



## **Assignment #1**

### **Student registration form**

#### **Objectives :**

- Integrate Web applications with database.
- Apply integrity constraints to a database schema.
- Create basic registration and login form using PHP and HTML.
- Validate forms using JavaScript.

#### **First : Database**

Implement the following basic schema using DDL statements

**Department** (dept\_id , name , description)

**User** (user\_id, email, username, password, registration\_date, department\_id)

**Course** (course\_id , course\_name , course\_description , instructor\_name, credit\_hours, department\_id)

#### **Notes:**

- Necessary primary and foreign key constraints must be added for all tables.
- Department and course tables must be filled with data (using DML statements).
- You should keep your DDL and DML statements in a separate .sql file similar to the one in lab2 to be reviewed during the discussion.

#### **Second: Signup and Login Page (in the same page, name it registration.php)**

##### **A. Sign up :**

1. Create a sign up form for a user to enter his email, username and password.
2. His user\_id should be **AutoIncrement** and registration\_date should be **TIMESTAMP**.
3. You should validate that username and password are not empty and the email's format is correct.
4. Validate that the username isn't used before using php.
5. After successful registration, you should redirect the user to another page called chooseDepartment.php

## **B. Login :**

After successful login (valid user\_name and password), you have two options:

1. If the user has already chosen his department redirect him to courses.php.
2. If the user hasn't chosen his department yet, you have to redirect him to chooseDepartment.php

## **Third: Choose Department Page :**

It should have

1. Welcome {UserName}.
2. Displaying list of departments to let the student selects his department. After selecting department, you should redirect him to courses.php page.

\*Hint : Check how to write HTML tags within a php echo (you'll find something similar to this in lab 1 files).

## **Fourth: Courses Page :**

It should have

1. Welcome {UserName}.
2. Displaying table of courses for a student's department which was selected in chooseDepartment.php.

## **Hints:**

1. The Sign up part is similar to what we did in lab2 in welcome.php page.
  2. DML (Data Manipulation Language) Statements are the insert statements that we wrote in the previous lab.
  3. You should use **Session** to store logged user\_id and user\_name across pages.
- \*More on sessions in php : [https://www.w3schools.com/php/php\\_sessions.asp](https://www.w3schools.com/php/php_sessions.asp)
4. You can check if username already exists using "SELECT \* FROM user WHERE user\_name = \$username" and check that num of records = 0 or if the Unique constraint doesn't fail.
  5. You can update department\_id value in user table using "UPDATE user set department\_id = \$departmentId WHERE user\_id= \$userId".

## **Bonus:**

- Storing the user encrypted password for security issues :  
<http://php.net/manual/en/function.md5.php>
- Using CSS to format the forms :  
<https://www.w3schools.com/css/default.asp>
- Hide/Show sign up and login forms with jQuery :  
[https://www.w3schools.com/jquery/jquery\\_hide\\_show.asp](https://www.w3schools.com/jquery/jquery_hide_show.asp)
- Submitting the form using Ajax :  
[https://www.w3schools.com/jquery/jquery\\_ref\\_ajax.asp](https://www.w3schools.com/jquery/jquery_ref_ajax.asp)  
[https://www.w3schools.com/js/js\\_ajax\\_intro.asp](https://www.w3schools.com/js/js_ajax_intro.asp)