Marmara University – Faculty of Engineering – Department of Computer Engineering
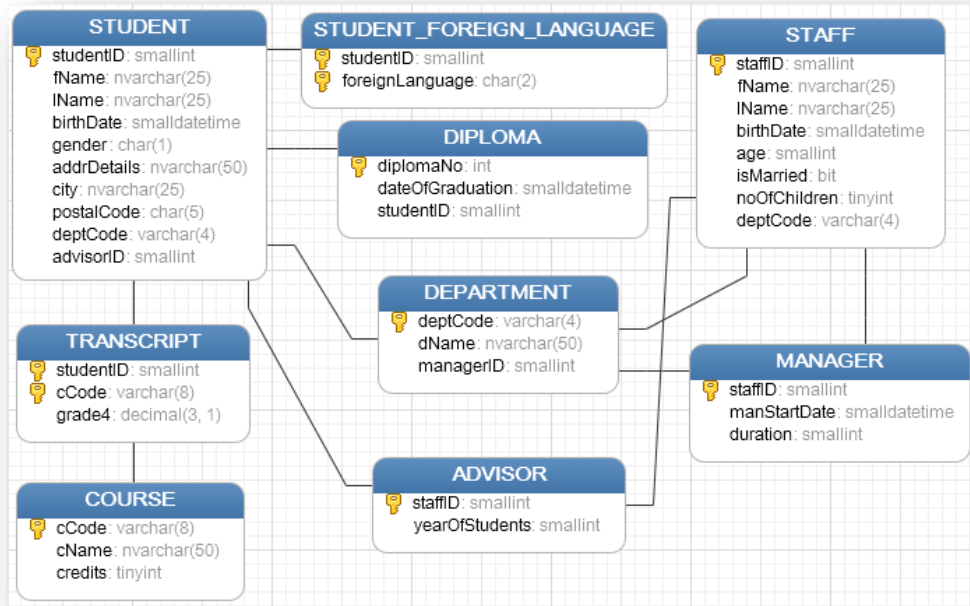
Fall 2021 – CSE3055 Database Systems
Homework #2

Due: 19.11.2021.Fri 23:59

1) Database Implementation.

  a) Implement the following database on MS SQL Server. Name your database as your InitialsOfFullName_StudentID, e.g. MAY_150120123 for a student with full name "Mehmet Ali YILMAZ" and student ID "150120123".

  b) Assign default values "İstanbul" and "34722" for the fields *city* and *postalCode* of table *STUDENT*, respectively.

  c) After implementing your database, use the Excel file "CSE3055_fall2021_homework_2_data.xlsx" to import data. In order to import data on MS SQL Server, right click on your database (e.g. MAY_150120123), point to "Tasks" and click on "Import Data…".

  d) Backup your database. In order to take a backup on SQL Server, right click on your database (e.g. MAY_150120123), point to "Tasks" and click on "Back Up..". Name your backup file as "hw2_NameOfDatabase.bak" (e.g. hw2_MAY_150120123.bak).

2) Write the following SQL statements on your MS SQL Server database. For each of the following query, take a screenshot of both your SQL query and output of the query on MS SQL Server.

  a) List first name, last name, birthdate and city of students.

  b) List first name, last name, department name, advisor's first name and last name. Order the list by department name ascending and student's last name.

  c) List distinct first and last name of students whose department is Computer Engineering.

  d) List all attributes of the students whose first name contains 'at'.

  e) List staff ID, first name and last name of married managers who is older than 40 and have at least 2 children. Order the list by birthdate.

  f) List student ID, first and last name, department name and graduation date of students who have graduated after 21.05.2010.

IMPORTANT NOTES:

1) Having submitted this homework all students accept the following sentences: "I hereby swear that the work done on this homework is totally my own; and on my honor, I have neither given nor received any unauthorized and/or inappropriate assistance for this homework. I understand that by the school code, violation of these principles will lead to a zero grade and is subject to harsh discipline issues."

2) In case of any form of copying and cheating on solutions, all parts will get ZERO points. You should submit your own work. In case of any forms of cheating or copying, both giver and receiver are equally culpable and suffer equal penalties. All types of plagiarism will result in zero points from the homework.

3) Compress your database backup file with the screenshots in a zip file. Name it as hw2_InitialsOfFullName_StudentID.zip" (e.g. hw2_MAY_150120123.zip) and submit it to the site http://ues.marmara.edu.tr before deadline.

4) Do not send homework submissions through e-mail. E-mail attachments will not be accepted as valid submissions.

5) You are responsible for making sure you are turning in the right file, and that it is not corrupted in anyway. We will not allow resubmissions if you turn in the wrong file, even if you can prove that you have not modified the file after the deadline.

6) No groups are allowed.

7) Grade evaluation may be done on selected parts of the homework, so try to complete all parts of your homework successfully.

8) No late submissions will be accepted.