## Assignment 6 – CS3310

- 1. Download & install MySQL.
- 2. Download & install the appropriate connector for MySQL which allows C# (& other .NET languages) or Java to interact with a MySQL database. [NOTE: C# people need Visual Studio (vs. Microsoft C# Express Edition) see the staff in room C-208 for instructions on how to get this since CS no longer has the MSDN license, but CEAS does].
- 3. Create a World DB consisting of just the <u>Country</u> and <u>CountryLanguage tables</u>. Do this using MySQL and appropriate script files NOT using a C# or Java program. [The script files to do this (with minor modifications for pathing) are on the course website].
- 4. Write a C# or Java program which does batch processing (using the "Sequential File Processing Algorithm" i.e., loop til EOF {read 1 transaction, then deal with it} ). The input Transaction file (a text file) includes requests for retrieval of data from the World DB (select's) and for updating of the World DB (insert's, delete's, update's). An output Log file (a text file) includes the following for each transaction:
  - a. the original transaction request,
  - b. the results from executing the "query" (which would be a "table" for a select, or a reassurance message for an insert/delete/update).

See A6TranAndLogSpecs.pdf and A6DemoSpecs.txt on the course website for further details.

The program MUST be modular, using good descriptive naming, a comment-line-of-\*s between modules, etc. There's a C# and a Java project example on the course website to demonstrate how a C#/Java program accesses a MySQL database: UseMySqlDb.zip (including UseMySqlDbProgram.cs/java and its 2 classes: DataRetrieval.cs/java, DataUpdate.cs/java).

The demo programs use hard-coded queries, hard-coded column-headings, multiple retrieval methods, etc. just to demonstrate how the new C#/Java language concepts regarding connecting and interacting with an existing DB. **CHANGE THESE for the asgn** to make what you hand in follow the asgn and demo specs.

5. NOTE: The examples on my website used MySQL 5.1. Newer versions should work the same.