



Daffodil
International
University

Lab Report 4

Course Code: CSE416

Course Title: Web Engineering Lab

SUBMITTED TO:

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Section :61_J1

1.Experiment No:04

2.Experiment Name: Database-Driven Web Application Development with PHP and MySQL.

3.Objective:

- To learn the basic syntax of PHP for web development.
- To understand how PHP interacts with MySQL databases.
- To implement CRUD operations (Create, Read, Update, Delete) using PHP and MySQL.
- To build a simple database-driven web application.

4.Introduction: PHP (Hypertext Preprocessor) is a widely used server-side scripting language for web development. It is often used with MySQL, an open-source relational database management system, to create dynamic, database-driven websites.

- Create → Insert new records into the database.
- Read → Fetch and display data from the database.
- Update → Modify existing records.
- Delete → Remove records from the database.

5.Code:

- **Basic PHP Syntax:**

```
<?php
echo "Hello, World!";

$number = 10;
$name = "Student";

echo "<br>My name is $name and I am learning PHP.<br>";
echo "The number is: " . $number;
?>
```

- **Create (Insert Data):**

```
<?php
include 'db.php';

if(isset($_POST['submit'])){
    $name = $_POST['name'];
    $email = $_POST['email'];

    $sql = "INSERT INTO students (name, email) VALUES ('$name','$email')";
    if($conn->query($sql) === TRUE){
        echo "New record created successfully";
    } else {
        echo "Error: " . $conn->error;
    }
}
?>

<form method="POST">
    Name: <input type="text" name="name" required><br>
    Email: <input type="email" name="email" required><br>
    <input type="submit" name="submit" value="Add Student">
</form>
```

- **Read (Display Data):**

```
<?php
$sql = "SELECT * FROM students";
$result = $conn->query($sql);

if($result->num_rows > 0){
    while($row = $result->fetch_assoc()){
        echo "ID: " . $row["id"]. " - Name: " . $row["name"]. " - Email: " . $row["email"].
"<br>";
    }
} else {
    echo "No records found";
}
?>
```

- **Update Data :**

```
<?php

if(isset($_POST['update'])){
    $id = $_POST['id'];
    $name = $_POST['name'];

    $sql = "UPDATE students SET name='$name' WHERE id=$id";
    if($conn->query($sql) === TRUE){
        echo "Record updated successfully";
    } else {
        echo "Error updating record: " . $conn->error;
    }
}
?>

<form method="POST">
    ID: <input type="number" name="id" required><br>
    New Name: <input type="text" name="name" required><br>
    <input type="submit" name="update" value="Update Student">
</form>
```

- **Delete Data :**

```
<?php

if(isset($_POST['delete'])){
    $id = $_POST['id'];

    $sql = "DELETE FROM students WHERE id=$id";
    if($conn->query($sql) === TRUE){
        echo "Record deleted successfully";
    } else {
        echo "Error deleting record: " . $conn->error;
    }
}
```

```
}  
?>
```

```
<form method="POST">  
  ID: <input type="number" name="id" required><br>  
  <input type="submit" name="delete" value="Delete Student">  
</form>
```

6.Conclusion: In this lab, we learned the basic PHP syntax and how to use it for web development. We connected PHP with a MySQL database and successfully implemented CRUD operations: inserting, displaying, updating, and deleting records. This demonstrates how PHP and MySQL together can be used to build dynamic and interactive database-driven applications.