SENG 300 – Introduction to Software Engineering **Assignment #4**

Due Date: Thursday, April 09, 11:30 pm

Overview:

This assignment focuses on Software Measurement. You will measure the size of a system following the guidelines of COSMIC (Common Software Measurement International Consortium) function point.

Case Description:

A corporation plans to build a simple locator application to maintain information about companies interested in its function point courses. The logical grouping of company contact data to be maintained will include the following fields:

- company
- name of contact
- job title
- date of initial contact
- street address
- city
- state
- zip code
- phone number
- fax number

This data initially will be created when an individual indicates an interest in any course. Employees will have the capability of creating, changing, and deleting any of this information, via an online screen, using the following commands: create, update, and delete. The create and update functions will maintain all ten fields indicated. The delete function requires only the company and name of contact to be entered.

A menu driven system will be required to navigate through the system. The four functions, offering selections, will be as follows:

- Create company contact
- Retrieve company contact
- Update company contact
- Delete company contact

All of these functions except retrieve company contact are already discussed. The retrieval, prompted by the entering of company and name of contact will display all fields maintained in the company contact data.

Errors could be returned, for any of the transactions, from an externally maintained Error file, which has four fields. One of those fields contains the error messages.

Requirements:

Find the functional size of the case application using the COSMIC Function Point method. Report all the intermediate steps and details of your measurement.

Note that the above requirements are not well-written and this is usually the case in practice. Therefore you are supposed to make assumptions when necessary.

Submission:

You are required to submit your solution in a PDF file. Your report should include a title page, and all the intermediate steps and details of your measurement.

Grading:

The grade would be assign based on solution and the quality of the report.

Individual Work:

All assignments in this course are individual work. Individual Assignments are to be performed strictly individually. The point is to demonstrate that you have acquired the individual skills. Questions may be asked on the D2L Discussion Forum. Students may not discuss details of their solutions, nor share details of their solutions. Students are required to specify all sources of information that they use, whether verbal, written, or online. In any case of uncertainty, students must discuss the details with the course instructor prior to utilizing the source of information. Students are also advised to read the guidelines for avoiding plagiarism mentioned in the course outline and university website.

Failure to follow these rules may result in charges of academic misconduct, leading to an F on the assignment, an F in the course, suspension, or even expulsion. Academic misconduct is a serious offence, so the consequences are also serious.

Late Penalty:

Late submissions will not be accepted.