Assignment 5 - Minirel Step 2: HeapFile Manager

Start Assignment

- Due Apr 17 by 11:59pm
- Points 7.5
- Submitting a file upload
- File Types zip
- Available after Apr 4 at 10am

Minirel: HeapFile Manager

This assignment will enable you to learn how to build a database system. You will build a working single-user DBMS that can execute certain simple SQL queries. In this part of the project, you will implement a File Manager for **Heap Files** that also provides a **scanning** mechanism that will allow you to search a heap file for records that satisfy a search predicate called a filter. How are heap files different from the files that the DB layer of Minirel provides? The main difference is that the files at the DB layer are physical (a bunch of pages) and not logical. The HeapFile layer imposes a logical ordering on the pages (via a linked list).

Important: **Friday, April 5's lecture** will be a discussion of Minirel and Assignment 5. It is strongly recommended that you attend the session in person to learn about this assignment.

Detailed instructions of the project are present here:
https://pages.cs.wisc.edu/~anhai/courses/564/minirel-project/
(https://pages.cs.wisc.edu/~anhai/courses/564/minirel-project/)

For Assignment 5, you will be **building a HeapFile Manager** (**https://pages.cs.wisc.edu/~anhai/courses/564/minirel-project/project-stage4.html** **(https://pages.cs.wisc.edu/~anhai/courses/564/minirel-project/project-stage4.html)**). You will be using the following codebase to implement certain missing functions: **Minirel-HeapFileManager.zip** **(https://canvas.wisc.edu/courses/382234/files/38270051?wrap=1)** **(https://canvas.wisc.edu/courses/382234/files/38270051/download?download_frd=1)**

Testing

After making your changes, test your code by running ***testfile.C***. Make sure that your code compiles and passes all the tests in ***testfile.C*** **ON CSL MACHINES**.

Submission

The following files must be submitted as a zip file:

1. **heapfile.C**: Make changes to the **heapfile.C** file in the attached codebase (don't change any other file in the codebase)
2. **members.txt:** A text file listing out names of **ALL** members of the group **and a description of their contribution to the assignment**

Zip both the files into a file called group-X.zip. For example, if your Canvas project group number is 10, you should submit a zip file named as *"group-10.zip".*

No Extensions

No late submission requests will be granted for this (and the remaining) assignments. *Attend the discussion on Friday to know more*. if you have not passed all the tests, just submit what you have by the deadline.