

Fall 2010 CS 3200 Class Project: Milestone 1

The goal of this milestone is to give you a first hands-on experience with a commercial DBMS. This milestone is to be completed individually (i.e., no teams). You can discuss problems with other students, but you have to create all deliverables yourself from scratch. In particular, it is not allowed to copy somebody else's code or text and modify it.

The report for this milestone is due on Friday, **September 17 at 5pm**. For late submissions you will lose one percentage point per hour after the deadline. This milestone is worth 10% of your overall homework score. Please email the deliverables to both me and Yue. You should receive a confirmation email from either of us. If you need to send multiple files, please create a single zip file. Many other attachments types, in particular rar files, are rejected by the CCIS mail server.

Connecting to a DBMS

We have set up a database server running SQL Server 2008. Its address is 129.10.112.226. You should have received a user name and password for this server. If not, please contact us immediately.

For this milestone, you will directly connect to the database server through the SQL Server 2008 client tools. Log on to a Windows Lab machine and find "SQL Server Management Studio" for Microsoft SQL Server 2008, which is "hidden" somewhere in the Start menu. (Careful, do not use the SQL Server 2005 tools!) Hint: It might not be where you would expect it, but it is there.

Open SQL Server Management Studio and you should see a dialog window for connecting to a server. Make sure you use "Database Engine" for server type, the IP address given above for server name, "SQL Server Authentication" for authentication, and then your user name and password. If successful, you should now see Databases, Security, etc in the object explorer window. Go ahead and open all folders and their sub-folders and see what is there.

Creating a Table

In the Databases folder, there should be a database named "CS3200XX" for login "Student3200XX". Open it and look at its tables. Now create a new table by simply right-clicking on Tables. For this table, create at least three different columns. One column should have an integer type of size 8 bytes at least, another should contain floating point numbers of size 4 bytes exactly, and yet another should be able to contain strings of variable length, up to 10 characters long. Feel free to choose any appropriate names for the columns and the table.

Inserting Tuples

Insert at least 10 different tuples into the table. The easiest way to do this is by right-clicking on the table and selecting a menu item that allows you to edit the table. Then you can simply type the desired values in the different table fields.

Report what happens when you try to insert a value that has the wrong type, e.g., a floating point number in the integer column.

Report what happens when you try to insert a string that has more than 10 characters.

Deliverables

Create a report for this milestone with the following content:

1. Discuss all points above that ask you to report something.
2. Right-click on your table and select “Script Table as” -> “CREATE To” -> “New Query Editor Window”. You should now see a script that shows SQL commands for creating your table. Copy and paste this script into your report.
3. Right-click on your table and select “select Top 1000 Rows”. Make sure that all tuples and the script for this query show up in the main windows. Take a screenshot of the entire active window (with Alt+PrtSc) and then paste this screenshot into your report. If you are using MSFT Word, you can simply paste it directly into the document.