

- Connect Web pages to MySQL Using PHP Code. -

## \* Important Functions to connect MySQL Database with web pages using PHP.

① Function opens a new connection to MySQL Server.

`mysqli_connect ("Server name", "username", "Password", "Database Name");`

Ex `$con=mysqli_connect ("localhost", "root", "", "Mydb");`

Return

Success  
connection



False (if connection failed)

return an object which  
represent MySQL connection.

② Function that executes the SQL queries.

`mysqli_query (connection, query);`

on Failure

false

on successful

update, insert, create,  
delete queries.

True

on successful select, show, describe  
queries.

return mysqli\_result  
object

Ex `$sql = "Select * from data";`

`$result = mysqli_query ($con, $sql);`

or `$result = mysqli_query ($con, "select * from data");`

③ a function that allow to access data stored in the result returned from mysqli\_query

`mysqli_fetch_array (result of mysqli_query);`

it fetches a result row as an associative array (the key is col name) or numeric array  
(index from 0)

// Field names are case sensitive.

Return

False: if there are no more rows.

an array of strings that  
corresponds to the fetched row.

Ex `$row = mysqli_fetch_array ($result);`

④ - To close a previously opened database connection.  
`mysqli_close (connection);` (Disconnect From MySQL Database)

Ex `mysqli_close ($con);`

ID	Firstname	Lastname	Age
102	Ahmed	Ali	25

\$row  $\Rightarrow$  array [ ]  
to access any element:  
- `$row ['Firstname'] ; // Ahmed`  
or - `$row [1] ; // Ahmed`

## \* Our Table & Database

① Consider a database called : "Mydb".  
- Create database db\_name,

② Consider you have a table called : "Data" with the next columns :-

ID	Firstname	Lastname	Age
101	Ahmad	Ali	25

- Create Table table\_name ( col1 type constraint1 const2 , col2 type const3 , ... ) ;  
int → Primary Key  
Varchar(10) → Not Null  
(must contain value)

\* To create database and table using PHP :

<?php

```
// create connection to MySQL
$conn1 = mysqli_connect("localhost", "root", "");
```

```
if ($conn1 == false) {
    die("connection Failed")}
```

```
// creating a database named "Mydb"
$sql = "Create database Mydb";
```

```
if (mysqli_query($conn1, $sql)) {
    echo "Database created successfully";}
```

```
// create connection to Mydb database.
```

```
$conn2 = mysqli_connect("localhost", "root", "", "Mydb");
```

```
// Create table called data.
```

```
$sql = "Create table data (ID int Primary Key, Firstname Varchar(20) Not Null,
Lastname Varchar(20) Not Null, Age int)";
```

```
if (mysqli_query($conn2, $sql)) {
```

```
    echo "Table data created successfully";}
```

```
else {
    echo "Error Creating Table";}
```

```
else { echo "Error in Database Creation"; } } mysqli_close($conn1);
= ($conn2);
```

## \* MySQL Insert Query.

\* used to insert new rows in a database table.

\* Syntax : \_insert into table\_name (col1, col2, ...) values (val1, val2  
-- valn);

- if adding data for all the columns of the table :

You not need to specify the columns name.

- make sure the order of the values in the same order as  
the columns in the table.

\* Insert into table\_name values (val1, val2 ...);

### Examples

→ insert into data (ID, Firstname) values (501, 'Leen');

- insert into data values (502, 'Tom', 'Jack', 25);

### Example2

Registration Form. / sign UP

The diagram shows a rectangular form with four input fields and one button. The first field is labeled 'ID' and has a small rectangle inside. The second field is labeled 'FirstName'. The third field is labeled 'LastName'. The fourth field is labeled 'Age'. Below these fields is a blue rectangular button labeled 'Register'.

register.php

<?php

\$con = mysqli\_connect("localhost", "root", "", "Mydb");

//check connection

if (mysqli\_connect\_errno())

echo "Failed to Connect";

else \$id = \$\_POST['id'];

\$fn = \$\_POST['fname'];

\$Ln = \$\_POST['lname'];

\$a = \$\_POST['age'];

\$sql = "Insert into data values (\$id, '\$fn', '\$Ln', \$a)";

if (mysqli\_query(\$con, \$sql))

echo "1 record added";

else

die("Error adding record");

mysqli\_close(\$con);

?>

## MySQL Update Query

\* to update one or more field at the same time.

\* Syntax : Update table-name set col1=value, col2=value, col3=value where  
Colname = ~~value~~ ;

### Example

• data JI BCT JI will go update JI Z where ID=1 QZ

To update (change) the "Age" of a person whose "ID" is 201 in the "Data" table :

The query is : Update data set Age=28 where id=201 ;  
    <sup>' ' char int type</sup>  
    <sup>' ' 2 char</sup>

\* die() : is an built in function in PHP . it is used to print message and exit from the current php script.

### Example

Page1.php

ID	<input type="text"/>	id
FName	<input type="text"/>	fName
LName	<input type="text"/>	lName
Age	<input type="text"/>	age
<input type="button" value="Update"/>		

method = Post  
action = "update.php"

update.php

<?php

\$fn = \$\_POST['fName'] ;

\$ln = \$\_POST['lName'] ;

\$a = \$\_POST['age'] ;

\$conn = mysqli\_connect("localhost", "root", "", "Mydb") ;

if (\$conn == false) {

    die ("Error : couldnot connect") ;

\$sql = "update data set FirstName = '" . \$fn . "' , LastName = '" . \$ln . "' , Age = '" . \$a . "' where ID = '" . \$\_POST['id'] . "' ;

if (mysqli\_query(\$conn, \$sql)) {

    echo "Records were updated successfully." ;

else {

    echo "Error could not execute update query." ;

    mysqli\_close(\$conn); ?>

# My SQL Select Query.

\* used to select the records from database tables.

\* syntax :- ① select col1\_name, col2\_name, ... from table\_name ;

② to select all data from table : select \* from table\_name ;

③ use where condition to retrieve specific data.

Examples :- select \* from data ;

- select ID, Firstname from data ;

- select Firstname, Age from data where ID = 101 ;

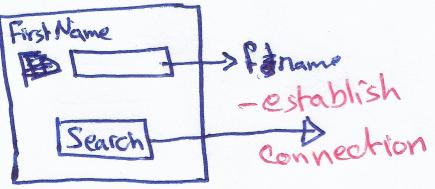
- select \* from data where Lastname = 'Khtoom' ;

- select Firstname, Lastname from data where age is null ;

- select \* from data where Firstname = 'Ahmad' And Age = 25 ;

## Example

- Search Form / Login Page



action: select.php

method: post

select.php

<?php  
\$fn = \$\_POST['fname'];

\$con = mysqli\_connect("localhost", "root", "", "Mydb");

// check connection

if (mysqli\_connect\_error())

echo "Failed to connect to MySQL: " . mysqli\_connect\_error();

else \$sql = "select \* from data where Firstname = '\$fn'" ;

\$result = mysqli\_query(\$con, \$sql);

echo "<table border='1'>"

<tr><th>ID </th><th>Firstname </th>

<th>Lastname </th><th>Age </th></tr>"

while (\$row = mysqli\_fetch\_array(\$result)) {

{ echo "<tr>" ; echo "<td>". \$row['ID'] . "</td>" ;

echo "<td>". \$row['Firstname'] . "</td>" ;

echo "<td>". \$row['Lastname'] . "</td>" ;

echo "<td>". \$row['Age'] . "</td>" ;

} // while end

echo "</table>" ; } // end else . mysqli\_close(\$con); ?>

- everytime it is invoked, it returns the next row from the result set .

- The while loop is used to loop through all the rows of the table "data".

returned from \$sql query.

## MySQL Delete Query.

\* Used to delete records from a database table.

\* Syntax: Delete from table\_name where column\_name = value ;

\* Example:

\$sql = "Delete from data where ID = 201";

```
if (mysqli_query($con, $sql)) {  
    echo "Record was deleted";  
} else {  
    echo "Error Deleting record";  
}  
mysqli_close($con);
```

?>