JOHN ABBOTT
CEGEP/COLLEGE

Centre for Continuing Education

420-SA5-AB - DATABASE

Project Final Delivery **Due: See Léa**
Project is Worth 20% of the Course Grade

This project will provide a learning activity to reinforce the following course content:

- Data Modelling, Normalization, Data Integrity, Keys, and Constraints
- CREATE TABLE, data types, CREATE VIEW, DROP, ALTER
- Modifying data using INSERT, UPDATE and DELETE statements
- More advanced queries with SELECT – INNER AND OUTER JOINS, sub-queries, DISTINCT

Overview: This is a course project that is worked on in groups. Each student must contribute to the presentation and contribute to the scripts to create and populate the tables. In addition, individually, produce a report illustrating queries for at least 3 system requirements..

Step 1: Based on the data model produced by your group, and feedback received, prepare a script to create the database tables. Include drop statements so that the script may be used to recreate the tables.

Step 2: Prepare a second script containing insert statements to populate the tables with a minimum of 10 rows per table. Use realistic data.

Step 3: Identify at least 15 queries that would be needed for this system. Assign 3 queries to each team member.

Step 4: Determine and code any views needed to support the queries. Add the "create view" and “drop view” statements to the create table script. Code select statements to produce the result of the queries.

Step 5: Using Word, create a report containing a title page, a brief description of the scope of the system, the final data model prepared in MySQLWorkbench using the existing tables, your queries, the code for each query, and the results of running the queries.

Step 6: Update the original PowerPoint presentation to present your organization's final data model. In addition, add some of the queries and query results to illustrate how the database is supporting the requirements of the organization.

Step 7: Submit your team's PowerPoint file and scripts to the dropbox on Lea.
Submit your report (step 5) to the dropbox on Lea.

Grading Scheme / Rubric

Final Project Delivery (Database Implementation) 80%

Criteria	Sub-criteria	Excellent	Average	Unacceptable
Database Creation /50	• Drop statements • Create table statements • Primary keys • Attributes, data types • Foreign keys	All syntax is correct, most tables are complete, primary and foreign keys are valid. Drop statements are included. **(46-50)**	Most tables are correct and complete. Some data types are not optimal. Some foreign key constraints are missing. Some drop statements are missing. **(26-45)**	Some syntax is incorrect and/or missing. Many attributes have poor choices of data types. Some drops are missing. Some keys are missing. **(0-25)**
Database Content /25	• Inserts	All tables are populated with the correct number of rows. **(21-25)**	Most tables are populated with the correct number of rows. **(16-20)**	Some tables are missing the correct number of rows **(0-15)**
Quality /25	• Data model • Queries • PowerPoint slides • Presentation • Clarity	The data model is created from the database. The queries are included and relevant. The presentation was very clear and complete. No errors in spelling or grammar. **(21-25)**	The data model is not updated. Some queries are not relevant. The presentations was fairly easy to follow. Minor errors in spelling or grammar. **(16-20)**	The data model is missing or not correct. Some queries are missing or not relevant. The presentation was difficult to understand or incomplete. Many errors in spelling or grammar. **(0-15)**

Final Project Report – Individual 20%

Criteria	Sub-criteria	Excellent	Average	Unacceptable
Query 1 /25	• Valid SQL • Correct result	Statement is correct, well-written, complete, efficient, and meets a requirement. Result is accurate and clear. **(21-25)**	Statement is somewhat correct, fairly well-written, almost complete, and may meet a requirement. Result is fairly accurate and relatively clear. **(16-20)**	Statement is missing, incorrect and/or poorly written. Result is missing or incorrect. **(0-15)**
Query 2 /25	• Valid SQL • Correct result • Follows best practices	Statement is correct, well-written, complete, efficient, and meets a requirement. Result is accurate and clear. **(21-25)**	Statement is somewhat correct, fairly well-written, almost complete, and may meet a requirement. Result is fairly accurate and relatively clear. **(16-20)**	Statement is missing, incorrect and/or poorly written. Result is missing or incorrect. **(0-15)**
Query 3 /25	• Valid SQL • Correct result • Follows best practices	Statement is correct, well-written, complete, efficient, and meets a requirement. Result is accurate and clear. **(21-25)**	Statement is somewhat correct, fairly well-written, almost complete, and may meet a requirement. Result is fairly accurate and relatively clear. **(16-20)**	Statement is missing, incorrect and/or poorly written. Result is missing or incorrect. **(0-15)**
Quality /25	• Scope • Data model in MySQLWorkbench • Clarity	The scope is included and clear. The data model is clear and from MySQLWorkbench. No errors in spelling or grammar. **(21-25)**	The scope is included and fairly clear. The data model is fairly clear and from MySQLWorkbench. Minor errors in spelling or grammar. **(16-20)**	The scope is missing or unclear. The data model is missing or difficult to read. Errors in spelling or grammar. **(0-15)**