# Programming Assignment 5

**Due** Nov 3, 2020 by 11:59pm  **Points** 100  **Submitting** a file upload  **Available** until Nov 6, 2020 at 11:59pm

This assignment was locked Nov 6, 2020 at 11:59pm.

# A Social Network using PHP and MySQL

## Description

The goal of this project is to learn server-side web programming using PHP and a relational database system (MySQL). More specifically, you will create a simple social network where users can declare other users as friends.

This project must be done individually. No copying is permitted. **Note: We will use a system for detecting software plagiarism, called [Moss (http://theory.stanford.edu/~aiken/moss/)](http://theory.stanford.edu/~aiken/moss/), which is an automatic system for determining the similarity of programs.** That is, your program will be compared with the programs of the other students in class as well as with the programs submitted in previous years.

Note that, if you use a Search Engine to find similar programs on the web, we will find these programs too. So don't do it because you will get caught and you will get an F in the course (this is cheating). Don't look for code to use for your project on the web or from other students (current or past). Just do your project alone using the help given in this project description and from your instructor and GTA only. Finally, you should not post your code nor deploy your project on a public web site.

## Platform

As in the previous projects, you will develop this project on your PC/laptop using XAMPP and you will test it using your Mozilla Firefox web browser. Download **[project5.zip](https://uta.instructure.com/courses/57979/files/10419781/download?download_frd=1)** ⤓ **(https://uta.instructure.com/courses/57979/files/10419781/download?download_frd=1)** and unarchive the files inside your web server document root directory. The project5 directory contains the file `createDB.sql`, which contains the SQL description of the tables: users and friends, that have the following schema:

```
users ( username, password, fullname, email )
friends ( user, friend )
```

To create the database, start the Apache web server and the MySQL database server on your PC using the XAMPP manager console. Run **phpMyAdmin** (http://localhost/phpmyadmin/) on your browser, create a new database with name `network` by clicking on New. After you create it, select this database (under the name `network`), go to the SQL tab, and cut and paste the SQL code in `createDB.sql` and push Go. This will create your database tables. You can test your setup on your web browser by using the URL address **http://localhost/project5/network.php** (http://localhost/project5/network.php)

The project5 directory contains the file `network.php` that uses the PDO extension of PHP to insert a new user and to query the users table using MySQL.

## Documentation

Please read **The PHP Data Objects (PDO) extension** (http://php.net/manual/en/intro.pdo.php), especially the **PDO class** (http://www.php.net/manual/en/class.pdo.php).

## Project Requirements

Create 10 users in the table users using phpMyAdmin. You need to write two PHP scrips `login.php` and `network.php`. The `login.php` script generates a form that has two text windows for username and password and a button "Login". The `network.php` script prints three sections and a "Logout" button. The first section prints the username, fullname, and email of the current user (the user currently logged-in). The second section "Friends" lists the friends of the current user. The third section "Others" lists all the other users who are not friends (non-friends) of the current user. For each friend or non-friend you display username, fullname, and email. Each friend has a button "Remove" to remove her from the friends and add her to the non-friends. Each non-friend has a button "Add" to add her to the friends and remove her from the non-friends.

From the login script, if the user enters a wrong username/password and pushes "Login", it should go to the login script again. If the user enters a correct username/password and pushes "Login", it should go to the network script. From the network script, if the user pushes "Logout", it should logout and go to the login script. The network script must always make sure that only authorized users (users who have logged-in properly) can use this script (you need to use a session to check this).

Hints: Each Add/Remove button must have an action that submits the form to network.php with a different query string. You may use a **form button** (http://www.w3schools.com/tags/tag_button.asp) with type="submit" and formaction="network.php?add=smith" to add smith as a friend and formaction="network.php?remove=smith" to remove smith from friends.
Use **md5** (http://us2.php.net/manual/en/function.md5.php) to encode passwords in PHP.

# What to Submit

Zip your project5 directory and submit your `project5.zip` file.