**Vize ve Final Projesi (Midterm and Final Exam Project)**

We will not have midterm or final exam this semester as well. Instead, you will make a single big project that has to be delivered before the final exams

Read this file very carefully and you can ask me the any parts you did not understand very well

In this project, you are supposed to code a desktop application that is capable of the following features:

* Uses one of the following databases : Microsoft SQL, Oracle, PostgreSQL, MySQL, SQLite
* Uses one of the following programming languages: C++, C# or Java
* It has to have an interface, no console application
* It will be a school management system
* The application will have 3 roles: System Administrator, Instructor and Student
* The application will allow account registration. The default registration role will be a student
* System administrators will be able to assign new members to their roles as Instructors or degrade as Student
* Who gets the system administrator role can be defined in the database manually
* For registration, the people has to enter the following information: name, surname, email (email will be used to login into the system as username), password, phone number, instructor or student (this will be approved by system administrator), which department (e.g. computer engineering or electrical engineering, etc.)
  + You have to check whether name, surname, email and phone are in valid format or not (e.g. no special characters allowed in emails)
* System administrators will compose or destroy available departments (such as computer engineering or electronic engineering, etc.) from the their administrator panel
* Designed system will automatically assign a User Id to each new registration
* Students will also get another id as Student Id and they need to hold several other information such as which year they are at (1st, 2nd, etc.), their yearly average and general average scores
* Every information of every account will be hold based on their User Id
* Instructors will be able to compose their lessons but they will be enabled only when approved by the system administrator
* Students will be able to select available lessons but will require approval of Instructor of that lesson
* Instructors will be able to enter lesson score of students
* The screens that has to be available for all roles (administrator role, instructor role and student role)
  + Membership panel, can change registered email or password
* The screens that has to be available System Administrator role
  + Membership approval panel, can change member role, can change member password. For this they should be able to list all registered members with their information
  + Lesson approval panel, can approve or change the lessons instructor or deny the lesson proposal made by an instructor
* The screens that has to be available Instructor role
  + Student lesson application approval or denial (when a student registers a lesson the instructor sees which student applied)
  + Instructor has to be able to see student’s name, surname, student id and their department and which year they are at currently (first year, second year, third year, fourth year)
  + Lesson proposal panel. Proposed new lessons are only activated after system administrator approves
  + List lessons and see registered students to those lessons
  + Give lesson score to the students and modify score later as wished
* The screens that has to be available Student role
  + List available lessons and apply to that lesson
  + List registered lessons and the score they have got from that lesson
  + See their yearly and general average score

You are free to design this system as you wish. Design the necessary database tables, design the necessary interfaces and everything is up to you

You will get your score based on how well you have coded this system. We do not expect it to be perfect but it is expected to work without any errors and with desired features

You can come and ask me any questions that you encounter

You cannot get code of your friends that is strictly prohibited. You will get 0 score if you do so

Since software will be unique to every student as their own planning, designing and imagination, no similar code can be expected

This project file may get updated according to student’s feedback so check it regularly and come join the every lesson

Final sınavı yapılmayacak ve notunuz bu projeden verilecektir. O yüzden bu projeyi oldukça ciddiye almalı ve hemen başlamalısınız. Bilmediğiniz kısımları internetten araştırın. <https://stackoverflow.com/> dan hesap alın ve oraya sorun, oradan bakın. Projeyi yaparken takıldığınız yerleri bana eposta ile sorabilir veya odama gelerek danışabilirsiniz. Eposta adresim : [furkan.gozukara@toros.edu.tr](mailto:furkan.gozukara@toros.edu.tr) , oda numaram : A015

There will not a final exam. Your grade will be based on this Project. Thus, take this Project very seriously and start working on it immediately. Look the internet for the parts that you do not know. Create an account on <https://stackoverflow.com/> and ask there, or look for answers there. When doing the Project you can email and ask me the parts that you cannot solve. My email : [furkan.gozukara@toros.edu.tr](mailto:furkan.gozukara@toros.edu.tr) , my room : A015