Term Project
A Simple Database Application Development

Objective

To develop a database application using modern programming tools.

Programming Tools

Students are expected to do their project using C# as programming tool and using SQLServer as database management system. However, it is up to the team to choose another programming language like Java, PHP, or Python, and to choose another database management system like MySQL, PostgreSQL, or SQLite.

Guidelines

Each student is expected to form a project-team by choosing one classmate. Failing to do so, he/she will work alone but will get penalized by getting at most 50% of the project grade. Each team will work separately on the same project title. It is highly suggested to share the work evenly. During the project submission, if it is noticed that the work done wasn't fairly distributed, both members will be penalized. However, if it is understood that one member didn't give as much efforts as his/her teammate, then the situation will change. Each team has to prepare a project documentation report. The report should include just necessary details documenting the work done with possible figures and tables. The number of pages for the report shouldn't pass ten.

Description of the Project

The project work is to develop a simple *university management system*. The application should let three different kinds of users to work, namely, the student, the instructor, and the faculty coordinator. Each user has the following functionalities in the system:

Faculty coordinator

- ✓ Login to the system
- ✓ Add new course
- ✓ Add new teacher
- ✓ Add new student
- ✓ Assign courses to instructors (teaching)
- ✓ Assign instructors to students (advisors)

Instructor

- ✓ Login to the system
- ✓ See and update his/her details
- ✓ See the courses assigned to him/her
- ✓ See course details (course info, list of students registered, etc.)
- ✓ Register students to the courses

Student

- ✓ Login to the system
- ✓ See and update his/her details
- ✓ See the courses he/she is registered to
- ✓ See the other students registered in his/her class

Note that it is up to each team to include more functionalities to the system. Relational database design is again up to the team. However, the graphical user interface design and data validation will play an important role in project grading (25%).

Grading

Application program (10 pts) + report (2 pts) + weekly meetings during laboratory hours (3 pts).

Good luck!