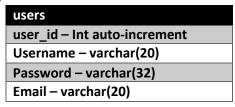# Web Application Engineering
Lab # 12

Objectives

Get basic understanding to the implementational aspects of

- Database CRUD operations in PHP

Lab Activities

1. Create a database "authentication"
2. Create following table

users
user_id – Int auto-increment
Username – varchar(20)
Password – varchar(32)
Email – varchar(20)

1. Create a homepage that shows the list of all the users that exists in users table. This page must only show the user_id, username and email.
2. Give an option to user that he/she could add a new user to this table. Upon adding a student, your form must require the username and email. The password must be generated on a random basis. Use the random string method of PHP to generate this password. Upon submission of this form, the username, password (auto generated) and email must be saved in database. After data is saved in database, display all the user (including newly created user) and show the message that data is saved if saved correctly, otherwise display the error message.
3. On homepage, against each user, give the option to delete the user. Once user clicks on delete button, the data in corresponding row must be deleted. After successful deletion, display all the remaining users and display a proper message that the data is successfully deleted, otherwise display the error message.
4. On homepage, against each user, display an edit button. On the click of edit button, the data in the corresponding row must be shown to the user. This data must be shown in the HTML form so that user can edit this data. The form must be prefilled with the already entered data so that user can change it effectively. Note that the user_id can not be changed. Upon the edit, the new data must be saved in database and user must be redirected to homepage with proper message.

Note:

- You must apply proper exception handling in each of the step.
- All the database related operations must be performed in separate database class.
- Must use PDO concepts effectively with query prepare methods.
- Proper messages to the user must be provided in alert forms.
- Extra credit will be given to students who use bootstrap Modal and confirm the user before deleting an entity.