



University of Central Punjab

Faculty of Information Technology

Course	Course Code	Section
Web Application Development	CSCP2034	□ __
Registration #:	_____	Name: _____

1 Open a Connection to the MySQL

Open a Connection

Before we can access data in a database, we must open a connection to the MySQL server.

In PHP, this is done with the `mysql_connect()` function.

Syntax

```
1 mysql_connect(host , username , password , dbname) ;
```

1. **host** Optional. Either a host name or an IP address
2. **username** Optional. The MySQL user name
3. **password** Optional. The password to log in with
4. **dbname** Optional. The default database to be used when performing queries

Note: There are more available parameters, but the ones listed above are the most important.

In the following example we store the connection in a variable (\$con) for later use in the script:

```
1 <?php
2 $host="127.0.0.1"; // Host name
3 $username="saeed"; // Mysql username
4 $password=""; // Mysql password
5 // Create connection
6 $con = mysql_connect("$host", "$username", "$password") or die("Failed to connect to MySQL:
   " . mysql_error());
7 ?>
```

Close a Connection

The connection will be closed automatically when the script ends. To close the connection before, use the `mysql_close()` function:

```
1 <?php
2 $host="127.0.0.1"; // Host name
3 $username="saeed"; // Mysql username
4 $password=""; // Mysql password
5 // Create connection
6 $con = mysql_connect("$host", "$username", "$password") or die("Failed to connect to MySQL:
   " . mysql_error());
7 mysql_close($con);
8 ?>
```

Create a Database

The CREATE DATABASE statement is used to create a database table in MySQL. We must add the CREATE DATABASE statement to the mysql_query() function to execute the command. The following example creates a database named "myUCP":

```
1 <?php
2 $host="127.0.0.1"; // Host name
3 $username="saeed"; // Mysql username
4 $password=""; // Mysql password
5 // Create connection
6 $con = mysql_connect("$host", "$username", "$password") or die("Failed to connect to MySQL:
   " . mysql_error());
7 echo 'Connected successfully<br />';
8 // Create database
9 $sql="CREATE DATABASE myUCP";
10 $resu = mysql_query($sql,$con) or die ("QUERY Error — Could not create database:
   " . mysql_error());
11 mysql_close($con);
12
13 ?>
```

Create a Table

The CREATE TABLE statement is used to create a table in MySQL. We must add the CREATE TABLE statement to the mysql_query() function to execute the command. The following example creates a table named "Persons", with three columns: "FirstName", "LastName" and "Age":

```
1 <?php
2 $host="127.0.0.1"; // Host name
3 $username="saeed"; // Mysql username
4 $password=""; // Mysql password
5 // Create connection
6 $con = mysql_connect("$host", "$username", "$password") or die("Failed to connect to MySQL:
   " . mysql_error());
7 echo 'Connected successfully';
8
9 // SELECT DATABASE;
10 mysql_select_db(myUCP);
11 // Create table
12 $sql="CREATE TABLE Persons(FirstName CHAR(30),LastName CHAR(30),Age INT)";
13 // Execute query
14 $tabl = mysql_query($con,$sql) or die ("Error creating table: " . mysql_error());
15 echo "Table persons created successfully";
16 mysql_close($con);
17 ?>
```

Note: When you create a field of type CHAR, you must specify the maximum length of the field, e.g. CHAR(50). The data type specifies what type of data the column can hold.

Insert Data Into a Database Table

The INSERT INTO statement is used to add new records to a database table.

It is possible to write the INSERT INTO statement in two forms. The first form doesn't specify the column names where the data will be inserted, only their values:

```
1 INSERT INTO table_name
2 VALUES (value1, value2, value3,...)
```

The second form specifies both the column names and the values to be inserted:

```
1 INSERT INTO table_name (column1, column2, column3,...)
2 VALUES (value1, value2, value3,...)
```

To get PHP to execute the statements above we must use the `mysql_query()` function. This function is used to send a query or command to a MySQL connection.

Example

In the previous chapter we created a table named "Persons", with three columns; "FirstName", "LastName" and "Age". We will use the same table in this example. The following example adds two new records to the "Persons" table:

```
1 <?php
2 $host="127.0.0.1"; // Host name
3 $username="saeed"; // Mysql username
4 $password=""; // Mysql password
5 // Create connection
6 $con = mysql_connect($host, $username, $password) or die("Failed to connect to MySQL:
   " . mysql_error());
7 echo 'Connected successfully<br />';
8 // SELECT DATABASE;
9 mysql_select_db(myUCP);
10 //INSERT Data
11 mysql_query($con,"INSERT INTO Persons (FirstName, LastName, Age)
12 VALUES ('Saeed', 'Iqbal',30)");
13 mysql_query($con,"INSERT INTO Persons VALUES ('Abdul', 'Aziz',43)");
14 mysql_close($con);
15 ?>
```

Insert Data From a Form Into a Database

Now we will create an HTML form that can be used to add new records to the "Persons" table. Here is the HTML form:

```
1 <html>
2 <body>
3 <form action="insert.php" method="post">
4 Firstname: <input type="text" name="firstname">
5 Lastname: <input type="text" name="lastname">
6 Age: <input type="text" name="age">
7 <input type="submit">
8 </form>
9 </body>
10 </html>
```

When a user clicks the submit button in the HTML form, in the example above, the form data is sent to "insert.php". The "insert.php" file connects to a database, and retrieves the values from the form with the PHP `$_POST` variables. Then, the `mysql_query()` function executes the INSERT INTO statement, and a new record will be added to the "Persons" table. Here is the "insert.php" page:

```
1 <?php
2 $host="127.0.0.1"; // Host name
3 $username="saeed"; // Mysql username
4 $password=""; // Mysql password
5 // Create connection
6 $con = mysql_connect($host, $username, $password) or die("Failed to connect to MySQL:
   " . mysql_error());
```

```
7 echo 'Connected successfully<br />';
8 // SELECT DATABASE;
9 mysql_select_db(myUCP);
10 $sql="INSERT INTO Persons (FirstName, LastName, Age)
11 VALUES
12 ('$_POST[firstname]', '$_POST[lastname]', '$_POST[age]')";
13 mysql_query($con,$sql) or die('Error: ' . mysql_error($con));
14 echo "1 record added";
15 mysql_close($con);
16 ?>
```