Problem Analysis

Lab Exercise 2

Lab Objective:

Using the given data files, write an application that lets users retrieve various statistical information, including the average team salary for any given year, the median team salary for any given year, and the standard deviation from the mean for any given year for any given team.

Using the methodology described in the lecture, create the following items.

1. Problem definition.
2. High level solution definition.
3. Data Dictionary.
4. Detailed solution definition.
5. Pseudo-code.
6. Completed software.

Problem Definition.

Among your team, discuss the problem given and write a high level problem definition statement. Title this document *Lab2 Problem Definition*. Remember that you should be taking into account all aspects of the problem, including what inputs and outputs will be defined.

High level solution definition.

Once you have created the problem definition, define a high level solution. Remember not to go too deeply into the solution. That will come in Step 4. Consider how you would solve this problem using only manual processes and encode these into your definition.

Title this document *Lab2 High level solution.*

Data dictionary.

Create a simple data dictionary for the given data source. Include the field name, type and description in the dictionary.

Title this document *Lab2 Data Dictionary.*

Low level solution definition.

Write in english the steps that your program will take to solve the assigned task. Again, visualize the process as a series of manual steps. Do not worry about exception handling in this lab. Only the "*Golden Path*"[1] should be considered.

Pseudocode.

Take the low level definition created and write *pseudocode* that will approximate the actual code to implement the requested task.

Final software solution.

Create a java program that implements the lab exercise. Write this software using the pseudocode as the guide. Your program should be called *Lab1Exercise.java*.

1 The "Golden Path" refers to the default scenario in the code, without exception or error handling.