CIS 2348

Final Project Part2

You will design a program that manages student records at a university. You will need to use a number of concepts that you learned in class including: use of classes, use of dictionaries and input and output of comma delimited csv files.

Input:

a) StudentsMajorsList.csv -- contains items listed by row. Each row contains student ID, last name, first name, major, and optionally a disciplinary action indicator
b) GPAList.csv -- contains items listed by row. Each row contains student ID and the student GPA.
c) GraduationDatesList.csv – contains items listed by row. Each row contains student ID and graduation date.

Example StudentsMajorsList.csv, GPAList.csv and GraduationDatesList.csv are provided for reference. Your code will be expected to work with any group of input files of the appropriate format. Names, majors, GPAs and graduation dates can and will likely be different from the examples provided.

You can reuse parts of your code from Part 1.

Required Output:

1) Interactive Inventory Query Capability
   a. Query the user of an item by asking for a major and GPA with a single query.
      i. Print a message("No such student") if the major is not in the roster, more that one major or GPA is submitted. Ignore any other words, so "smart Computer Science student 3.5" is treated the same as "Computer Science 3.5".
      ii. Print "Your student(s):" with the student ID, first name, last item, GPA. Do not provide students that have graduated or had disciplinary action . List all the students within 0.1 of the requested GPA.
      iii. Also print "You may, also, consider:" and provide information about the same student type within 0.25 of the requested GPA . Do not provide students that have graduated or had disciplinary action.
      iv. If there were no students who satisfied neither ii nor iii above – provide the information about the student within the requested major with closest GPA to that requested. Do not provide students that have graduated or had disciplinary action .
      v. After output for one query, query the user again. Allow 'q' to quit.

Commit all your .py files on Github. Provide a link on BlackBoard. Name all your files with the starting pharase “FinalProject” for example FinalProjectInput.py

Comment your code extensively. Include comment block with your name and student ID at the top of every .py file.

Presentation:

You have to create a short presentation of your project: maximum 3 minutes.
Describe your approach and the structure of your code (including your choices) for both Class Projects Part 1 and 2.

1) Create a PowerPoint (maximum 4 slides)
2) Add voice over comments to each slide
3) Save as a video (MP4)
4) Upload to Microsoft STREAM (you need to login with your UH account)
5) Give access to everybody

Provide the link to your video on BlackBoard