

REPUBLIC OF THE PHILIPPINES POLYTECHNIC UNIVERSITY OF THE PHILIPPINES STA. MESA, MANILA COLLEGE OF ENGINEERING



COMPUTER ENGINEERING DEPARTMENT

CMPE 30052

Data Structures and Algorithms

Final Project Requirement

Transcript Generation System

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Course/Year/Section:

BSCOE 2-1

Class Schedule:

3:00 - 5:00 PM | WEDNESDAY

Date Submitted:

FEBRUARY 28, 2023

Submitted to:

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I. FUNCTIONS

1. def startFeature(self)

This function lets the user choose the student level (U, G, or B) and also asks for the degree (M, D, or B0) under the G and B student level options. Then, the system will rest for a few seconds, send you back to the menu window and keep track of what you chose.



2. def resetVariables(self)

Resets the variables to give space for new student

3. def setStudentList(self)

Read student details CSV file, save each row as a dictionary then append that dictionary to student

4. def setStudentLevel(self)

Ask the user to choose their student level and, if they have one, their type or degree.

5. def setDegreeLevel(self)

Prompt user to enter degree level

6. def setStudentID(self)

Prompt user to enter student ID and check if it exists in the data list

7. def setStudentInfos(self)

Save student information relevant to the user

8. def isStudentRegistered(self)



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Checks if the student information given is registered in the student details csv

9. def setStudentGrade(self)

Read the csv file of the student, then save it to student grades

10. def setHistory(self)

Read the csv file of the student's previous request and save it in history

11. def saveHistory(self)

Save previous requests of the student via txt file

12. def recordRequest(self, request)

Record this request with the current date and time, save it in history list via append

13. def menuFeature(self)

Show all available options in menu. Asks for a choice, then redirect to that feature

```
Student Transcript Generation System

1. Student Details
2. Statistics
3. Transcript based on major courses
4. Transcript based on minor courses
5. Full transcript
6. Previous transcript requests
7. Select another student
8. Terminate system

Enter your Feature: []
```

14. def detailsFeature(self, student)

Display Details and save it in a text file. It gives information about the student, such as his or her name, stdID, number of terms, college, and department.

```
Name: Edgar Esquerra Jr.
stdD: 2021-05780-NN-0
Level(0): U
Number of Terms: 4
College(s): College1
Department(5): BSCOC2
Press enter to proceed ...[]
```

15. def statisticsFeature(self, student_level, student_id)

Show some statistics about the student's grade/record. Examples are average grade per term, minimum and maximum grades. After showing and saving the student's records, the program will clear the screen of all written information, let you rest for a few seconds, and then send you back to the menu window.



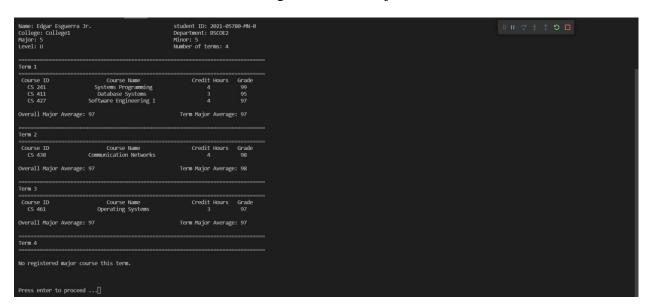


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16. def majorTranscriptFeature(self, student_level, student_id, student)

Shows the transcript of the student's major courses. It lists the major courses, the average number of major courses taken in each term, and the average number of major courses taken from the first term to the last.



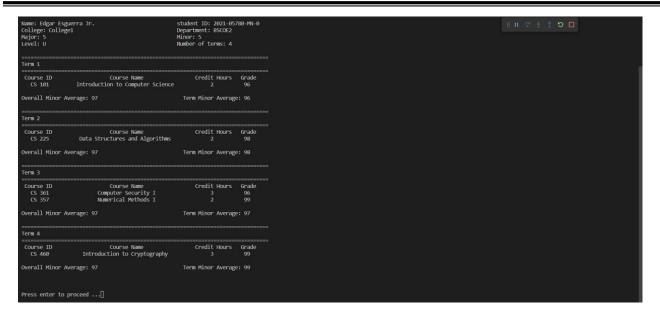
17. def minorTranscriptFeature(self, student_level, student_id, student)

It shows the student's transcript based on the courses they took in college. This transcript lists the minor courses, the average number of minor courses taken each term, and the average number of minor courses taken from the first term until the last term.



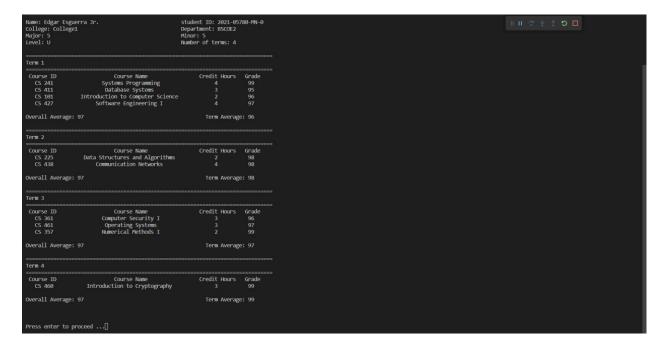


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18. def fullTranscriptFeature(self, student_level, student_id, student)

Shows the transcript of the student's courses (both major and minor courses). It shows the student's major and minor courses on his or her transcript. This transcript shows the courses, the average of the courses in each term, and the average for all terms up to the last term.



19. def previousRequestsFeature(self, history, student_id)





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It shows what this student has asked for in the past. A student, for example, asked for a major transcript last term and a full transcript this term.



20. def newStudentFeature(self)

With this feature, the user can start the program for another student after wiping the screen clean of all previous information.



21. def terminateFeature(self)

With this feature, the user can end the program, and at the same time, the number of requests made during the session will be shown on the screen.

```
There was a total of 7 requests this session.
The program is closing ...
Goodbye!
```

22. def menuManager(self)

Asks user which feature to use, then redirects to that feature.

23. def buffer()



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Acts as buffer to give enough time for user to read the texts

24. def clearScreen()

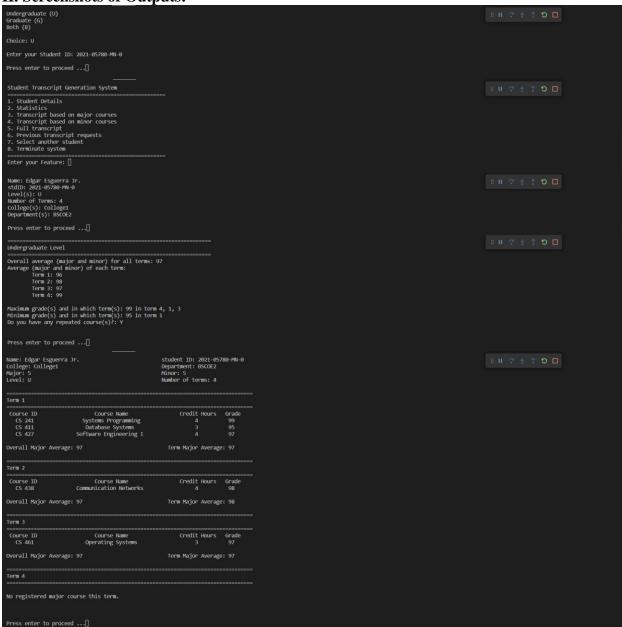
Clears the screen regardless of the OS



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II. Screenshots of Outputs:

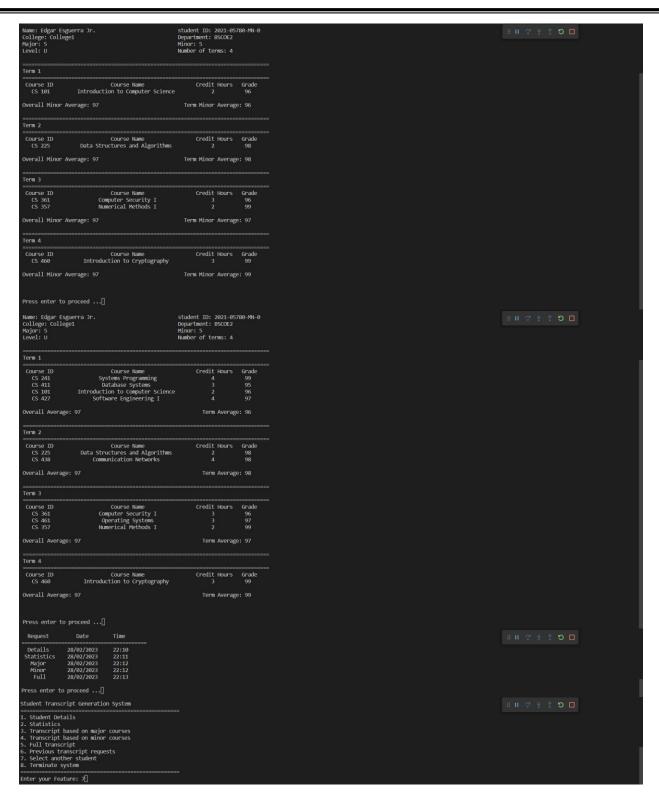




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