



BIRZEIT UNIVERSITY

Faculty of Engineering and Technology
Electrical and Computer Engineering Department
ENCS 3130
Linux Laboratory
Python Project
Students Records Management System

Student's Name: Aseel Deek.

ID: 1190587.

Sec: 2.

Student's Name: Lojain Abdalrazaq.

ID: 1190707.

Sec: 2.

Instructor's Name: Dr. Khader Mohammad.

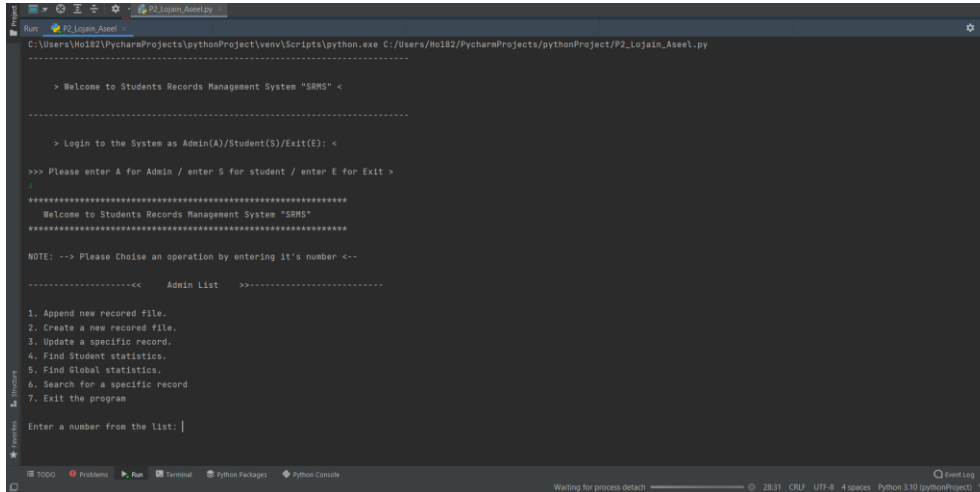
4th Jan 2022.

Abstract:

In this project, some important concepts were covered to implement students' records management system (like searching, updating, adding a new record, and finding global statistics for the student average). In addition, the data structure was used in this project was the list since it is easy to understand and to be implemented using Python language. Secondly, it has many ready methods that make our work easier such as appending new elements, searching for them, and updating them.

Test Cases

1. Case #1 : Searching for a record in the SRMS



```
Run P2_Login_Aseel.py
C:\Users\Ho182\PycharmProjects\pythonProject\venv\scripts\python.exe C:/Users/Ho182/PycharmProjects/pythonProject/P2_Login_Aseel.py

> Welcome to Students Records Management System "SRMS" <

.....

> Login to the System as Admin(A)/Student(S)/Exit(E): <

>>> Please enter A for Admin / enter S for student / enter E for Exit >
>
=====
Welcome to Students Records Management System "SRMS"
=====

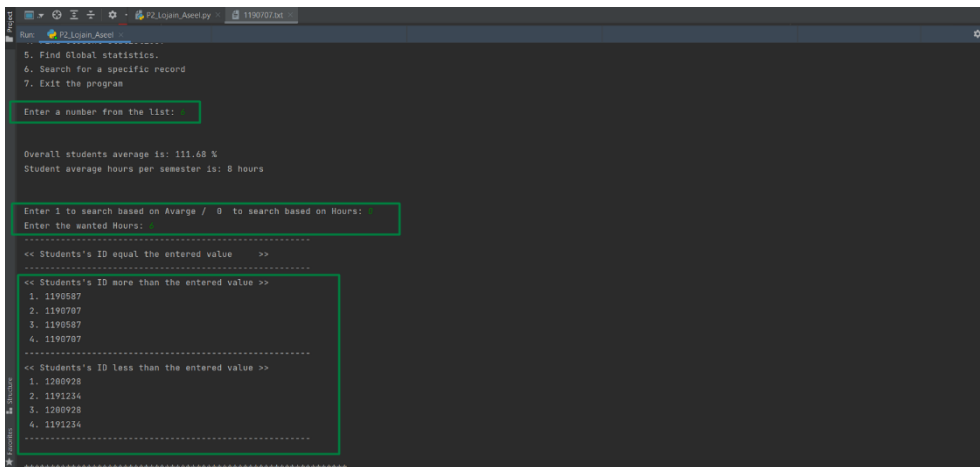
NOTE: --> Please Chioise an operation by entering it's number <--

-----<< Admin List >>-----

1. Append new recored file.
2. Create a new recored file.
3. Update a specific record.
4. Fine Student statistics.
5. Find Global statistics.
6. Search for a specific record
7. Exit the program

Enter a number from the List: |
```

fig(1.1): This is the Menu for our project shows the admins options



```
Run P2_Login_Aseel.py 1190/02/06

5. Find Global statistics.
6. Search for a specific record
7. Exit the program

Enter a number from the List:

Overall students average is: 111.68 %
Student average hours per semester is: 8 hours

Enter 1 to search based on Avarge / 0 to search based on Hours:
Enter the wanted Hours:

<< Students's ID equal the entered value >>

<< Students's ID more than the entered value >>
1. 1190587
2. 1190787
3. 1190587
4. 1190787

<< Students's ID less than the entered value >>
1. 1280928
2. 1191234
3. 1280928
4. 1191234
```

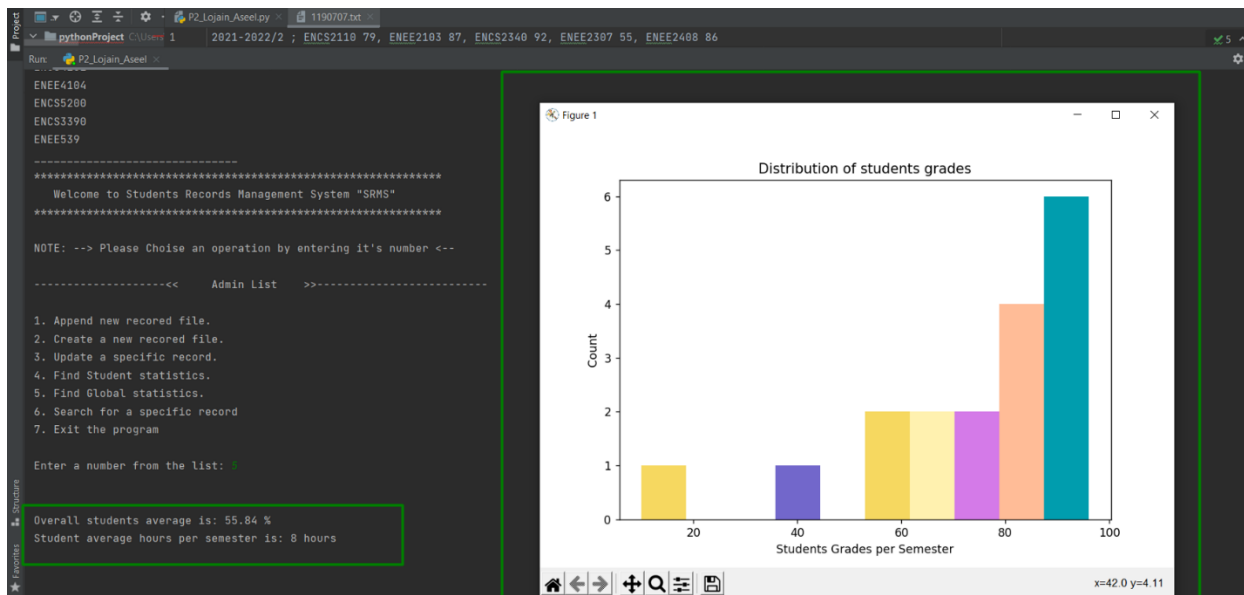
fig(1.2): Searching for # of students based in Hours

2. Case #2 : Add a new record in the SRMS

```
Project
Run: P2_LoJain_Aseel.py
Enter a number from the list: 2
Enter the Student ID number like "1190587" : 1192256
Enter 1 to add new record / 0 to quit the file : 1
ENTER the year like this (2020-2021) 2019 2020
Wrong formate make sure to add dash (-) between the years
ENTER the year like this (2020-2021) 2019-2020
ENTER the 1, 2, 3 for first semester/ second semester/ summer semester: 1
Enter number of Courses u want to add: 3
Enter the Subject
ENEE2103
Not allowed!
Enter the Subject
ENEE222
Not allowed!
Enter the Subject
ENEE2307
Enter your mark in this Course: 22
Not allowed!
Enter your mark in this Course: 66
Enter the Subject
ENCS4210
Enter your mark in this Course: 83
Enter the Subject
ENCS311
Enter your mark in this Course: 94
Enter 1 to add new record / 0 to quit the file : 0
*****
Welcome to Students Records Management System "SRMS"
*****
```

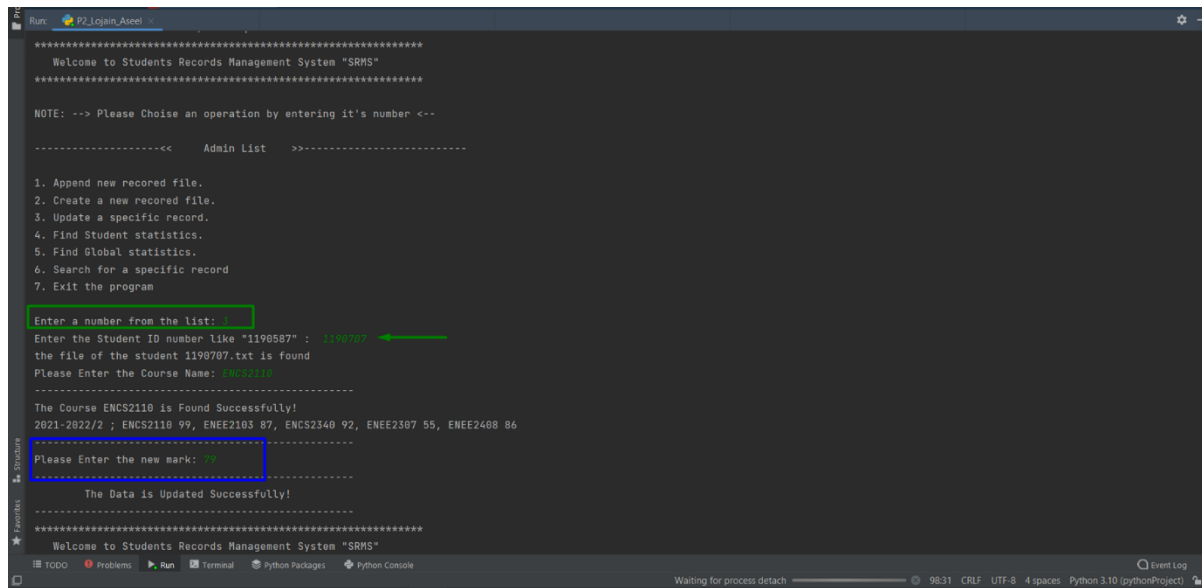
fig(1.3): Adding a new record

3. Case #3 : Admin Global statistic



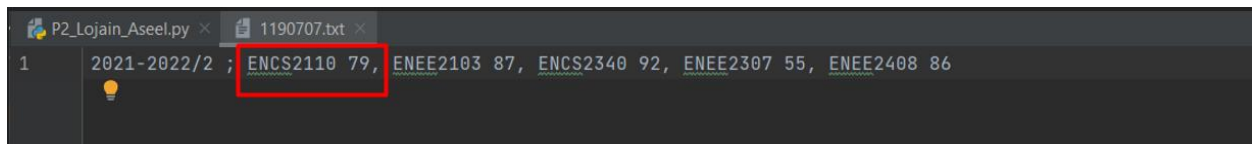
fig(1.4) : Admin global statistic

4. Case #4 : Updating data



```
*****  
Welcome to Students Records Management System "SRMS"  
*****  
  
NOTE: --> Please Choose an operation by entering it's number <--  
  
-----<< Admin List >>-----  
  
1. Append new record file.  
2. Create a new record file.  
3. Update a specific record.  
4. Find Student statistics.  
5. Find Global statistics.  
6. Search for a specific record  
7. Exit the program  
  
Enter a number from the list: 3  
Enter the Student ID number Like "1190587" : 1190707  
the file of the student 1190707.txt is found  
Please Enter the Course Name: ENCS2110  
-----  
The Course ENCS2110 is Found Successfully!  
2021-2022/2 ; ENCS2110 99, ENEE2103 87, ENCS2340 92, ENEE2307 55, ENEE2408 86  
-----  
Please Enter the new mark: 79  
-----  
The Data is Updated Successfully!  
-----  
*****  
Welcome to Students Records Management System "SRMS"  
*****  
  
*****
```

fig(1.5) : Updating data for a record



```
1 2021-2022/2 ; ENCS2110 79, ENEE2103 87, ENCS2340 92, ENEE2307 55, ENEE2408 86
```

fig(1.6) : After updating data

5. Case #5 : Admin Students Statistic

```
Project
pythonProject C:\Users\1
2021-2022/2 ; ENCS2110 79, ENEE2103 87, ENCS2340 92, ENEE2307 55, ENEE2408 86
Run: P2.Loain_Aseel.py
4. Find Student statistics.
5. Find Global statistics.
6. Search for a specific record
7. Exit the program

Enter a number from the list: 4
Enter the Student ID number Like "1190587" : 1190587
the file of the student 1190587.txt is found
-----<< Printing Student's Information >>-----

***NUMBER 1: Student's avg per semester***
The Avg for semester 1 :67.54
The Avg for semester 2 :70.67

***NUMBER 2: The Number of taken hours***
The number of the taken hours for the studentwith ID << 1190587 >> :25

***NUMBER 3: The Overall student Average***
The Overall student Avg with ID << 1190587 >> : 69.11

***NUMBER 4:The List of Remaining Courses***
ENCS1202
ENCS311
ENCS3320
ENEE3309
ENCS4101
ENEE4104
ENCS5200
ENCS3390
ENEE539
```

fig(1.7) : Admin Students Statistic

6. Case #6 : Student Students Statistic

```
Project
pythonProject C:\Users\1
2021-2022/2 ; ENCS2110 79, ENEE2103 87, ENCS2340 92, ENEE2307 55, ENEE2408 86
Run: P2.Loain_Aseel.py
-----<< Student List >>-----

1. Find Student statistics.
2. Find Global statistics.
3. Exit the program.

Enter a number from the list: 1
Enter the Student ID number Like "1190587" : 1190587
the file of the student 1190587.txt is found
-----<< Printing Student's Information >>-----

***NUMBER 1: Student's avg per semester***
The Avg for semester 1 :67.54
The Avg for semester 2 :70.67

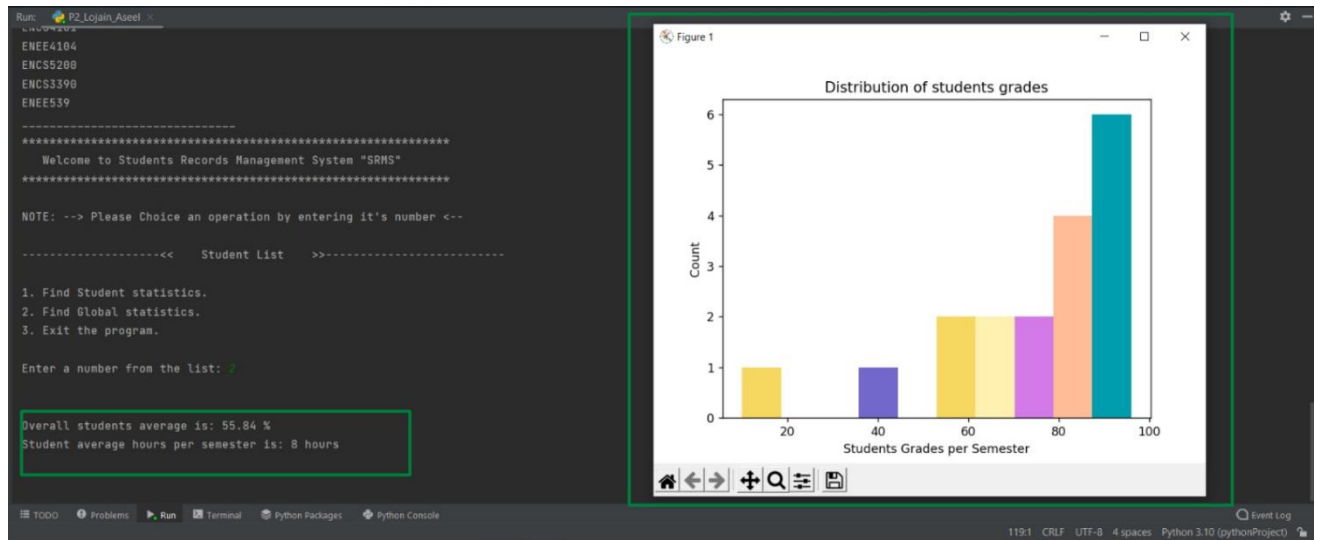
***NUMBER 2: The Number of taken hours***
The number of the taken hours for the studentwith ID << 1190587 >> :25

***NUMBER 3: The Overall student Average***
The Overall student Avg with ID << 1190587 >> : 69.11

***NUMBER 4:The List of Remaining Courses***
ENCS1202
ENCS311
ENCS3320
ENEE3309
ENCS4101
ENEE4104
ENCS5200
ENCS3390
ENEE539
```

fig(1.8): Admin Students Statistic

7. Case #7 : Student Global Statistic



fig(1.9): Student Global Statistic