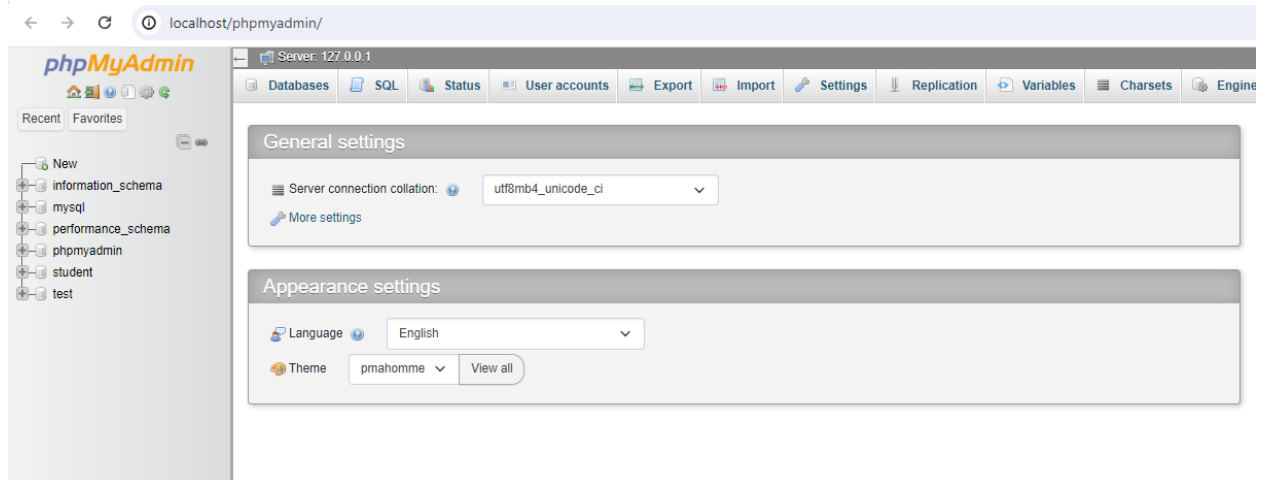# CS355: Web Technologies Lab
Lab 7: PHP with Database

Date: 1 May 2024

1. Database

To create Database, open XAMPP, Next to MySql press on start, then click on Admin.
The phpMyAdmin config page will open, from this point you can create a new database and tables.

2. SQL Connection

To create a connection with the database, we have to define the server name or ip that the xampp is working with, which is "localhost" in our case. Also we have to know the username and password that are used for the database, and the name of the database. Then we can establish the connection using command mysqli_connect.
Also we have to make sure to close the connection at the end of any php file or when we finish working with the connection using command   mysqli_close.

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

    $conn = mysqli_connect ($servername, $username, $password, $db);
    if ($conn->connect_error) {
            die("Connection failed: " . $conn->connect_error);
    }
   mysqli_close($conn);
?>
```

3. Other Command

- To execute a query, we can write the query in a string and we can store the result in var:
  $result = mysqli_query($conn, $query)

- To execute a query, we can write the query in a string
  mysqli_num_rows($result)

- Bring the first row in the result, and move the pointer, return NULL when no more rows
  $row = mysqli_fetch_assoc($result)

- You can get a column of the row
  $row[columnname]

4. Full Example

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

  $conn = mysqli_connect($servername, $username, $password, $db);
  if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
  }

  $sql = "SELECT * FROM studentinfo";
  $result = mysqli_query($conn, $sql);

  if (mysqli_num_rows($result) > 0) {
    echo 'The table contains '.mysqli_num_rows($result).'student. <br>';
    while($row = mysqli_fetch_assoc($result))
    {
      echo "Student Name: ".$row['firstName'].", Student Major: ".$row['Major'] ."<br> ";
    }
  } else {
    echo "The table is Empty";
  }
  mysqli_close($conn);
?>
```

5.Task

- Create a database called Student.
- Create a table called loginInfo, that have the following columns:
    - ID int auto increment.
    - Username varchar (20).
    - Password varchar(20).

- Create a form that have login and signup page,

- If the user press on login, the php file should check if the user and password in the data base, if available print successful login, else print invalid username or password.

- If the user press on signup, the php file should check if the username already exist, print that the username is already exists, if not insert it into the database.