Department of
Computer Science and Engineering

Title: Implementation of Database Connection, Data Retrieval and Updating with PHP

Web Programming Lab

CSE 302

Green University of Bangladesh

1 Objective(s)

- To learn Mysql database connectivity using PHP.
- performing operations using PHP.

2 Problem analysis

After a database and a table have been created, we can start adding data in them.
Here are some syntax rules to follow:

- The SQL query must be quoted in PHP
- String values inside the SQL query must be quoted
- Numeric values must not be quoted
- The word NULL must not be quoted

The INSERT INTO statement is used to add new records to a MySQL table:

INSERT INTO $table_name$ (column1, column2, column3,...)
VALUES (value1, value2, value3,...)

2.1 Select Data From a MySQL Database

- The SELECT statement is used to select data from one or more tables:
  $SELECT column_name(s) FROM table_name$
- or we can use the * character to select ALL columns from a table:
  $SELECT * FROM table_name$

2.2 Delete Data From a MySQL Table Using MySQLi and PDO

- The DELETE statement is used to delete records from a table:
  $DELETE FROM table_name WHERE some_column = some_value$

3 Implementation in PHP

The following examples add a new record to the "MyGuests" table:

```
1  <?php
2  $servername = "localhost";
3  $username = "username";
4  $password = "password";
5  $dbname = "myDB";
6
7  // Create connection
8  $conn = new mysqli($servername, $username, $password, $dbname);
9  // Check connection
10 if ($conn->connect_error) {
11     die("Connection failed: " . $conn->connect_error);
12 }
13
14 $sql = "INSERT INTO MyGuests (firstname, lastname, email)
```

```
VALUES ('John', 'Doe', 'john@example.com')";

if ($conn->query($sql) === TRUE) {
    echo "New record created successfully";
} else {
    echo "Error: " . $sql . "<br>" . $conn->error;
}

$conn->close();
?>
```

The following example selects the id, firstname and lastname columns from the MyGuests table and displays it on the page:

```
<?php
$servername = "localhost";
$username = "username";
$password = "password";
$dbname = "myDB";

// Create connection
$conn = new mysqli($servername, $username, $password, $dbname);
// Check connection
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}

$sql = "SELECT id, firstname, lastname FROM MyGuests";
$result = $conn->query($sql);

if ($result->num_rows > 0) {
    // output data of each row
    while($row = $result->fetch_assoc()) {
        echo "id: " . $row["id"]. " - Name: " . $row["firstname"]. " " . $row["
            lastname"]. "<br>";
    }
} else {
    echo "0 results";
}
$conn->close();
?>
```

The following examples delete the record with id=3 in the "MyGuests" table:

```
<?php
$servername = "localhost";
$username = "username";
$password = "password";
$dbname = "myDB";

// Create connection
$conn = new mysqli($servername, $username, $password, $dbname);
// Check connection
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}

```

```php
// sql to delete a record
$sql = "DELETE FROM MyGuests WHERE id=3";

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

$conn->close();
?>
```

4 Input

Output of the program is given below.

OUTPUT:
id: 1 - Name: John Doe
id: 2 - Name: Mary Moe
id: 3 - Name: Julie Dooley

Figure 1: The id, firstname and lastname columns from the MyGuests table Displayed

id	firstname	lastname	email	reg_date
1	John	Doe	john@example.com	2021-08-22 14:26:15
2	Mary	Moe	mary@example.com	2021-08-23 10:22:30

Figure 2: The MyGuests tabl after delete record

5 Discussion & Conclusion

Hence we have implemented Mysql connectivity and basic operations on database with PHP.

6 Lab Task (Please implement yourself and show the output to the instructor)

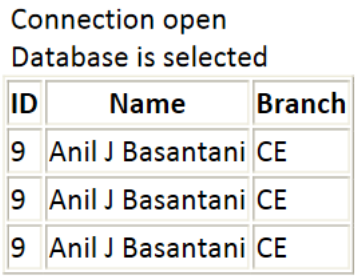
1. A PHP program to select data and show into table format.

6.1 Problem analysis

Very often you will need to use a MySQL table to store data inside it and then output that data by using a PHP script. To display the table data it is best to use HTML, which upon filling in some data on the page invokes a PHP script which will update the MySQL table.

To populate a new database table with data you will first need an HTML page which will collect that data from the user.

6.2 Sample output


Connection open
Database is selected

ID	Name	Branch
9	Anil J Basantani	CE
9	Anil J Basantani	CE
9	Anil J Basantani	CE

Figure 3: Sample data into a table formate

7 Lab Exercise (Submit as a report)

- Create a student Registration in PHP and Save and Display the student Records.

8 Policy

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