Chapter 7 Entering Grades

Brian Veitch

Instructions:

For this assignment, you will be providing the logic (plan) for the following program:

Ask the user how many students are in their class. Get the student's name and final grade. Store the answers in a two-dimensional list, display the list, then write the list to the grades.txt file in a comma separated format using quotes around the string values.

Data:

Functions:

* Main(): starting function. Contains ‘try’ in case user doesn’t enter an integer.
  + Num\_of\_students: Int, number of students to enter
  + Grades\_array: 2-D array containing student’s name and grade
* getInformation(): receives the number of students. Loops through to get the student’s name and grade. Returns 2-D array containing the name and grade for each student.
  + Name: String, user input
  + Grade: String, user input
  + Grades\_array: 2D array containing the student’s name and grade
* copyToFile(grades): receices the grades 2D array. Writes the contents of the 2D array to the grades.txt file.
  + Grades: array received in function containing student name and grade
  + File: variable for opening the ‘grades.txt’ file

Processing:

1. Start program
2. Ask user for the number of students
   1. Continue asking if the user does not enter a positive integer
3. Ask the user for the student’s name
4. Ask the user for the student’s grade
   1. Continue asking for name and grade until we reach the desired number of students
5. After entering the last student name and grade, copy the contents of the 2D array into a text file, grades.txt.

Output:

Ask user for number of students.

Ask user for name and grades for each student

Confirm that the grades have been copied successfully.

Example:

How many students do you need to enter grades for? kg

You did not enter a positive integer. Try again

How many students do you need to enter grades for? 2

What the name of student 1: Charles

Enter the student's final grade: B+

What the name of student 2: Nessie

Enter the student's final grade: A-

Grades successfully copied to 'grades.txt'