Final Project Milestone 2

Submit Assignment

Due Aug 6 by 11:59pm **Points** 25 **Submitting** a text entry box or a file upload

Milestone 2 Details

In MS 2, you will prepare your documentation and coding outline...

The Final Database Document you turn in will end up being a SINGLE MS Word Document or Simple HTML Webpage (preferred) with Sections (described below) containing Hyperlinks to open up "snapshots" of the individual sprocs, udfs, and/or triggers you will be writing. They will be displayed as separate individual text files (instead of one continuous script). You can still have your a full continuous script, but the documentation should make it easy to read about each thing you will program, and actually open up the portion of the code that the documentation is relevant for.

To start MS 2, first, make changes based on instructor feedback from Milestone 1 (if necessary), and start organizing your document as follows...

Part 1. Project Overview. Based on your initial write up and feedback from MS 1, you may need to revise your scenario text / summary of the intent of your final project. If the initial write up scenario was good and contained enough summary content, then just paste it again here. If not, edit it and review. Part I should be a general overview of one to two paragraphs. Move your business rules to Part 2 (below). You will only program against certain business rules you deem necessary.

Part 2. Data Specifications Overview (work in progress).

Part A: List specific BUSINESS RULES Satisfied by the ERD and normal DB Constraints (PK, FK, DK, CK). Copy and paste your E-R diagram and embed it here, but also include the image of the ERD as a separate file with your zipped submission.

Part B: List specific BUSINESS RULES Satisfied by TRIGGERS and outlines for each trigger you plan to program

- Trigger Name (will eventually be hyperlinked to the real trigger.txt file you will write. You will have one txt file for each trigger)

-Type *On Update/Delete/Insert FOR/AFTER INSTEAD OF*

- DETAILED Description of what this trigger should do

Part C: List specific BUSINESS RULES Satisfied by STORED PROCEDURES and outlines for each SPROC you plan to program

- SPROC Name (will eventually be hyperlinked to the real spoc.txt file you will write. You will have one txt file for each sproc)

- DETAILED Description of what the sproc should do. Does it call others? Does it have a cursor? Does it have error handling routines? Does it utilize a linked server or impact other distributed databases / tables?

-Input Parameter(s) Any *Optional?*

-Output Parameter(s)

Part D: List specific BUSINESS RULES Satisfied by USER DEFINED FUNCTIONS and outlines for each UDF you plan to program

-UDF Name

-DETAILED Description of what the UDF should do. Does it call others? Does it have a cursor? Does it have error handling routines? Does it utilize a linked server or impact other distributed databases / tables?

-Input Parameter(s)

-Returns_____? *Table or Scalar Value (Type)*

Part 3. OTHER SCRIPTS (not already hyperlinked in Part I of documentation): As you develop them, save your scripts SEPARATELY (in .txt files) including, but not limited to (a) DB and Table Creation Script with data relationships and constraints (PK and FK constraints) including, (b) INSERT INTO statements sample data, (c) events (stored procedures and User Defined Functions), actions (triggers) of the database, and (d) a test/demo script (which you will present in a 15 minute video at the end of the course) running through everything showing it works. I don't expect a majority of the scripts to have been written by the time you turn in MS2, but they should be defined. In other words, if you do not have a particular Stored Procedure, Function, and/or Trigger, finalized, then include placeholders (a description) of what you intend to write/develop. Keep copies of old scripts, so they can be included under "archived materials".

HEADS UP!!! Not Required for MS2, but will be part of Final Project:

- Your final database should utilize at least 6 unique* (with 5 being fairly complex) Stored Procedures and/or User Defined Functions to manipulate data, process queries, and generate data based on the application requirements in #1 above. At least 75%, preferably all, of these should be fairly complex, do error handling, and include comments. At least 2 need to utilize cursors. NOTE: Teams must do 9 Stored Procedures and/or Functions and have at least 3 cursors.
- Your final database should also have at least 4 unique* triggers. These should be fairly complex, and at least one trigger should use the Update Column (not table) feature. A trigger that enforces referential integrity between tables will NOT count (even though you will need one for referential integrity across FARMS tables). This extra (5th) trigger should be included to enforce referential integrity across multiple databases. NOTE: Teams must do 6 Triggers - with the 7th being the referential integrity across Farms Tables.
- Your final database will need to demonstrate LINKED SERVER or OPENROWSET connectivity to the YOUR_FARMS database (the class master). In other words, at least two of your queries (1 read and 1 write) have to cross into the YOUR_FARMS and Join with your own Final Project database to produce results. NOTE: Teams must do 4 Distributed Queries (2 read / 2 write).

*Unique means not doing the same thing twice. In other words, a stored procedure to insert info in the guest table and a stored procedure to insert info into a hotel table are considered the same type of stored procedure. In addition, this is considered a simple stored procedure. Your others should be more creative than this (ie: using cursors, error checking, etc).

Here is what is required for Milestone 2 **THIS PORTION WILL BE GRADED!**

1. An Organized PHYSICAL (or ELECTRONIC preferred) Folder containing information grouped as outlined above - including all archived and corrected materials from Milestone #1.
2. Part I above should be complete when you turn in Milestone #2.
3. Part II should be set up with links to these areas when you turn in Milestone #2.
4. An Outline (placeholder, pseudocode, etc) of Part III of these items should be complete. While it's not necessary to have the exact code finished, I want a general idea or what Procedures and/or UDFS, and Triggers you will implement to enforce and execute business rules. Since you need 8 Procedures and/or UDF's and 4 Triggers, I want to make sure you have enough to program against. Psuedocode would be helpful at this point. If you do not have enough UNIQUE things to program against in the database, we'll have to re-visit your ERD and business rules again.

Final Turn in Details (NOTE: you may not have all the information to do all this for MS2....this is just a head's up of what's expected at the end of the semester).

1) You will run your database on your LOCAL Machine. You will need as much sample data as possible to properly demonstrate your final project. Have some variety of data!

2) You must have at least 2 (4 for teams) DISTRIBUTED queries (that use a linked server to YOUR FARMS database on TITAN).

3) You must have at least 6 (9 for teams) or more Stored Procedures and or User Defined Functions. These Procedures or UDFS must be fairly complex and unique from one another. At least 2 (3 for teams) Procedures should demonstrate the use of Cursors.

5) You must have at least 4 (6 for teams) Triggers. These Triggers should be documented, with comments, and be fairly complex. An extra (5th) trigger should be included to enforce referential integrity across multiple databases.