

This assignment is the second step in the comprehensive program that you will be completing all semester to develop computer software to solve a problem or improve an application in your approved area of interest. This assignment has two parts:

1. Revise and expand your proposal for your concept of the overall assignment that you want to pursue this semester. Remember that the proposal should have the following sections:
 - a. Title section will be centered at the top of the first page with the following information:
 - Title of the Project
 - Your Name
 - CIS201-# (replacing the # with your class section number) and the term (e.g., Fall 2015)
 - b. Project Summary section
 - c. Project Background section
 - d. IPOS Requirements section
 - e. A new section on the classes used for this application. Include formal UML Class Diagrams in this section. This section should be left justified with the bold title **Class Hierarchy Requirements:**
 - f. The Conclusion section
 - g. The Glossary section

This description should be at least several pages long including the diagrams and use correct spelling and grammar. Be innovative in what you do. The use of a graphics based applet or application is highly suggested.

2. Improve your Java application or applet related to your project in step one that contains at least three object created (including the “about” or “help” class from assignment 1) as found in your UML diagrams. The class you create must contain multiple constructors (including a replacement default constructor), mutators and accessors for all attribute variables and a toString method. Your classes must be comprehensive in what you plan to do. Be innovative in what you do. The use of a graphics is highly suggested.
3. Be sure that you completely **comment** your source with both headers and in-line comments. Include the following data structures in your application.
 - a. At least one single-dimension array structure
 - b. At least one two-dimension array structure

and retain the following **control structures** from assignment 1 in your project:

- a. Nested **if-else** and/or **switch** structures,
- b. Nested **while** or **do-while** loops, and
- c. Count control using one or more **for** loops

Submit your word file and all of your completely documented /commented source code for the Java class files using this assignment feature. NOTE: I suggest that you create a zip file containing your other files for this project. Do NOT submit other types of compressed files (e.g., RAR or JAR), I will only accept zip files.

Be sure to submit your complete set of files because you will not be able to submit the files once. NOTE: Remember that 25 points of your 50 point grade for assignment 2 are reserved and based upon how this assignment fits in to your comprehensive overall goal for all five assignments. You must complete all five assignments in order to receive a score for the second portion of assignment 2.