

Exercise 11.8 – MySQL Through PHP

- PHP Function Documentation & References
 - define(), <http://php.net/manual/en/function.define.php>
 - PDO class, <http://php.net/manual/en/class.pdo.php>
 - A connection between PHP and a database server
 - PDO -> setAttribute()
 - PDO -> query(\$query-string)
 - PDOException class, <http://php.net/manual/en/class.pdoexception.php>
 - Mysqli Procedures
 - mysqli_connect(DBHOST, DBUSER, DBPASS, DBNAME), <http://php.net/manual/en/function.mysqli-connect.php>
 - mysqli_query(\$connection, \$sql), <http://php.net/manual/en/mysqli.query.php>
 - mysqli_fetch_assoc(\$reslts), <http://php.net/manual/en/function.mysqli-fetch-assoc.php>
 - mysqli_free_result(\$result), <http://php.net/manual/en/mysqli-result.free.php>
 - mysqli_close(\$connection), <http://php.net/manual/en/mysqli.close.php>
- Open phpMyAdmin
- Click on **art** database
- Click Privileges
 - Add User Account
 - User name: testuser
 - Host Name: localhost
 - Password: secret
 - Retype Password:
- phpMySQL displays
 - ```
CREATE USER 'testuser'@'localhost' IDENTIFIED VIA
mysql_native_password USING '***';GRANT ALL PRIVILEGES ON *.* TO
'testuser'@'localhost' REQUIRE NONE WITH GRANT OPTION
MAX_QUERIES_PER_HOUR 0 MAX_CONNECTIONS_PER_HOUR 0
MAX_UPDATES_PER_HOUR 0 MAX_USER_CONNECTIONS 0;GRANT ALL
PRIVILEGES ON `art`.* TO 'testuser'@'localhost';
```
- Open config.php using Notepad++ and make following changes
- Create lab11 folder under htdocs
- Move those two files to
  - C:\xampp\htdocs\lab11

```
<?php
```

```
//config.php - lab11-exercise08-mysqli.php
```

```
define('DBHOST', 'localhost');
define('DBNAME', 'art');
define('DBUSER', 'testuser');
define('DBPASS', 'secret');
define('DBCONNSTRING','mysql:host=localhost;dbname=art');
?>
```

```
//lab11-exercise08-pdo.php
```

```
<?php require_once('config.php'); ?>
<!DOCTYPE html>
```

```

<html>
<body>
<h1>Database Tester (PDO)</h1>
<?php
try {
 $pdo = new PDO(DBCONNSTRING,DBUSER,DBPASS);
 $pdo->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
 $sql = "select * from Artists order by LastName";
 $result = $pdo->query($sql);
 while ($row = $result->fetch()) {
 echo $row['ArtistID'] . " - " . $row['LastName'] . "
";
 }
 $pdo = null;
}
catch (PDOException $e) {
 die($e->getMessage());
}
?>
</body>
</html>

```

#### Running Results

**Case 1:** Run the lab11-exercise08-pdo.php

<http://localhost/lab11/lab11-exercise08-pdo.php>

#### Database Tester (PDO)

SQLSTATE[HY000] [1045] Access denied for user 'testuser'@'localhost' (using password: YES)

**Case 2:** After add a user account, add needed privileges, then modify the **config.php** with needed user name and password:

<http://localhost/lab11/lab11-exercise08-pdo.php>

## Database Tester (PDO)

```

41 - Balla
56 - Beardsley
67 - Beckman
42 - Boccioni
...
...
106 - Vermeer
33 - Vlaminck
61 - Von Jawlensky
13 - Whistler

```

```

//lab11-exercise08-mysqli.php
<?php require_once('config.php'); ?>
<!DOCTYPE html>
<html>
<body>
<h1>Database Tester (mysqli)</h1>
Genre:
<select>
<?php

$connection = mysqli_connect(DBHOST, DBUSER, DBPASS, DBNAME);
if (mysqli_connect_errno()) {
 die(mysqli_connect_error());
}

$sql = "select * from Genres order by GenreName";

if ($result = mysqli_query($connection, $sql)) {

 // loop through the data
 while($row = mysqli_fetch_assoc($result))
 {
 echo '<option value="' . $row['GenreID'] . '">';
 echo $row['GenreName'];
 echo "</option>";
 }
 // release the memory used by the result set
 mysqli_free_result($result);
}

// close the database connection
mysqli_close($connection);

?>
</select>
</body>
</html>

```

## Results

