CSE 2341

**Programming Assignment 2 – Extra Credit**

Due: Wednesday, October 3, 2012 by 11:00pm Uploaded to Blackboard

**Overview:**

It is unlikely that when starting a new job in industry as a software developer that you’ll walk in and start coding on a blank screen for a completely new project. You’ll have to spend time learning how the existing code base works, what its quirks are, and perhaps deal with poorly written code. To get a bit of experience reading other people’s code and making improvements to it, I’m giving you the opportunity to improve my solution for Programming Assignment 2 – AutoIndexer.

**Requirements:**

1. Read the code base and create a class diagram for it.
2. Separate each class interface from its implementation appropriately.
3. Keep a log of code changes organized by file.
4. Make the code better. What does this mean?
   1. What’s the formatting of the code like? Is it consistent? Can it be improved?
   2. Can you provide appropriate comments for each function and file as required for the class?
   3. Look for memory leaks (or potential memory leaks) and fix them.
   4. Can you make some of the code more efficient?

**Log:**

Keep a log of things you change. This, along with review of the code, is what we will use to determine the amount of extra credit you will receive. The log needs to be detailed as to why you think something needed to be changed, how you will make it “better”, and where to find the fix. However, you don’t need to be as specific as every variable name you change. You could just have a log entry that said something like “updated variable names in indexer.h”.

**Changes to source code:**

Keep all of the original code in the files so we can compare it to your changes. Just comment it out. On each line of code that you are “replacing” comment with either of the following methods:

* //$ for single line comments
* /\*\*$ …… $\*\*/ for block comments

Amount of extra credit:

The amount of extra credit you receive will be based on the significance of your changes. Simply separating interface from implementation will only garner you a few points. Finding and fixing a major bug will garner you quite a few points. Generally speaking, the number of people finding and fixing an error will decrease the amount of extra credit that fix is worth. Maximum available credit is 25% of the total points available for PA2.