

Experiment no: 08

Experiment name: Study and Implementation of SQL Commands to Connect MySQL Database PHP.

Objectives:

- Learn how to connect to a MySQL database using PHP.
- Be able to execute SQL queries to interact with the database.
- Understand the different ways to connect to a MySQL database with PHP, such as using MySQLi and PDO.
- Be able to use PHP to store, retrieve, and manipulate data in a MySQL database.
- Develop dynamic web applications that can interact with a MySQL database.

Theory:

MySQL is a popular relational database management system (RDBMS) that is often used with PHP to develop web applications. PHP is a server-side scripting language that can be used to create dynamic web pages. By connecting PHP to a MySQL database, developers can create web applications that can store and retrieve data.

There are two main ways to connect MySQL database with PHP:

- MySQLi: MySQLi is an improved extension for MySQL that provides a more object-oriented interface and better performance.
- PDO: PDO is a database abstraction layer that allows developers to use the same code to connect to different types of databases, including MySQL.

Connecting to MySQL Database with MySQLi

To connect to a MySQL database with MySQLi, you can use the following code:

PHP

```
$servername = "localhost";
$username = "username";
$password = "password";
$db = "dbname";

// Create connection
$conn = mysqli_connect($servername, $username, $password, $db);

// Check connection
if (!$conn) {
```

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

```
echo "Connected successfully";
```

The `mysqli_connect()` function takes four parameters:

- `$servername`: The hostname of the MySQL server.
- `$username`: The username to connect to the MySQL server with.
- `$password`: The password to connect to the MySQL server with.
- `$db`: The name of the MySQL database to connect to.

If the connection is successful, the `mysqli_connect()` function will return a `mysqli` object. You can then use this object to execute SQL queries and interact with the database.

PHP Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Person</title>
  <link rel="stylesheet" href="style.css">
</head>
<body>
  <div class="container">
    <?php
      $conn = new mysqli("localhost", "root", "", "person");
      if(isset($_POST["insert"])){
        $conn = new mysqli("localhost", "root", "", "person");
        $id = $_POST['id'];
        $name = $_POST['name'];
        $phone = $_POST['phone'];
        $city = $_POST['city'];
        $gender = $_POST['gender'];
        $sql = "INSERT INTO person_details values('$id', '$name', '$phone', '$city', '$gender')";
        $result = $conn -> query($sql);
        if($result){
          echo "<h3>Record has been inserted!</h3>";
        }
      }
    </?php>
  </div>
</body>
</html>
```



```

        <th>Phone Number</th>
        <th>City</th>
        <th>Gender</th>
    </tr>;
    while($row = $result-> fetch_assoc()){
        echo "<tr>
            <td>$row[id]</td>
            <td>$row[name]</td>
            <td>$row[phone]</td>
            <td>$row[city]</td>
            <td>$row[gender]</td>
        </tr>";
    }

    echo "</table>";
}
else{
    echo "<h2>No Records found</h2>";
}
}

}
?>
</div>
<div class="form">
    <h2>Personal Details</h2>
    <form method="POST">
        <input type="text" name="id" placeholder="Enter your id" required> <br>
        <input type="text" name="name" placeholder="Enter your name"> <br>
        <input type="text" name="phone" placeholder="Enter your phone"> <br>
        <input type="text" name="city" placeholder="Enter your city"> <br>
        <input type="radio" name="gender" value="male" checked>Male
        <input type="radio" name="gender" value="female">Female
        <br>
        <input type="submit" value="insert" name="insert">
        <input type="submit" value="update" name="update">
        <input type="submit" value="delete" name="delete">
        <input type="submit" value="show" name="show">
    </form>
</div>

<div class="nb">
    <h3>NB.</h3>
    <ul>

```

```

        <li>To show all records enter id</li>
        <li>To delete a record enter id </li>
        <li>To update a record enter id</li>
    </ul>
</div>
</div>
</body>
</html>

```

Output:

All Records

Id	Name	Phone Number	City	Gender
190630	Abdul Halim	01761236455	Pabna	male
190631	Md Sohag Hossain	01748616567	Kurigram	male
190632	Janatul Nayeem	01789238374	Dhaka	male

Personal Details

☒ Male ☐ Female

NB.

- To show all records enter id
- To delete a record enter id
- To update a record enter id