

# Unit – 8 PHP and MySQL



**Web Technology**

**2160708**

**Semester 6**

# Unit – 8 PHP and MySQL



Book: Developing Web Applications, Ralph Moseley and M. T. Savaliya, Wiley-India

Web link: [https://www.tutorialspoint.com/php/php\\_and\\_mysql.htm](https://www.tutorialspoint.com/php/php_and_mysql.htm)

Web Link: [https://www.w3schools.com/php/php\\_mysql\\_intro.asp](https://www.w3schools.com/php/php_mysql_intro.asp)

# PHP & MySQL

- PHP is server side scripting language , designed for web development to produce dynamic websites.
- PHP scripts execute on web server and serve web pages to users on request.
- Web server is computer and program installed on it. Web server interacts with the client through the web browser.
- Example : Apache HTTP Server, NGINX, Apache Tomcat, IIS etc...

# PHP & MySQL

- **Apache web server** : Apache is the most widely used web server software. Developed and maintained by Apache Software Foundation.
- Apache is an open source software available for free.
- It runs on 67% of all web servers in the world.
- It is fast, reliable, and secure.
- It can be highly customized to meet the needs of many different environments by using extensions and modules.

# PHP & MySQL

- **Database:** With PHP, you can connect to and manipulate databases.
- PHP will work with virtually all database software, including Oracle and Sybase but most commonly used is freely available MySQL database.
- MySQL is the most popular database system used with PHP.

# PHP & MySQL

- **MySQL** is a database system used on the web and run 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
- **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.**

# PHP & MySQL

- PHP 5 and later can work with a MySQL database using:
  - MySQLi extension (the "i" stands for improved)
  - PDO (PHP Data Objects)
- **We will use MySQLi (Object Oriented)**
- Steps for PHP and MySQL connection.
  1. Open a Connection to MySQL
  2. Create a MySQL Database
  3. Create a MySQL Table
  4. Insert Data Into MySQL Table
  5. Select/List Data From a MySQL Table
  6. Delete Data From a MySQL Table
  7. Update Data In a MySQL Table

# 1. Open a Connection to MySQL

```
<?php
//create connection
$conn = new mysqli("localhost","root","");
//check connection
if($conn->connect_error)
{
    die("Connection failed:" . $conn->connect_error);
}
else
{
    echo "Connected successfully". "<br>";
}
```



## 2. Create a MySQL Database

```
//create database
$sqldatabase = "create database employee";
if($conn->query($sqldatabase) === true)
{
    echo "Database Created successfully" .
        "<br>";
}
else
{
    echo "Error creating database". $conn->error;
}
```

### 3. Create a MySQL Table

```
// sql to create table
$sqltable = "CREATE TABLE personal(
id INT(6) UNSIGNED AUTO_INCREMENT PRIMARY KEY,
name VARCHAR(30) NOT NULL,
salary INT(6) NOT NULL)";

if ($conn->query($sqltable) === TRUE) {
    echo "Table personal created
    successfully";
} else {
    echo "Error creating table: " . $conn-
    >error;
}
```

## 4. Insert Data Into MySQL Table

```
//insert value in table
$sqlinsert = "INSERT INTO personal (id, name,
    salary)
VALUES ('1', 'Priya', '50000')";
if ($conn->query($sqlinsert) === TRUE)
{
    echo "New record created successfully";
} else
{
    echo "Error: " . $sql . "<br>" . $conn-
    >error;
}
```

## 5. Select Data From a MySQL Table

```
//select data from table
$sqlselect = "SELECT id, name, salary FROM
    personal";
$result = $conn->query($sqlselect);
if ($result->num_rows > 0)
{
    // output data of each row
    while($row = $result->fetch_assoc())
    {
        echo "id: " . $row["id"]. " - Name: " .
        $row["name"]. " " . $row["salary"]. "<br>";
    }
} else
{
    echo "0 results";
}
```

## 6. Delete Data From a MySQL Table

```
// sql to delete a record
$sqldelete = "DELETE FROM personal WHERE id=3";
if ($conn->query($sqldelete) === TRUE)
{
    echo "Record deleted successfully";
}
else
{
    echo "Error deleting record: " . $conn-
    >error;
}
```

## 7. Update Data In a MySQL Table

```
//Update Data In a MySQL Table
$sqlupdate = "UPDATE personal SET name='Joy'
    WHERE id=1";

if ($conn->query($sqlupdate) === TRUE)
{
    echo "Record updated successfully";
}
else
{
    echo "Error updating record: " . $conn-
    >error;
}
```