INF202 DBMS 1

ASSIGNMENT 4

Deadline: December 6, 23.59

Assignment 4: Group Assignment

Group mates: the same from Assignment 3

Total: 20 points

Task 1 (10 points)

Make corrections according to the feedback provided from Assignment 3:

- If you did not submitted Assignment 3, then please create a database out of at least 3 tables, and insert some amount of data in each table (no restrictions on the number of records). This is needed to be able to work further.
- Most common types of mistakes, that you should check for and fix:
 - A. Not putting INSERT, DELETE, UPDATE statements into the procedure. Please create stored parametrized procedures.
 - B. Not putting constraints on the tables. Please specify table constraints. Especially check your FOREGN KFYS
 - C. Make sure there is no unconnected tables each table either references or is being referenced at least by one another table. If you are using Azure Data Studio, then just check these constraints in code. SQL Server Management Studio users might use "Database Diagrams" functionality to see all connections between tables like here https://dataedo.com/kb/tools/ssms/create-database-diagram.
- Generally, if you omitted or could not finish something from last Assignment 3, you can complete it as part of this task.

INF202 DBMS 1

ASSIGNMENT 4

Task 2 (10 points)

In this task we ask you to create graphical user interface to interact with your database. In terms of functionality, example of your GUI interface might look something similar to the following:



From exmaple: ID, Username, Password, Roles - are columns of some table from your database. ADD, UPDATE, DELETE buttons - are to get called to implement corresponding sql INSERT, UPDATE, DELETE procedures created before.

For this task, please select set of columns you are going to interact with. While it comes to the part, of using SQL queries, use your already written INSERT, DELETE, UPDATE statements from stored procedures. If you need, your can modify or create new queries according to your needs.

INF202 DBMS 1

COMPANY NAME

You are welcome to use any technology or language you prefer to use. Here we provide for you links in Java, since this is the language you learned last year.

- 1) Step1. Here you install and configure JDBC Driver (Example link: https://docs.microsoft.com/en-us/sql/connect/jdbc/step-1-configure-development-environment-for-java-development?view=sql-server-ver15).
- 2) Step 2. You establish connection with your database. (Example link: https://docs.microsoft.com/en-us/sql/connect/jdbc/step-3-proof-of-concept-connecting-to-sql-using-java?view=sql-server-ver15)
- 3) Step 3. You create a Graphical User Interface to interact with your database.