COSC 1046 Project Proposal

This project aims to create a software application that allows you to enroll in any course and play a game for extra credit, with the use of Variables and User Input, Control Structures (if statements), Loops, Methods, Arrays (at least 1-dimensional) and Object Classes.

Many times students find themselves in a position where they are not doing the best in a course and as a way to relieve some stress and gain a bit of extra credit, which is an additional 1% of the credit for up to three times, they can play a game for points. Students will be able to feel a bit better, and in some cases, their grades may end up being boosted. This software application will run at the end of the course, to add to the final percentage the student has in their course.

The topics that will be made use of in the software are as follows:

* Variables and User Input: The user will be able to input their name, course, username and password, grade, and game answers, all with appropriate corresponding variables.
* Control Structures (if statements): if-else-if statements and else if statements will be utilized to print out game answers and game questions and calculate the final grade.
* Loops: loops will be used to calculate how many times the game can run (3 times), game questions, and game answers output statements as well.
* Methods: Methods will be used to prompt the user for an appropriate password and give a username, calculate the grade one has and the percentage addition at the end of the game, and the main method will hold the statements, loops, and output statements.
* Arrays: arrays will be used to generate a new password for the user.
* Object Classes: Object classes like the random class will allow for the user to play against the computer and also for the computer to display randomized answers.

Instructions

Submit the source code for your software application and a 5-7 page written report (PDF format). Source code should be well-documented, well-formatted, and JavaDocs should be used for all object classes. Your report should describe your software, how it functions, it’s purpose and the intended audience. It should also describe howyouusedthetopicslistedabove (use code samples to highlight interesting sections) and whythosetopicsareimportant in the implementation of your software application. This report should show your knowledge of how and why to implement the topics listed above. Also, use the report to show off any sub-topics (not directly listed above) that you implemented to make your software application functional or interesting. A formal rubric for both the source code and report requirements will be posted to D2L. Source code and report due Thursday Dec 17th.