

Assignment5 discussion

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1 Limitations

- No input error checking
 - No statistics on whether percentages add up to 100.
 - No check if the earned grade is higher than the total grade.
 - No check if the entered line is of the correct data type.
 - No check if the number of grades percentage entered by the user is the same as the assignment number entered at the beginning.
- When the user enters something wrong, instead of looping or prompting the user to re-enter, the application simply stops.
 - No hint whether the user is separated by coma or space when entering data (or both).

2 Improvements

2.1 Improvements for limitations

- Add input error checking
 - Use logic expression to compare whether the sum of percentages is 100 and if not, use for loop or while loop to reenter the percentages.
 - Use logic expression to compare the corresponding earned grades and total grades for each assignment, and if the earned grade is higher than matched total grade, a pop-up prompt is displayed for user to re-input the earned grade.
 - Use "!=" or "==" to check whether the input data type(double or int) is correct, if it is not, pop up a prompt to remind user to use the proper data type and enter again.
 - When the number of grades or percentages doesn't equal to assignment number input before, show a prompt to remind user what was wrong and use while loop or for loop to re-input the grades or percentages.
- Let user get the prompt and can re-enter when they enter something wrong.
 - Prompt the user to use spaces or use commas to separate data.

2.2 Other improvements

- The UI interface can be set to facilitate the use of the user.
- When the user enters the wrong content before using enter to submit, the page can automatically detect the error (size error, type error, etc).
- When the user enters the wrong content, you can change only the wrong element, rather than all the results or percentage of all input.
- For the last value of percentages, it can be shown automatically without user input. The value is calculated by subtracting the previous percentages from 100.
- As percentages are entered one by one, the interface can dynamically display the current total grades and level.
- With the dynamically displayed total grades and earned grades, the required earned grades to reach each level can be also dynamically shown in the graphical user interface.