A10 Create a MySQL table and use it via PHP (Sample instruction)

If you have trouble to do A10, you may follow this instruction.

1. Create a folder for each of your php projects. It becomes more important to keep separate folders for different pages with php. Remember that if you have common files, you can place those in a folder and include them anywhere using a relative path.

A folder structure such as this is a reasonable approach:

php

include

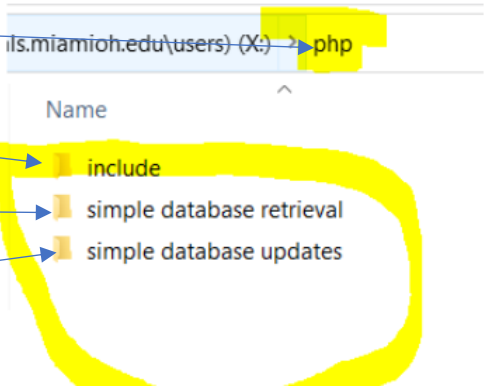
<place common include file here>

simple database retrieval **(For A10 assignment)**

<place relevant php and/or html files here>

simple database updates **(For A11 assignment)**

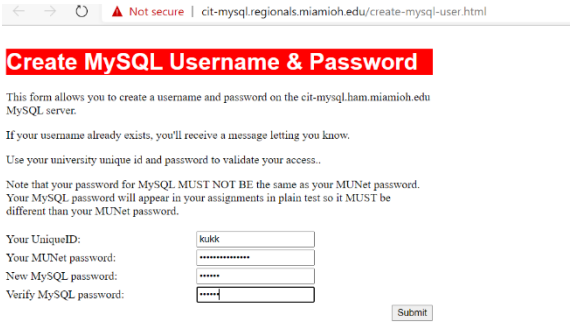
<place relevant php and/or html files here>



2. (Only if you have not set up yet.) Creating a MySQL username/password

Rather than catch-all usernames, each individual needs their own username and password. This keeps students out of each other's stuff.

In a web browser, go to http://cit-mysql.regionalws.miamioh.edu/create-mysql-user.html



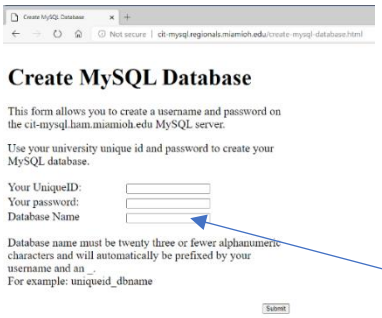
Enter your Miami UniqueID and password. A new user will be created. Passwords are not synchronized so if you change your Miami password the MySQL password WILL NOT CHANGE. If you need a password change contact the Regional IT Helpdesk.

If they already have a user name and password, this gives an error.

Instructors that need to access student databases will need to contact the Regional IT Helpdesk.

3. Creating a MySQL database

In a web browser, go to http://cit-mysql.regionals.miamioh.edu/create-mysql-database.html



Put in your UniqueID and MySQL password and then a database name. The web page will create a database and assign all privileges to the user for the database.

Databases will be named *uniqueid_dbname*. Database names can be up to 23 alphanumeric characters long.

Students will not be able to see or access any other databases, including instructor's sample databases. If you need that changed, contact the Regional IT helpdesk.

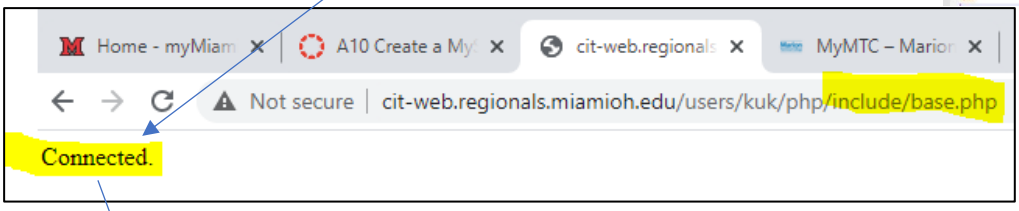
Create 'practice' database. → It will be '*uniqueid_practice*'.

4. Creating a MySQL table using <php> inside 'uniqueid_practice' database

1) Create 'base.php' under 'include' folder.

Since we will use same connection for several files, we may create "base.php" to use "include" command.
We will see "include" command later.

```
<?php
$servername = "cit-mysql.regionals.miamioh.edu";
$username = "UniqueID "; //Your Miami UniqueID
$password = "Passwords"; //Your Passwords from Step 2 (above). Not school passwords.
$dbname = " uniqueid_practice"; //Database name from step 3.
// Create connection
$conn = mysqli_connect($servername, $username, $password, $dbname);
// Check connection
if (!$conn) {
   die("Connection failed: " . mysqli_connect_error());
}
echo "Connected. "; #After testing connection, make this line comment.
?>
```



After testing connection, make the last line as a comment line.

```
<?php
$servername = "cit-mysql.regionals.miamioh.edu";
$username = "UniqueID "; //Your Miami UniqueID
$password = "Passwords"; //Your Passwords from Step 2 (above). Not school passwords.
$dbname = " uniqueid_practice"; //Database name from step 3.
// Create connection
$conn = mysqli_connect($servername, $username, $password, $dbname);
// Check connection
if (!$conn) {
   die("Connection failed: " . mysqli_connect_error());
}
#echo "Connected. "; #After testing connection, make this line comment.
?>
```

2) Create 'createTable.php' using <php> under 'simple database retrieval' folder.

You will run this only once to Create a table. If you run it again, you will see an error for the same name.

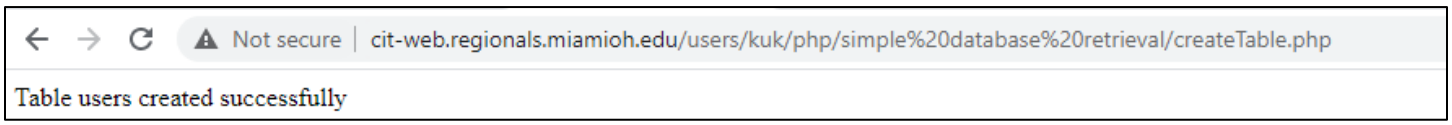
You can create a table using 'phpmyadmin' (We sill use it from step 5.)

```
<?php
include "../include/base.php"; //this will include everything from base.php → So we type everything from base.php
// Look at how to use "Relative file path." → "../include/base.php"


//Below is a SQL grammar to create a table. We will create id(auto), firstnae, lastname, email, pref1(preference),
//pref2, pref3 and reg_date. We may use only some of them.
//The new table name is users. Below is a template of how to create a table.

$sql = "CREATE TABLE users (
id INT(6) UNSIGNED AUTO_INCREMENT PRIMARY KEY,
firstname VARCHAR(30) NOT NULL,
lastname VARCHAR(30) NOT NULL,
email VARCHAR(50),
pref1 VARCHAR(30),
pref2 VARCHAR(30),
pref3 VARCHAR(30),
reg_date TIMESTAMP )";

if (mysqli_query($conn, $sql)) {
   echo "Table users created successfully";
} else {
   echo "Error creating table: " . mysqli_error($conn);
}
mysqli_close($conn);
?>
```

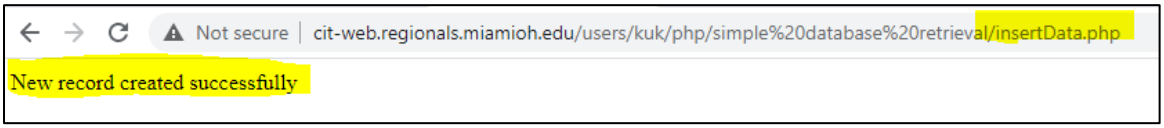


3) Create 'insertData.php' using <php> under 'simple database retrieval' folder.

This will insert a record to users table under "*uniqueid_practice*" *database.*

```
<?php
include "../include/base.php"; //this will reuse everything from base.php
//below is SQL to insert a record. We only insert firstname, lastname, and email.
$sql = "INSERT INTO users (firstname, lastname, email) VALUES ('John', 'Doe', 'john@example.com')";

if (mysqli_query($conn, $sql)) {
   echo "New record created successfully";
} else {
   echo "Error: " . $sql . "<br>" . mysqli_error($conn);
}
mysqli_close($conn);
?>
```



5. Add more data using 'phpmyadmin' inside 'uniqueid_practice' database

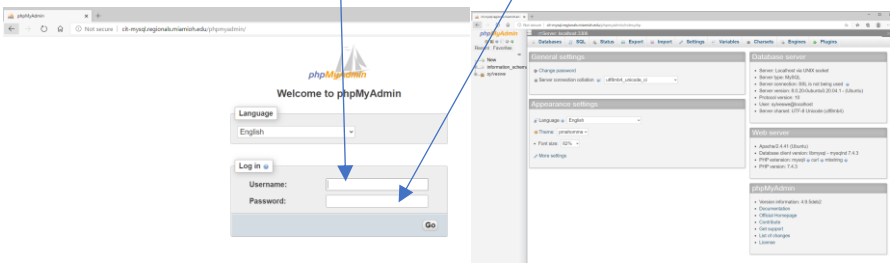
(You can add more data using 'insertData.php' → Change inside VALUES(…..) and run it.)

1) Accessing 'phpmyadmin' web page

In a browser go to http://cit-mysql.regionals.miamioh.edu/phpmyadmin

Enter your username and password.

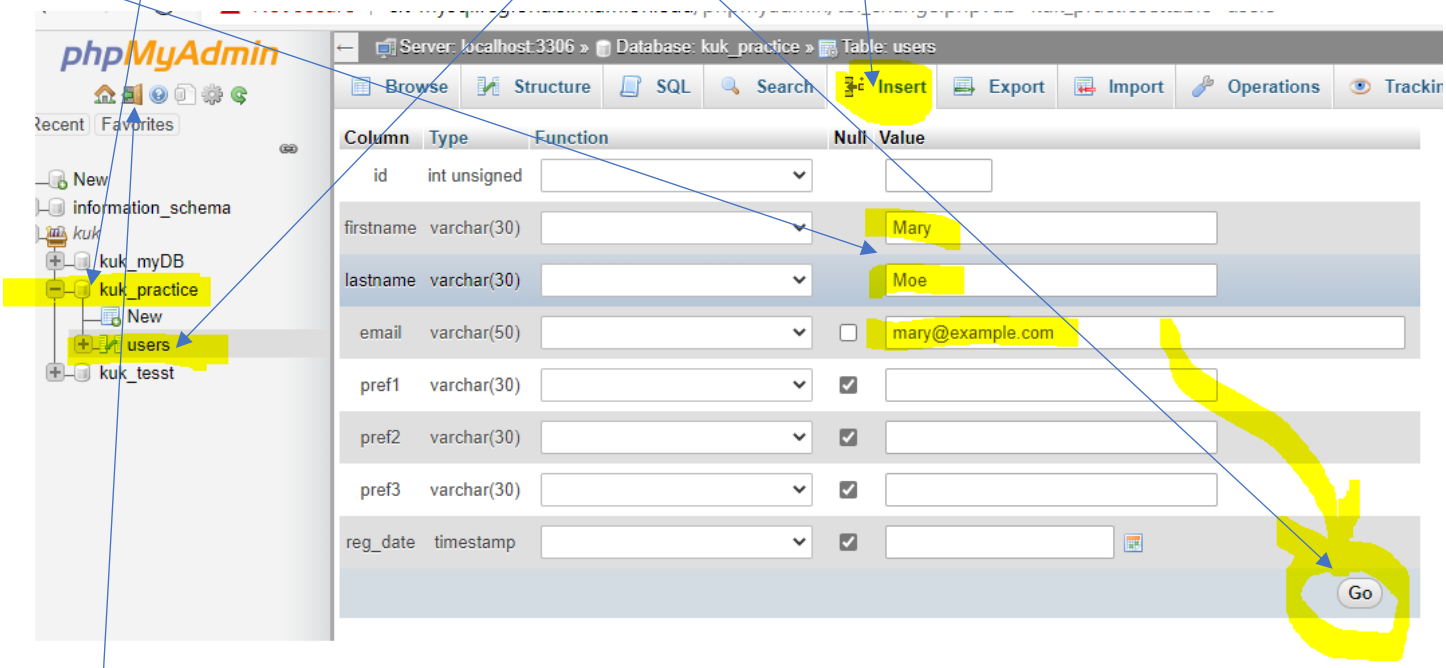
This username is school UniqueID and password is the one you created from step 3(when you created a database). You'll see a screen with only your databases and whatever your instructor has shared.



2) How to insert more data to a Table from phpmyadmin:

- Click 'uniqueid_practice' database → Click 'users' table → Click 'insert' tab

- Add 'Mary', 'Moe', 'mary@example.com' → Then Click 'Go' button



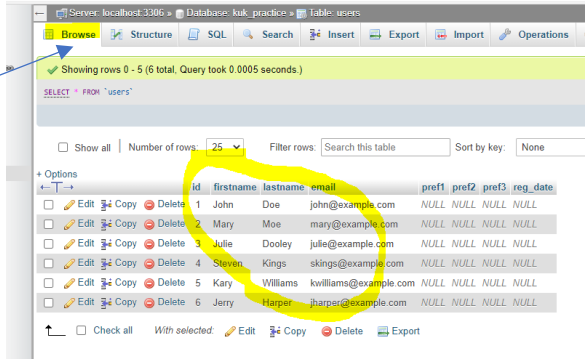
3) Add below records: (You can add more data using 'insertData.php' → Change inside VALUES(…..) and run it.)

-'Julie', 'Dooley', 'julie@example.com'

-'Steven ', 'Kings ', 'skings@example.com'

-'Kary', 'Williams', 'kwilliams@example.com'

-'Jerry', 'Harper', 'jharper@example.com'



4) Check records: Click Browse to see records.

5) Log out or close phpmyadmin

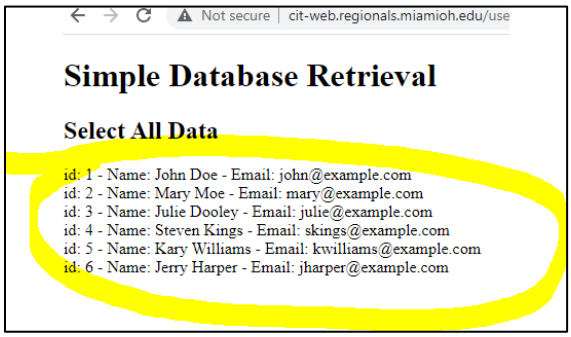
6. simple database retrieval using <php>

1) Create 'selectAllData.php' using <php> under 'simple database retrieval' folder.

We are using some kind of template. There are other ways you can do this work.

```
<!doctype html>
 <head>
<meta charset="utf-8">
<title>simple database retrieval</title>
</head>
<body>
<h1>Simple Database Retrieval</h1>
<h2> Select All Data</h2>
<?php
include "../include/base.php";
$sql = "SELECT id, firstname, lastname, email FROM users"; //This is a template SQL how to select some fields.
//$sql = "SELECT * FROM tableName";  → * means everything.  So this is a template to select all fields.
$result = mysqli_query($conn, $sql);

if (mysqli_num_rows($result) > 0) {
   // output data of each row
   while($row = mysqli_fetch_assoc($result)) {
//be careful for below line → on typo, missing dot(.) or quotation mark(") or any mistakes…
   echo "id: " . $row["id"]. " - Name: " . $row["firstname"]. " " . $row["lastname"]. " - Email: " . $row["email"]. "<br>";
   }
} else {
   echo "0 results"; //when there is no record.
}
mysqli_close($conn);
?>
</body>
</html>
```



***This is the end of an example of Assignment 10.**

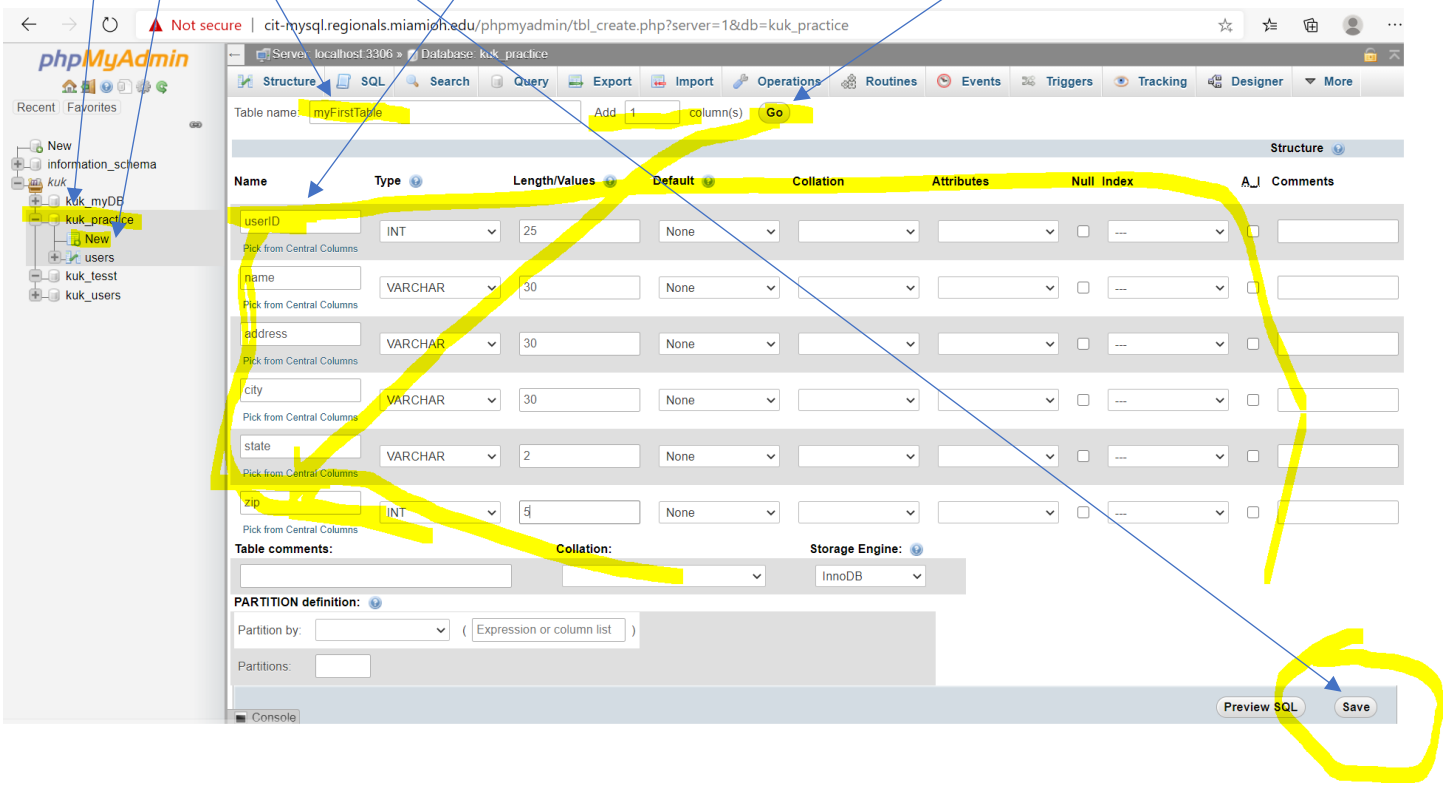
Submit the internet URL for 'selectAllData.php' if everything works fine.

In next page, I will show you how to create a table from phpMyAdmin.

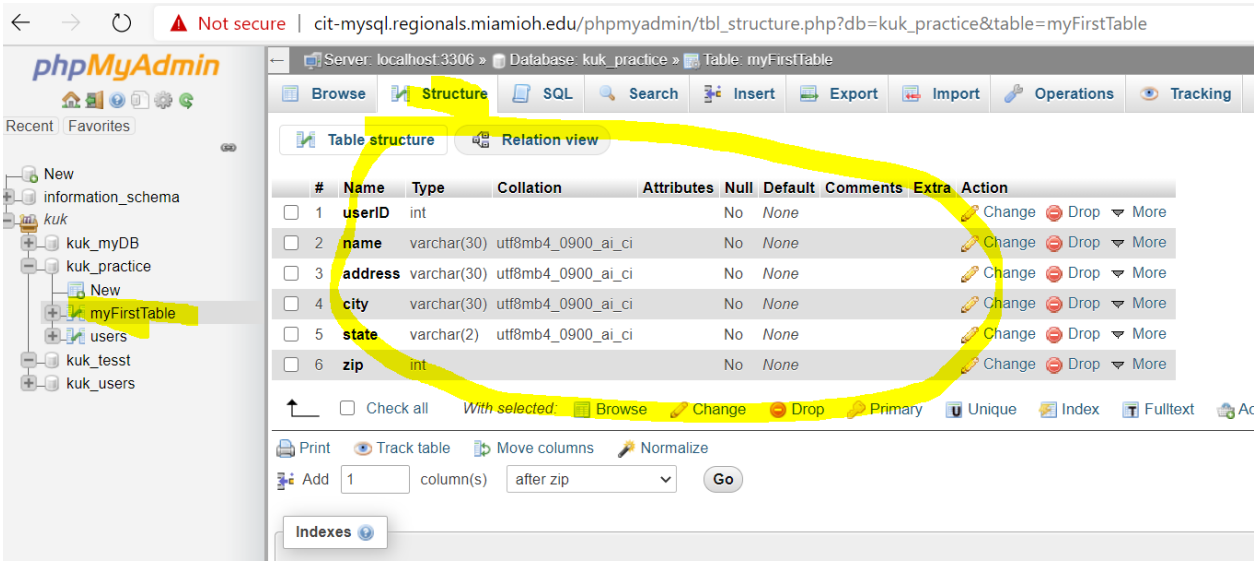
(School administrator blocked us to create a Database from phpMyAdmin. So we have to follow step 3.)

7.How to create a table from phpMyAdmin?

1. **Select database first.**
2. **Click "New" under the database**
3. **Put table name then fill field information. (if you need more field, click "Go" button.)**
4. **When you finish. Click Save button.**



5. **You can see the table.**



6. **Check page 4, to insert records from phpMyAdmin.**