CS631-Term Project Final Report Requirements

Due Date: See course Canvas assignment page

The final step is to prepare a formal report and brief presentation. You are required to demonstrate your programs. You should treat these demonstrations as if you were giving them to your customer. So, prepare them professionally.

This report should include:

1- A separate cover page indicating the course number, course section, GROUP Number, the title of your project, and the full names of the group members (with e-mail addresses).

2- This report should minimally cover a summary of the *business requirements* and any additions you may have made, the *entity-relationship design*, the (relational) *logical database design*, and *the application program design*. For each of these, you should identify the major design decisions you faced and the design decisions you made with justifications for those decisions.

The application program design should have *at least three web pages* to connect to the database. You may choose any language and platform for your application program.

3- Normalize the Relations: The steps to follow for each relation are:
   a) Write out the relation (schema) including all attribute names. Indicate keys and foreign keys.
   b) Provide some sample data for the relation (5 rows).
   c) State the **Key** for the relation and write down **Functional Dependencies**.
   d) State that this relation is in 3NF.
      If a relation fails to meet the definition of a third normal form (e.g., it contains a partial-key dependency or it contains a transitive dependency), then split the relation into new relations.
      Begin the normalization process from the beginning with each of these new relations.

4- Write four queries in English and answer in SQL code, show a screen dump or SNIP that shows the SQL code and the result (You may use the same queries from Phase II).

   Write four SQL Queries;
         1 contains GROUP BY
         1 contains GROUP BY and HAVING
         1 contains nested query with ALL
         1 contains nested query with IN

5- A narrative conclusion section that describes:

   a) the group's experience with the project (which steps were the most difficult? Which were the easiest? what did you learn that you did not imagine you would have? if you had to do it all over again, what would you have done differently?)

   b) any final comments and conclusions.