

Project 2 Report

The objective of this project was to improve both flexibility and the robustness of our previous GPA calculator program. The goal was to make the program more flexible by allowing the user to determine the number of classes, allowing for GPA calculations for a semester, year, or even a whole degree. The program also needed to be more robust, allowing the option to read grades as 'A,' 'B,' 'C,' 'D,' 'F,' 'W,' and 'I' as well as verifying the user's input as valid grade and credit hour information. In order to fulfill the first goal, I had to restructure the whole program, instead of doing each class/grade calculation one at a time I implemented a while loop with a counter variable that runs until the counter equals the number of classes. This allows the user to input however many classes he/she would like. In order to check the validity of the user's input for both the hours and the grade, I implemented two nested while loops within the first while loop calculation set before the 'if' statements determining the weight of the credit hours. Currently, the program works as advertised, given the user follows the program's instruction. The only known issue currently is if the user inputs a class name that contains a space, the program will jump and not allow for the user to input other variables. Other than that, the program works fine, however I could not end up finding a solution to the problem other than warn the user to not use spaces in their class name.