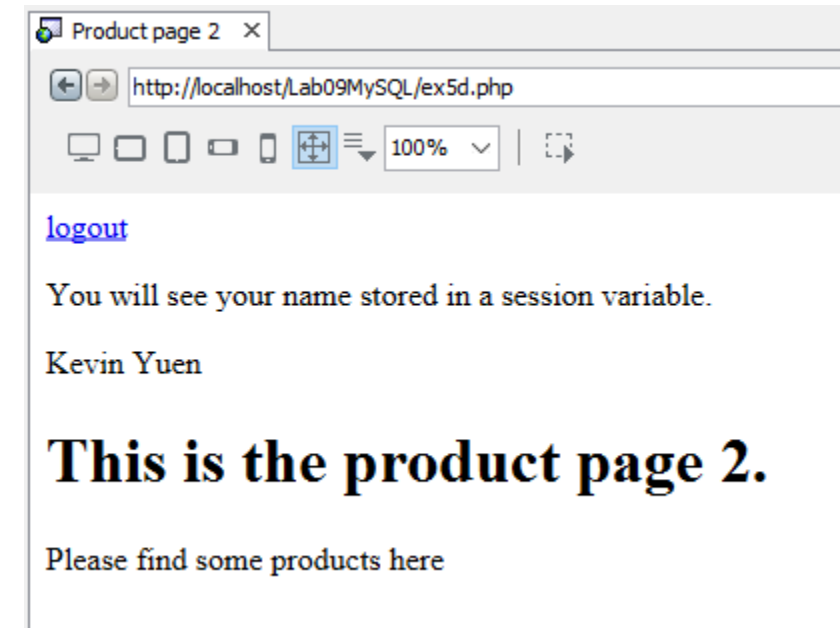
</body>
</html>
```



Ex5: Login with Session

On the basis of ex5c.php, create ex5d.php

```
19 <html>
20 <head>
21 <meta charset="UTF-8">
22 <title>Product page 2</title>
23 </head>
24 <body>
25 <a href="ex6.php"> logout </a>
26
27 <?php
28 echo "<p> You will see your name stored in a session variable.</p>";
29 echo $_SESSION['name'];
30 ?>
31
32 <h1> This is the product page 2. </h1>
33 <p> Please find some products here </p>
34
35 </body>
36 </html>
37
```



Ex6: Logout

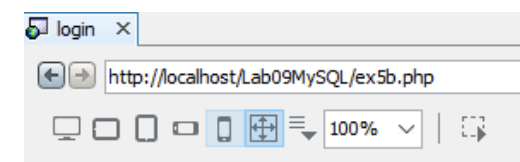
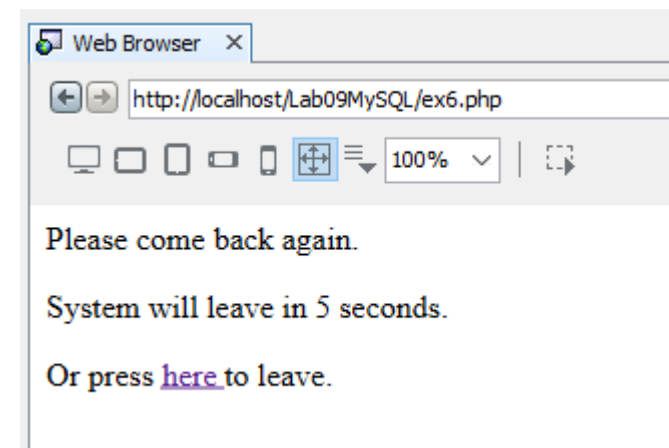
ex6.php

```
<?php
// start the session
session_start();

// clear the session variables
$_SESSION = array();

// Destroy the session.
session_destroy();

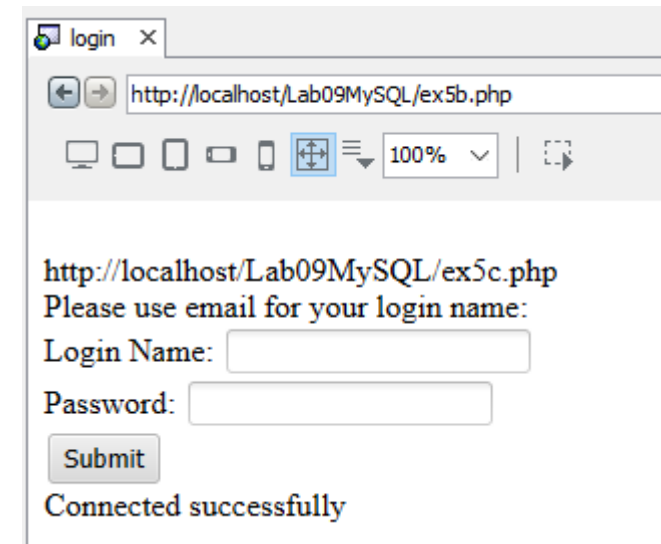
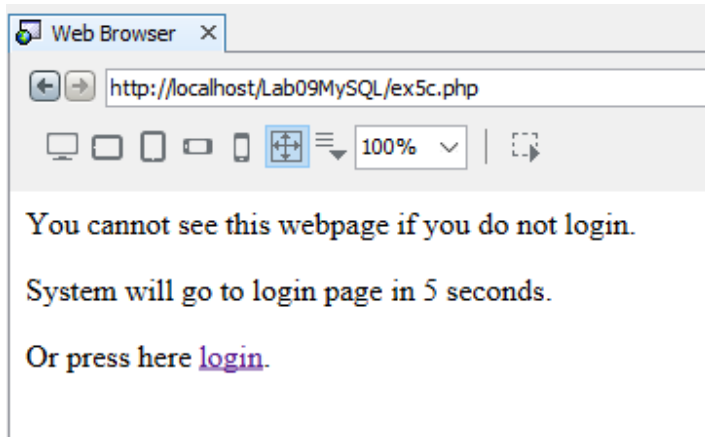
// Redirect to login page
echo "Please come back again.";
echo "<p>System will leave in 5 seconds.<p>";
header("refresh:5; url= ex5b.php");
echo "<p>Or press <a href='ex5b.php'> here </a> to leave. </p>";
exit;
?>
```



http://localhost/Lab09MySQL/ex6.php
Please use email for your login name:
Login Name:
Password:

Connected successfully

Ex6: Logout



Q&A
Thank you