#### CIS276DB

### **Semester Project Instructions**

## Semester Database Project - Due Wednesday 07/21/21

(email your idea to me by Monday 07/05/21 @ 8 AM at rushing@mesacc.edu)

It's time to put everything you've learned over the semester into a database! With this semester project, you will create and fill a database with records using SQL scripting. You will also design views, stored procedures, and functions that interact with the data stored in the tables. Have fun and be creative with this project- the sky is the limit on what your business or services related database can be designed to accomplish. Name your database the same as your MEID. In a PDF page or so, tell me what your project is about and what your code does. Name each of your files meaningfully and follow standards illuminated in the book.

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Graded Content:
Name your database your MEID cas2033209
Initial requirements for the database:
5 tables (related to each other via PK-FK relationships with 60 records between all 5 tables All scripts are to be written by hand (cannot use designer functionality and then create a script from the design itself)
Semester Project Objectives
Demonstrate knowledge of third normal form database design $\chi$
Demonstrate ability to write DML statements Basic SQL statements (SELECT, FROM, WHERE, ORDER BY) $$ X
Use of multiple table joins X
Use of built-in SQL functions X
Use of summary queries & Use of subqueries $\chi$
Demonstrate ability to write DDL statements $\chi$
Use of database and table creation scripts X
Use of View creation scripts X
Use of Stored Procedure creation scripts X
Use of user-defined creation scripts & Functions X
Demonstrate ability to use T-SQL within scripts $\chi$
Use of conditional structures X
Use of CTE X
Use of custom error messages X

Use of database objects within scripts X	
Create and provide a visual ERD from SSMS $\chi$	
Files Included in this Module:	
Semester Project 2 page Report & Use Manual (in pdf format)	
Detailed requirements and scripts that must be submitted with the project X	
Database Specifications (tables and fields with datatypes shown) in an excel file $\chi$	
Please fill out this sheet after completing the project and submit it in the same Zip folder sql/.png files $$	with you
Database Specifications, Project & Report (300 points):	

# Describe what every file does and label with your name and date in complete comments at the beginning of every file

#### NO SINGLE FILE script SUBMISSIONS are allowed

The files should be given in sequence of operations with a step number in the filename

Demonstrate ability to attach your database

Demonstrate your tables and relationships

Demonstrate the views, stored procedures, functions, and triggers you created

Demonstrate understanding and use of transactions and locking

Demonstrate understanding and use of database security and systems management

Students will Follow all prior information and instructions in this document

Students will give periodic updates on project progress as directed

All code must run successfully for Professor Rushing to receive any points for this assignment

Presenting is mandatory to receive any points for this assignment

Updated 07/01/21 DR