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CSC 415-01

Assignment #1

VM User: student1@csc415-server09.hpc.tcnj.edu

Password: bond2flavoYr3s

Pathway: vm-csc415/Assignment_1/.git/

GitHub Repository: https://github.com/leveyg1/Assignment_1.git

The above repository is currently set to private. You must be added as a collaborator to view it.

Instructions

1) Enter >ruby Program.rb into the console.

(NOTE: Do not type > into the console)

2) Enter the name of the file you want to use into the console. Be sure to

include the file type (.csv) or an error will occur.

3) If you've done everything correctly, the program will print the data from

the file onto the console. You may also notice the number on the left hand

side of each Student's info. This is their index location within a Student

array and is referred to as student ID.

4) On the first menu, you'll notice how certain words are uppercase while

others aren't. The uppercase words indicate what must be typed into the console

in order to select that option. Capitalization does not matter here since the

program will do it for you but spelling does matter. See the

'Option Description' section of this file to learn more about what each option

does. Type "NEXT" or "next" into the console when you have finished modifying the Student array.

IMPORTANT! ONCE YOU HAVE TYPED LEFT THE FIRST MENU YOU CAN NOT MAKE CHANGES TO THE STUDENT ARRAY.

5) On the second menu, you'll be asked to specify what criteria you'd like to use when seperating Students into Groups. This is achieved by sorting the Student array in reference to the desired criteria. Type the index number of the info field you'd like to use as criteria.

6) You will be automatically sent to the third menu once you have specified the criteria you'll be using. Enter the maximum amount of students you want in a group. The program will tell you what you are allowed and not allowed to put here.

7) Enter >groups.txt into the console to view the output.
(NOTE: Do not type > into the console)

Option Description

PRINT
Located in menu1. Displays the contents of the Student array onto the console. The program does this automatically after extracting the data from the file but the option is still available. Each line prints the data of one Student in the following format:
ID first_name,last_name,email

GET

Located in menu1. Similar to PRINT but displays one Student's info in an easier-to-read format.

MODIFY

Located in menu1. Same as GET, only after retrieving the Student's info you are able to modify their info. This option produces a sub-menu that requires you to enter the index of the info you want to modify. SPELLING IS VERY IMPORTANT HERE, ESPECIALLY WHEN MODIFYING A MAJOR OR MINOR. If you wish to remove a major or minor, please change that major or minor to "N/a". If an invalid input is entered, the user will be taken back to menu1.

ADD

Located in menu1. Adds a new Student to the Student array. If all required info fields of the new Student match the required info fields of a Student already in the Student array, then the new Student will not be added into the Student array.

REMOVE

Located in menu1. Removes a Student from the Student array.

NEXT

Located in menu1. Typing this means the user is done modifying the Student array and is ready to move forward.

Limitations
-Program is somewhat reliant on correct user input

-Program can only create groups based off of provided criteria options

-Program is only capable of extracting data from a .csv file

-Program is only capable of printing to a .txt file

-Program must be restarted in order to make revisions to groups

-Program is unable to automatically open output file

Known Bugs

-Program is not able to tell if multiple info fields for a Student are the

same (eg. a Student's major1 and major2 are the same)

-When run on the VM, an empty Student instance is generated at the last index

of the Student array. Not removing it causes errors when groups are generated.