## **CSCIX370 Database Management**

## **Spring 2014**

**Project 2**: Join Operator, Simple Indexing and FileList

**Due**: Feb 20 (8 am)

Implement Join Operator, Simple Indexing and FileList.

Download the starter source code from the course web page for Project 2. Upon making sure that it is working properly, you can start implementing. This part of the project consists of 2 more source code files. It may require implementing more than one method to make an operator or a function to work properly as it was in the first project. Make sure you read comments within the code and uncomment some of the lines. There are 4 new functionalities to be implemented in this project:

- 1. As you implemented some of the operators in Project 1, now you need to add simple indexing feature to those operators (Java Map).
- 2. In addition, you need to implement, with indexing feature, join operator, which is partially implemented.
- 3. Also you need to implement FileList that will allow you to store tuples of your tables in a file (rather than main memory). For doing this, you'll need to implement some of the methods in FileList.java and Table.java as well.

Your program must be thoroughly documented (generate javadoc). Use the @author tag for each class and method. Each method should have a single (main) author. The coding workload should be split roughly equally among 4 (or 5) group members. We will check this by examining the @author tags. Please make sure that the output of your program is easy to understand. Provide a flag for turning on/off your tracing/debugging messages in your program's output – if necessary.

**Programming language:** Java 7 is required for the project.

What to submit: Please submit

- all source code
- all the javadoc files
- a readme file

The readme file should contain: your names, how to compile and run your code and other specifications you want to make. Please pack all your files in a zip package with the file name: "project2" + last names of group members. For example:

project2\_chen\_kim\_wong\_allen.zip.

**How to submit:** Mail your ".zip" file to the TA (Sara Vahid, <a href="mailto:savahid@gmail.com">savahid@gmail.com</a>) with subject line "[X370] Project 2 Submission". If you submit more than once the latest copy will be considered (we encourage only a single submission). See course page or syllabus for the policy on late submissions.

An electronic copy of this project and links to source code templates to be used (including FileList.java and Conversions.java) can be found at the course web page:

http://www.cs.uga.edu/~budak/db\_sp14.html

Also every group member needs to submit a peer evaluation form at the time of project submission. This form can be e-mailed to TA in a separate e-mail.