CHAPTER 12

MYSQL DATABASE WITH PHP (PART - III)

Department of Information Technology
Supporting and Maintenance

Objectives

- To know how to use phpMyAdmin

- To know how to communicate database in PHP

- To know the steps in connecting with the database

- To know different types of MySQLi functions when connection database from PHP scripts.

```php
<?php
$servername = "localhost";

$username = "your_username";

$password = "your_password";

$dbname = "your_database";


// Create connection

$conn = mysqli_connect($servername,
$username, $password, $dbname);

// Check connection

if (!$conn) {

    die("Connection failed: " .
mysqli_connect_error());

}


// Sample data for insertion

$name = "John Doe";

$email = "john.doe@example.com";
```

```php
// SQL query for insertion

$sql = "INSERT INTO your_table
(name, email) VALUES ('$name',
'$email')";


// Execute the query

if (mysqli_query($conn, $sql)) {

    echo "New record inserted
successfully";

}

else {

    echo "Error: " . $sql . "<br>" .
mysqli_error($conn);

}


// Close the connection

mysqli_close($conn);

?>
```

- **mysqli_num_rows** ( ) is used to get the number of rows in a result set returned by a SELECT query.

- This function takes the result set as its argument and returns the number of rows.

mysqli_num_rows(*query_result*);

Display Data from Table

```php
// Create connection
$conn =mysqli_connect($servername, $username, $password, $dbname);

// Check connection
if (!$conn) {    die("Connection failed: " . mysqli_connect_error());}

// SQL query to select all records from a table
$sql = "SELECT * FROM newtb";

// Execute the query
$result = mysqli_query($conn, $sql);

// Check if the query was successful
if ($result) {
// Check if there are any records
if (mysqli_num_rows($result) > 0) {
// Display records
echo "<table border='1'>";
echo "<tr><th>ID</th>
            <th>Name</th>
            <th>Email</th></tr>";
```

```php
 while ($row =
mysqli_fetch_assoc($result)) {
        echo "<tr>";
        echo "<td>" . $row["id"] .
"</td>";
        echo "<td>" . $row["name"] .
"</td>";
        echo "<td>" . $row["email"] .
"</td>";
        echo "</tr>"; }
      echo "</table>";
    } else {      echo "No records found";
    }
```

```php
// Free the result set
  mysqli_free_result($result);
} else {
  // If the query fails, handle the error
  echo "Error: " . mysqli_error($conn);
}


// Close the connection
mysqli_close($conn);
?>
```

- The results come out as an array of associative arrays.

- The keys of each associative array are the fields in the database.

- The values are the contents of the database corresponding to those fields for a record.

```php
<?php
        $con = mysqli_connect("localhost","root","");
        if (!$con){
                die('Could not connect: ' . mysqli_error( ));
                }
         mysqli_select_db($con ,"my_db1");
        $query="select * from Persons";     //retrieving all records
        $ret=mysqli_query($con,$query);
        $num_results = mysqli_num_rows($ret);
        echo "<p>There were $num_results results returned from the query.</p>";
?>
```

Updating Data

```php
<?php
$newAge = 26;
$userId = 1;
$sql = "UPDATE users SET age=$newAge WHERE id=$userId";
if (mysqli_query($conn, $sql)) {
    echo "Record updated successfully";
} else {
    echo "Error: " . $sql . "<br>" . mysqli_error($conn);
}
mysqli_close($conn);
?>
```

Deleting Data

```php
<?php
$userIdToDelete = 2;
$sql = "DELETE FROM users WHERE id=$userIdToDelete";
if (mysqli_query($conn, $sql)) {
    echo "Record deleted successfully";
} else {
    echo "Error: " . $sql . "<br>" . mysqli_error($conn);
}
mysqli_close($conn);
?>
```

Simple User Registration System

you can create it on the MySQL prompt using the following SQL script:

```
CREATE TABLE `users` (
`id` int(11) NOT NULL AUTO_INCREMENT PRIMARY KEY,
`username` varchar(100) NOT NULL,
`email` varchar(100) NOT NULL,
`password` varchar(100) NOT NULL ) ENGINE=InnoDB DEFAULT
CHARSET=latin1
```

```html
<!DOCTYPE html>
<html>
<head>
 <title>Registration system </title>
 <link rel="stylesheet" type="text/css" href="style.css">
</head>
<body> <div class="header">
    <h2>Login</h2>
 </div>
```

```html
<form method="post" action="login_process.php">
        <div class="input-group">
        <label>Username</label>
        <input type="text" name="username" >
    </div>
    <div class="input-group">
        <label>Password</label>
        <input type="password" name="password">
    </div>
```

```
<div class="input-group">

        <button type="submit"
class="btn"
name="login_user">Login</button>

    </div>

    <p>

        Not yet a member? <a
href="register.php">Sign up</a>

    </p>

  </form>

</body>

</html>
```

login_process.php

```php
<?php
// Database connection

$host = "localhost";

$username = "root";

$password = "";

$database = "registration";

$conn = mysqli_connect($host,
$username, $password, $database);

if (!$conn) {

    die("Connection failed: " .
mysqli_connect_error());

}
```

```php
// Login process

if ($_SERVER["REQUEST_METHOD"] ==
"POST") {

    $username = $_POST["username"];

    $password = $_POST["password"];


    // Retrieve user information

    $select_query = "SELECT id, username, password
FROM users WHERE username='$username'";

    $result = mysqli_query($conn, $select_query);
```

login_process.php (Cont'd)

```php
if (mysqli_num_rows($result) > 0) {

    $row = mysqli_fetch_assoc($result);


    // Verify password

    if ($password== $row["password"])
{

        echo "Login successful! Welcome,
" . $row["username"] . "!";

        header("Location:
http://localhost/MyProgram/welcome.php
");

    }
    else {

        echo "Error: Incorrect password.";

    }

} else {

    echo "Error: User not found.";

}

}


mysqli_close($conn);

?>
```

```
<!DOCTYPE html>

<html>

<head>

 <title>Registration system PHP and
MySQL</title>

 <link rel="stylesheet" type="text/css"
href="style.css">

</head>

<body>

 <div class="header">

    <h2>Register</h2>

 </div>
```

```
<form method="post"
action="register_process.php">

<div class="input-group">

    <label>Username</label>

    <input type="text" name="username">

  </div>

  <div class="input-group">

   <label>Email</label>

   <input type="email" name="email">

  </div>
```

```
<div class="input-group">

        <label>Password</label>

        <input type="password"
name="password_1">

        </div>

        <div class="input-group">

        <label>Confirm password</label>

        <input type="password"
name="password_2">

        </div>
```

```
<div class="input-group">

        <button type="submit" class="btn"
name="reg_user">Register</button>

        </div>

<p>

        Already a member? <a
href="login.php">Sign in</a>

        </p>

  </form>

</body>

</html>
```

register_process.php

```php
<?php
// Database connection

$host = "localhost";

$username = "root";

$password = "";

$database = "registration";

$conn = mysqli_connect($host,
$username, $password, $database);

if (!$conn) {

    die("Connection failed: " .
mysqli_connect_error());

}
```

```php
// Registration process

if ($_SERVER["REQUEST_METHOD"] ==
"POST") {

    $username = $_POST["username"];

     $email =$_POST["email"];

    $password = $_POST["password_1"];

    $confirm_password =
$_POST["password_2"];

    // Check if password and confirm_password
match

    if ($password != $confirm_password) {

        die("Error: Passwords do not match.");

    }
```

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```php
<?php
// Database connection
$host = "localhost";

$username = "root";

$password = "";

$database = "registration";

$conn = mysqli_connect($host,
$username, $password, $database);

if (!$conn) {

    die("Connection failed: " .
mysqli_connect_error());

}
```

```php
// Registration process
if ($_SERVER["REQUEST_METHOD"] ==
"POST") {

    $username = $_POST["username"];

     $email =$_POST["email"];

    $password = $_POST["password_1"];

    $confirm_password =
$_POST["password_2"];

    // Check if password and confirm_password
match

    if ($password != $confirm_password) {

        die("Error: Passwords do not match.");

    }
```

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```php
// Check if username already exists

    $check_query = "SELECT id FROM
users WHERE username='$username'";

    $result = mysqli_query($conn,
$check_query);


    if (mysqli_num_rows($result) > 0) {

        die("Error: Username already
exists.");

    }
```

```php
$insert_query = "INSERT INTO users (username,
email  , password) VALUES ('$username',
'$email', '$password' )";


    if (mysqli_query($conn, $insert_query)) {

        echo "Registration successful!";

    } else {

        echo "Error: " . $insert_query . "<br>" .
mysqli_error($conn);

    }

} mysqli_close($conn);

?>
```

References

- Beginning PHP 5.3, 1st Edition by Matt Doyle
- PHP 5 for Dummies by Janet Valade
- PHP Refereshment Course from UCSY

THANK YOU