

Web Engineering LAB



Lab # 11 PHP MySQL Database

Instructor: Hurmat Hidayat

Email: hurmat.hidayat@nu.edu.pk

Course Code: SL3003

Semester Spring 2022

**Department of Computer Science,
National University of Computer and Emerging Sciences FAST
Peshawar Campus**

Content

MYSQL	3
PHPMYADMIN.....	3
CONNECTION TO MYSQL.....	3
CREATING A MYSQL DATABASE USING PHP	4
CREATING A TABLE USING PHP	4
INSERTING DATA IN PHP	5
REFERENCES	6
LAB TASKS:	7

MySQL

With PHP, you can connect to and manipulate databases. MySQL is the most popular database system used with PHP.

- MySQL is a database system used on the web
- MySQL is a database system that runs on a server
- MySQL is ideal for both small and large applications
- MySQL is very fast, reliable, and easy to use
- MySQL uses standard SQL
- MySQL compiles on a number of platforms
- MySQL is free to download and use
- MySQL is developed, distributed, and supported by Oracle Corporation
- MySQL is named after co-founder Monty Widenius's daughter: My

The data in a MySQL database are stored in tables. A table is a collection of related data, and it consists of columns and rows.

Databases are useful for storing information categorically. A company may have a database with the following tables:

- Employees
- Products
- Customers
- Orders

phpMyAdmin

phpMyAdmin is a free software tool written in PHP, intended to handle the administration of MySQL over the Web. phpMyAdmin supports a wide range of operations on MySQL and MariaDB. Frequently used operations (managing databases, tables, columns, relations, indexes, users, permissions, etc) can be performed via the user interface, while you still have the ability to directly execute any SQL statement.

Connection to MySQL

Before we can access data in the MySQL database, we need to be able to connect to the server:

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

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

// Check connection
if (!$conn) {
    die("Connection failed: " . mysqli_connect_error());
}
echo "Connected successfully";
?>
```

Creating a MySQL Database using PHP

```
<?php
// Connecting to the Database
$servername = "localhost";
$username = "root";
$password = "root";
// Create a connection
$conn = mysqli_connect($servername, $username, $password);
// Die if connection was not successful
if (!$conn){
    die("Sorry we failed to connect: ". mysqli_connect_error());
}else{
    echo "Connection was successful<br>";
}
// Create a db
$sql = "CREATE DATABASE dbWebEngineering";
$result = mysqli_query($conn, $sql);
// Check for the database creation success
if($result){
    echo "The db was created successfully!<br>";
}else{
    echo "The db was not created successfully because of this error ---> ".
mysqli_error($conn);
}
?>
```

Creating a Table using PHP

```
<?php
// Connecting to the Database
$servername = "localhost";
$username = "root";
$password = "root";
$dbase = "dbwebengineering";
```

```
// Create a connection
$conn = mysqli_connect($servername, $username, $password, $database);

// Die if connection was not successful
if (!$conn){
    die("Sorry we failed to connect: ". mysqli_connect_error());
}
else{
    echo "Connection was successful<br>";
}

// Create a table in the db
$sql = "CREATE TABLE `CREATE TABLE `dbwebengineering`.`students` ( `sno` INT(5)
NOT NULL AUTO_INCREMENT , `name` VARCHAR(32) NULL DEFAULT NULL , `registration`
VARCHAR(11) NULL DEFAULT NULL , `semester` INT(2) NULL DEFAULT NULL , PRIMARY KEY
(`sno`)) ENGINE = InnoDB;";
$result = mysqli_query($conn, $sql);

// Check for the table creation success
if($result){
    echo "The table was created successfully!<br>";
}
else{
    echo "The table was not created successfully because of this error ---> ".
mysqli_error($conn);
}

?>
```

Inserting Data in PHP

```
<?php
// Connecting to the Database
$servername = "localhost";
$username = "root";
$password = "root";
$database = "dbwebengineering";
// Create a connection
$conn = mysqli_connect($servername, $username, $password, $database);
```

```
// Die if connection was not successful
if (!$conn){
    die("Sorry we failed to connect: ". mysqli_connect_error());
}else{
    echo "Connection was successful<br>";
}

// Sql query to be executed
$sql =
"INSERT INTO `students` (`sno`, `name`, `registration`, `semester`) VALUES
('123', 'ahmad', '123NU2022', '6')
";
$result = mysqli_query($conn, $sql);

// Add a new trip to the Trip table in the database
if($result){
    echo "The record has been inserted successfully successfully!<br>";
}else{
    echo "The record was not inserted successfully because of this error -
--> ". mysqli_error($conn);
}
?>
```

References

1. https://www.w3schools.com/php/php_mysql_connect.asp
2. <https://codewithharry.com/videos/php-tutorials-in-hindi-28/>

Lab Tasks:

1. Consider the patient registration form (created in previous lab) and do the following:
 - a. Establish a database connection
 - b. Create a database using php
 - c. Create table(s) using php
 - d. Insert data in the table using php

Patient Registration Form

New Patient Registration

Please fill in the form below

Hospital Name

Hospital Address

Street Address

Street Address Line 2

City

State / Province

Postal / Zip Code

Please Select

Country

Hospital Phone Number

Area Code

-

Phone Number

Chart Number

Registration Clerk ID

Registration Location ex: ER, Clinic, etc

Registration Date and Time *


04

-

10

-

2022



:

11

:

40

PM

Month Day Year Hour Minutes

Health Care Number *

Ex: 23

Patient Name *

First Name

Middle Name

Last Name

Address *

Street Address

Street Address Line 2

City

State / Province

Postal / Zip Code

Please Select

Country

Phone Number - Home *

 -

Area CodePhone Number

Phone Number - Work (optional)

 -

Area CodePhone Number

E-mail (optional)

Sex *

Date of Birth *

 / /

MonthDayYear

Marital Status

Province of Residence *

In case of emergency...

Emergency Contact: *

First NameLast Name

Relationship *

Contact Number *

 -

Area CodePhone Number

Family Doctor Name

Family Doctor Phone Number

 -

Area CodePhone Number

Reason for Registration *

Reason for Registration *

Additional Notes

Doctor Name (if applicable)

Taking any medications,
currently?

Yes

No

If yes, please list it here

Submit Form