**Exercise 02\_08\_01 – Step 1**

MySQLInfo.php

<head>

<!--

Exercise 02\_08\_01

Author: Mark J. Buckler

Date: December 2, 2017

Filename: MySQLInfo.php

-->

<title>MySQLInfo</title>

<meta charset="UTF-8">

<meta name="viewport" content="initial-scale=1.0">

<script src="modernizr.custom.65897.js"></script>

</head>

<body>

<h2>MySQL Database Server Information</h2>

<?php

?>

</body>

</html>

------------------------------------

MySQLInfo.php

<?php

echo "<p>MySQL client version: " .   
 mysqli\_get\_client\_info() . "</p>\n";

?>

MySQLInfo.php

$hostname = "localhost";

$username = "root";

$password = "";

$DBConnect = mysqli\_connect($hostname, $username,   
 $password);

if (!$DBConnect) {

echo "<p>Connection failed.</p>\n";

}

else {

echo "<p>Connection successful.</p>\n";

mysqli\_close($DBConnect);

}

------------------------------------

MySQLInfo.php

else {

echo "<p>Connection successful.</p>\n";

echo "<p>MySQL connection: " .   
 mysqli\_get\_host\_info($DBConnect) . "</p>\n";

echo "<p>MySQL protocol version: " .   
 mysqli\_get\_proto\_info($DBConnect) . "</p>\n";

echo "<p>MySQL server version: " .   
 mysqli\_get\_server\_info($DBConnect) . "</p>\n";

mysqli\_close($DBConnect);

}

**Exercise 02\_08\_01 – Step 2**

CreateNewsletterDB.php

<?php

$hostname = "localhost";

$username = "root";

$password = "";

$DBName = "newsletter";

$DBConnect = mysqli\_connect($hostname, $username,   
 $password);

if (!$DBConnect) {

echo "<p>Connection error: " . mysqli\_connect\_error() .   
 "</p>\n";

}

else {

mysqli\_close($DBConnect);

}

?>

------------------------------------

CreateNewsletterDB.php

else {

$sql = "CREATE DATABASE $DBName";

if (mysqli\_query($DBConnect, $sql)) {

echo "<p>Successfully created the \"$DBName\"   
 database.</p>\n";

}

else {

echo "<p>Could not create the \"$DBName\" database:   
 " . mysqli\_error($DBConnect) . "</p>\n";

}

mysqli\_close($DBConnect);

}

**Exercise 02\_08\_01 – Step 3**

SelectTest.php

else {

if (mysqli\_select\_db($DBConnect, $DBName)) {

echo "<p>Successfully selected the \"$DBName\"   
 database.</p>\n";

}

else {

echo "<p>Could not select the \"$DBName\" database:   
 " . mysqli\_error($DBConnect) . "</p>\n";

}

mysqli\_close($DBConnect);

}

**Exercise 02\_08\_01 – Step 4**

CreateSubscribersTable.php

$DBName = "newsletter";

$tablename = "subscribers";

------------------------------------

CreateSubscribersTable.php

echo "<p>Successfully selected the \"$DBName\"   
 database.</p>\n";

$sql = "SHOW TABLES LIKE '$tablename'";

$result = mysqli\_query($DBConnect, $sql);

if (mysqli\_num\_rows($result) === 0) {

echo "The <strong>$tablename</strong> table does   
 not exist, creating table.<br>\n";

}

else {

echo "The <strong>$tablename</strong> table   
 already exists.<br>\n";

}

------------------------------------

CreateSubscribersTable.php

echo "The <strong>$tablename<strong> table does   
 not exist, creating table.<br>\n";

$sql = "CREATE TABLE subscribers (subscriberID   
 SMALLINT NOT NULL AUTO\_INCREMENT PRIMARY   
 KEY, name VARCHAR(80), email VARCHAR(100),   
 subscribe\_date DATE, confirmed\_date DATE)";

$result = mysqli\_query($DBConnect, $sql);

if ($result === false) {

echo "<p>Unable to create the   
 <strong>$tablename</strong> table.</p>";

echo "<p>Error code: " .   
 mysqli\_error($DBConnect) . "</p>";

}

else {

echo "<p>Successfully created the   
 <strong>$tablename</strong> table.</p>";

}

**Exercise 02\_08\_01 – Step 5**

NewsletterSubscribe.php

$tablename = "subscribers";

$subscriberName = "";

$subscriberEmail = "";

$showForm = false;

------------------------------------

NewsletterSubscribe.php

<form action="NewsletterSubscribe.php" method="post">

<p><strong>Your Name: </strong><br>

<input type="text" name="subName" value="<?php echo   
 $subscriberName; ?>"></p>

<p><strong>Your Email Address: </strong><br>

<input type="email" name="subEmail" value="<?php echo   
 $subscriberEmail; ?>"></p>

<p><input type="submit" name="submit"   
 value="Submit"></p>

</form>

------------------------------------

NewsletterSubscribe.php

if ($showForm) {

?>

------------------------------------

NewsletterSubscribe.php

</html>

<?php

}

?>

------------------------------------

NewsletterSubscribe.php

$showForm = false;

if (isset($\_POST['submit'])) {

$formErrorCount = 0; }

else {

$showForm = true;

}

NewsletterSubscribe.php

if (isset($\_POST['submit'])) {

$formErrorCount = 0;

$DBConnect = mysqli\_connect($hostname, $username,   
 $password);

if (!$DBConnect) {

echo "<p>Connection error: " .   
 mysqli\_connect\_error() .   
 "</p>\n";

}

else {

if (mysqli\_select\_db($DBConnect, $DBName)) {

echo "<p>Successfully selected the \"$DBName\"   
 database.</p>\n";

}

else {

echo "<p>Could not select the \"$DBName\"   
 database: " . mysqli\_error($DBConnect) .   
 "</p>\n";

}

mysqli\_close($DBConnect);

}

}

------------------------------------

NewsletterSubscribe.php

if (!$DBConnect) {

echo "<p>Connection error: " .   
 mysqli\_connect\_error() . "</p>\n";

}

NewsletterSubscribe.php

$formErrorCount = 0;

if ($formErrorCount === 0) {

$showForm = false;

$DBConnect = mysqli\_connect($hostname, $username,   
 $password);

if (!$DBConnect) {

echo "<p>Connection error: " .   
 mysqli\_connect\_error() . "</p>\n";

}

else {

if (mysqli\_select\_db($DBConnect, $DBName)) {

echo "<p>Successfully selected the   
 \"$DBName\" database.</p>\n";

}

else {

echo "<p>Could not select the \"$DBName\"   
 database: " . mysqli\_error($DBConnect) .   
 "</p>\n";

}

mysqli\_close($DBConnect);

}

}

else {

$showForm = true;

}

------------------------------------

NewsletterSubscribe.php

$formErrorCount = 0;

if (!empty($\_POST['subName'])) {

$subscriberName = stripslashes($\_POST['subName']);

$subscriberName = trim($subscriberName);

if (strlen($subscriberName) === 0) {

echo "<p>You must include your   
 <strong>name</strong></p>\n";

++$formErrorCount;

}

}

else {

echo "<p>Form submittal error, no   
 <strong>Name</strong> field!</p>\n";

++$formErrorCount;

}

NewsletterSubscribe.php

if (!empty($\_POST['subEmail'])) {

$subscriberEmail = stripslashes($\_POST['subEmail']);

$subscriberEmail = trim($subscriberEmail);

if (strlen($subscriberEmail) === 0) {

echo "<p>You must include your <strong>email   
 address</strong></p>\n";

++$formErrorCount;

}

}

else {

echo "<p>Form submittal error, no   
 <strong>email</strong> field!</p>\n";

++$formErrorCount;

}

NewsletterSubscribe.php

if (mysqli\_select\_db($DBConnect, $DBName)) {

echo "<p>Successfully selected the   
 \"$DBName\" database.</p>\n";

$subscriberDate = date("Y-m-d");

$sql = "INSERT INTO $tablename (name, email,   
 subscribe\_date)   
 VALUES('$subscriberName',   
 '$subscriberEmail', '$subscriberDate')";

$result = mysqli\_query($DBConnect, $sql);

if ($result === false) {

echo "<p>Unable to insert the values   
 into the <strong>$tablename</strong>   
 table.</p>";

echo "Error code <strong>" .   
 msqli\_errorno($DBConnect) . ": " .   
 mysqli\_error($DBConnect) .   
 "</strong></p>";

}

else {

$subscriberID =   
 mysqli\_insert\_id($DBConnect);

echo "<p><strong>" .   
 htmlentities($subscriberName) .   
 "</strong>, you are now subscribed   
 to our newsletter.<br>";

echo "Your subscriber ID is   
 <strong>$subscriberID</strong>.<br>";

echo "Your email address is <strong>" .   
 htmlentities($subscriberEmail) .   
 "</strong>.</p>";

}

**Exercise 02\_08\_01 – Step 6**

NewsletterSubscribers.php

echo "<p>Successfully selected the \"$DBName\"   
 database.</p>\n";

$sql = "SELECT \* FROM $tablename";

$result = mysqli\_query($DBConnect, $sql);

echo "<p>Number of rows in   
 <strong>$tablename</strong>: " .   
 mysqli\_num\_rows($result) . ".</p>\n";

mysqli\_free\_result($result);

-----------------------------------

NewsletterSubscribers.php

echo "<p>Number of rows in   
 <strong>$tablename</strong>: " .   
 mysqli\_num\_rows($result) . ".</p>\n";

echo "<table width='100%' border='1'>\n";

echo "<tr><th>Subscriber ID</th>" . "<th>Name</th>"   
 . "<th>Email</th>" . "<th>Subscriber Date</th>" .   
 "<th>Name</th></tr>\n";

echo "</table>\n";  
 mysqli\_free\_result($result);

------------------------------------

NewsletterSubscribers.php

while ($row = mysqli\_fetch\_row($result)) {

echo "<tr>";

echo "<td>{$row[0]}</td>";

echo "<td>{$row[1]}</td>";

echo "<td>{$row[2]}</td>";

echo "<td>{$row[3]}</td>";

echo "<td>{$row[4]}</td>";

echo "<tr>\n";

}

echo "</table>\n";

**Exercise 02\_08\_01 – Step 7**

NewsletterSubscribers2.php

while ($row = mysqli\_fetch\_assoc($result)) {

echo "<tr>";

foreach ($row as $field) {

echo "<td>{$field}</td>";

}

echo "<tr>\n";

}

echo "</table>\n";

**Project 02\_08\_01**

SignGuestBook.php

<body>

<h1>Sign Guest Book</h1>

<?php

$hostname = "localhost";

$username = "root";

$password = "";

$DBName = "guestbook";

$tablename = "visitors";

$firstName = "";

$lastName = "";

$formErrorCount = 0;

?>

<form action="SignGuestBook.php" method="post">

<p><strong>First Name: </strong><br>

<input type="text" name="firstName” value="<?php echo   
 $firstName; ?>"></p>

<p><strong>Last Name: </strong><br>

<input type="text" name="lastName" value="<?php echo   
 $lastName; ?>"></p>

<p><input type="submit" name="submit"   
 value="Submit"></p>

</form>

</body>

------------------------------------

SignGuestBook.php

$formErrorCount = 0;

if (isset($\_POST['submit'])) {

}

SignGuestBook.php

if (isset($\_POST['submit'])) {

$firstName = stripslashes($\_POST['firstName']);

$firstName = trim($firstName);

$lastName = stripslashes($\_POST['lastName']);

$lastName = trim($lastName);

if (empty($firstName) || empty($lastName)) {

echo "<p>You must enter your first and last   
 <strong>name</strong>.</p>\n";

++$formErrorCount;

}

}

------------------------------------

SignGuestBook.php

<?php

function connectToDB($hostname, $username, $password) {

$DBConnect = mysqli\_connect($hostname, $username,

$password);

if (!$DBConnect) {

echo "<p>Connection error: " .   
 mysqli\_connect\_error() .

"</p>\n";

}

return $DBConnect;

}

------------------------------------

SignGuestBook.php

if (empty($firstName) === 0 || empty($lastName)) {

echo "<p>You must enter your first and last   
 <strong>name</strong>.</p>\n";

++$formErrorCount;

}  
 if ($formErrorCount === 0) {

$DBConnect = connectToDB($hostname, $username,   
 $password);

if ($DBConnect) {

echo "<p>Connection successful!</p>\n";

mysqli\_close($DBConnect);

}

}

?>

SignGuestBook.php

function selectDB($DBConnect, $DBName) {

$success = mysqli\_select\_db($DBConnect, $DBName);

if ($success) {

echo "<p>Successfully selected the \"$DBName\"   
 database.</p>\n";

}

else {

echo "<p>Could not select the \"$DBName\" database:   
 " . mysqli\_error($DBConnect) . ", creating   
 it.</p>\n";

$sql = "CREATE DATABASE $DBName";

if (mysqli\_query($DBConnect, $sql)) {

echo "<p>Successfully created the \"$DBName\"   
 database.</p>\n";

$success = mysqli\_select\_db($DBConnect,   
 $DBName);

if ($success) {

echo "<p>Successfully selected the   
 \"$DBName\" database.</p>\n";

}

}

else {

echo "<p>Could not create the \"$DBName\"   
 database: " . mysqli\_error($DBConnect) .   
 "</p>\n";

}

}

return $success;

}

------------------------------------

SignGuestBook.php

if ($DBConnect) {

if (selectDB($DBConnect, $DBName)) {

echo "<p>Connection successful!</p>\n";

}

mysqli\_close($DBConnect);

}

SignGuestBook.php

function createTable($DBConnect, $tablename) {

$success = false;

$sql = "SHOW TABLES LIKE '$tablename'";

$result = mysqli\_query($DBConnect, $sql);

if (mysqli\_num\_rows($result) === 0) {

echo "The <strong>$tablename</strong> table does not   
 exist, creating table.<br>\n";

$sql = "CREATE TABLE $tablename (countID SMALLINT   
 NOT NULL AUTO\_INCREMENT PRIMARY KEY,   
 lastName VARCHAR(40), firstName   
 VARCHAR(40))";

$result = mysqli\_query($DBConnect, $sql);

if ($result === false) {

$success = false;

echo "<p>Unable to create the $tablename   
 table.</p>";

echo "<p>Error code " . mysqli\_errno($DBConnect)   
 . ": " . mysqli\_error($DBConnect) . "</p>";

}

else {

$success = true;

echo "<p>Successfully created the $tablename   
 table.</p>";

}

}

else {

$success = true;

echo "The $tablename table already exists.<br>\n";

}

return $success;

}

------------------------------------

SignGuestBook.php

if (selectDB($DBConnect, $DBName)) {

if (createTable($DBConnect, $tablename)) {

echo "<p>Connection successful!</p>\n";

}

}

SignGuestBook.php

echo "<p>Connection successful!</p>\n";

$sql = "INSERT INTO $tablename   
 VALUES(NULL, '$lastName',   
 '$firstName')";

$result = mysqli\_query($DBConnect,   
 $sql);

if ($result === false) {

echo "<p>Unable to execute the   
 query.</p>";

echo "<p>Error code " .   
 mysqli\_errno($DBConnect) . ": "   
 . mysqli\_error($DBConnect) .   
 "</p>";

}

else {

echo "<h3>Thank you for signing our   
 guest book!</h3>";

$firstName = "";

$lastName = "";

}

------------------------------------

SignGuestBook.php

</form>

<?php

$DBConnect = connectToDB($hostname, $username, $password);

if ($DBConnect) {

if (selectDB($DBConnect, $DBName)) {

if (createTable($DBConnect, $tablename)) {

echo "<p>Connection successful!</p>\n";

echo "<h2>Visitors Log</h2>";

}

}

mysqli\_close($DBConnect);

}

?>

SignGuestBook.php

echo "<h2>Visitors Log</h2>";

$sql = "SELECT \* FROM $tablename";

$result = mysqli\_query($DBConnect, $sql);

if (mysqli\_num\_rows($result) == 0) {

echo "<p>There are no entries in the quest   
 book!</p>";

}

else {

echo "<table width='60%' border='1'>";

echo "<tr>";

echo "<th>Visitor</th>";

echo "<th>Last Name</th>";

echo "<th>First Name</th>";

echo "</tr>";

while ($row = mysqli\_fetch\_row($result)) {

echo "<tr>";

echo "<td width='10%' style='text-align:   
 center'>$row[0]</td>";

echo "<td>$row[1]</td>";

echo "<td>$row[2]</td>";

echo "</tr>";

}

echo "</table>";

mysqli\_free\_result($result);

}