CSE 204 **Group Project Assignment 1** 15/03/2022

Due: Sunday 17 April, 2022 by 23:59 (via MS Teams)

Percentage of Final Project : 40%

Description:

For this portion of your group project, you will go through the steps of creating a normalized database from a set of source data. This will represent a combination of multiple topics covered in the course thus far.

You will use a series of fact-finding techniques (mostly research-based) to create a set of at least 30 data items you want to maintain using your database. You will need to create an unnormalized dataset of example data. Bring this data into a single table in an RDBS schema using a technology of your choosing (MySQL, Access, others).

Following this, you will use the normalization process discussed in class to create an E-R diagram for your database in 3NF.

Create the necessary tables to represent your data in the 3NF database. Populate these tables using the necessary queries to get the data from the source UNF table and put it into the proper 3NF table.

Deliverables:

1. An unnormalized set of data, including:
    - a list of the data items being maintained
    - a set of data in a grid or spreadsheet
2. E-R Diagram for your 3NF database (include the participation/cardinality information... 0..*, 1..1, etc.)
3. SQL queries for creating tables and inserting data from the UNF database table into the tables created
4. A view to recreate the original dataset from your 3NF tables (this will be used for comparison purposes to the original dataset you provide as number 1 of this deliverable)

Acceptable formats:

- Item 1 can be submitted as an spreadsheet. Item 2 should be drawn as a diagram. Items 3 and 4 should be submitted as SQL queries.
- Alternatively, you can submit all items as a report in Word or pdf format.