First Term (Final Project 2)

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Mastering Embedded System Online Diploma

Description

A students' database management system based on the Linked List queue data structure.

System Operation

System Operation:

- 1- Add Students from text file.
- 2- Add student Manually.
- 3- Find Student by roll number.
- 4- Find Student by First Name.
- 5- Find students using enrolled course ID.
- 6- Find Total number of students.
- 7- Delete student by roll number.
- 8- Update student information.
- 9- Show all the information.

Screenshots

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 Problems 🔎 Tasks 📮 Console 🛭 🔲 Properties 🖳 Debugger (
                                                           Choose the task that you want to perform
<terminated> (exit value: -1,073,741,510) unit4-project2-test1.exe [C/C++ /
                                                           1. Add the student details from text file
---FIFO initialize
                      -> Done---
                                                           2. Add the student details manually
WELCOME TO THE STUDENT MANAGMENT SYSTEM
                                                           3. Find the student details by Roll number
_____
                                                           4. Find the student details by first name
Choose the task that you want to perform
                                                           5. Find the student details by course {\tt ID}
                                                           6. Find the total number of students
1. Add the student details from text file
                                                           7. Delete the student details by Roll number
2. Add the student details manually
                                                           8. Update the student details by Roll number
3. Find the student details by Roll number
                                                           9. Show all information
4. Find the student details by first name
                                                           10. To Exit
5. Find the student details by course ID
                                                           Enter your choice to perform the task:1
6. Find the total number of students
7. Delete the student details by Roll number
                                                           Roll Number 1 saved successfully
8. Update the student details by Roll number
9. Show all information
                                                           Roll Number 1 is already taken
10. To Exit
Enter your choice to perform the task:9
                                                           Roll Number 3 saved successfully
=====fifo_print=====
                                                           Roll Number 4 saved successfully
Student 1
        Roll number : 2
                                                           Choose the task that you want to perform
        First name: Hesham
                                                           1. Add the student details from text file
        Last name: Hm
                                                           2. Add the student details manually
        GPA: 2.400000
                                                           3. Find the student details by Roll number
        Courses:
                                                           4. Find the student details by first name
              Course 2: 5
                                                           5. Find the student details by course ID
                                                           6. Find the total number of students
Student 2
                                                           7. Delete the student details by Roll number
        Roll number : 5
                                                           8. Update the student details by Roll number
        First name: hg
                                                           9. Show all information
                                                           10. To Exit
        Last name: v8
                                                           Enter your choice to perform the task:2
        GPA: 2.800000
                                                           Please, Enter the roll number: 846
        Courses:
                                                           Please, Enter student first name: heba
               Course 1: 5
                                                           Please, Enter student last name: Islam
                Course 2: 15
                                                           Please, Enter student GPA: 4.0
Please, Enter Course ID of each course:
                Course 3: 18
                                                           Course 1: 15
====print -> Done=====
                                                           Course 2: 5
                                                           Course 3: 46
_____
                                                           Course 4: 18
```

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_____
Choose the task that you want to perform
                                                               Student 4
1. Add the student details from text file
                                                                       Roll number : 3
2. Add the student details manually
                                                                       First name: Pip
3. Find the student details by Roll number
                                                                       Last name: Lobia
4. Find the student details by first name
                                                                       GPA: 3.500000
5. Find the student details by course ID
6. Find the total number of students
                                                                       Courses:
7. Delete the student details by Roll number
                                                                                Course 1: 45
8. Update the student details by Roll number
                                                                                Course 2: 21
9. Show all information
                                                                                Course 3: 55
10. To Exit
                                                                                Course 4: 18
Enter your choice to perform the task:9
                                                                               Course 5: 46
====fifo_print=====
                                                               Student 5
Student 1
                                                                       Roll number : 4
       Roll number : 2
                                                                       First name: Kerolos
       First name: Hesham
                                                                       Last name: Gamal
       Last name: Hm
       GPA: 2.400000
                                                                       GPA: 3.600000
       Courses:
                                                                        Courses:
             Course 2: 5
                                                                               Course 1: 45
                                                                                Course 2: 21
Student 2
                                                                                Course 3: 55
       Roll number : 5
                                                                                Course 4: 18
       First name: hg
                                                                               Course 5: 46
       Last name: v8
       GPA: 2.800000
                                                               Student 6
       Courses:
                                                                        Roll number: 846
              Course 1: 5
                                                                       First name: heba
              Course 2: 15
              Course 3: 18
                                                                       Last name: Islam
                                                                       GPA: 4.000000
Student 3
                                                                        Courses:
       Roll number : 1
                                                                               Course 1: 15
       First name: Reda
                                                                                Course 2: 5
       Last name: AbdelAal
                                                                                Course 3: 46
       GPA: 3.500000
                                                                                Course 4: 18
       Courses:
                                                                                Course 5: 80
               Course 1: 1
               Course 2: 2
                                                               ====print -> Done=====
               Course 3: 3
               Course 4: 4
```

```
_____
Choose the task that you want to perform
1. Add the student details from text file
2. Add the student details manually
3. Find the student details by Roll number
4. Find the student details by first name
5. Find the student details by course ID
6. Find the total number of students
7. Delete the student details by Roll number
8. Update the student details by Roll number
9. Show all information
10. To Exit
Enter your choice to perform the task:3
Enter the Roll Number of the student: 3
the Student Details is:
       First name: Pip
       Last name: Lobia
       Roll number: 3
       GPA: 3.500000
       Courses:
               Course 1: 45
               Course 2: 21
               Course 3: 55
               Course 4: 18
               Course 5: 46
```

```
_____
Choose the task that you want to perform
1. Add the student details from text file
2. Add the student details manually
3. Find the student details by Roll number
4. Find the student details by first name
5. Find the student details by course ID
6. Find the total number of students
7. Delete the student details by Roll number
8. Update the student details by Roll number
9. Show all information
10. To Exit
Enter your choice to perform the task:4
Enter the first name of the student: reda
the Student Details is:
       First name: Reda
        Last name: AbdelAal
        Roll number: 1
       GPA: 3.500000
       Courses:
               Course 2: 2
               Course 3: 3
               Course 4: 4
               Course 5: 5
```

```
Choose the task that you want to perform
1. Add the student details from text file
2. Add the student details manually
3. Find the student details by Roll number
4. Find the student details by first name
5. Find the student details by course ID
6. Find the total number of students
7. Delete the student details by Roll number
8. Update the student details by Roll number
9. Show all information
Enter your choice to perform the task:5
Enter the course ID: 46
Student No.1 Details are:
        First name: Pip
        Last name: Lobia
        Roll number: 3
       GPA: 3.500000
Student No.2 Details are:
       First name: Kerolos
        Last name: Gamal
        Roll number: 4
       GPA: 3.600000
Student No.3 Details are:
       First name: heba
        Last name: Islam
        Roll number: 846
       GPA: 4.000000
```

Choose the task that you want to perform

- 1. Add the student details from text file
- 2. Add the student details manually
- 3. Find the student details by Roll number
- 4. Find the student details by first name
- 4. Find the student details by first name
- 5. Find the student details by course ID
- 6. Find the total number of students
- 7. Delete the student details by Roll number
- 8. Update the student details by Roll number
- 9. Show all information
- 10. To Exit

Enter your choice to perform the task:6

The total number of Student is 6 You can add up to 50 students You can add 44 more students Choose the task that you want to perform

choose the task that you want to periorm

- 1. Add the student details from text file
- 2. Add the student details manually
- 3. Find the student details by Roll number
- 4. Find the student details by first name
- 5. Find the student details by course ID
- 6. Find the total number of students
- 7. Delete the student details by Roll number
- 8. Update the student details by Roll number
- 9. Show all information
- 10. To Exit

Enter your choice to perform the task:8
Enter the Roll Number to update the entry: 1

- First name
- 2. Last name
- 3. GPA
- 4. Courses

Select the required section to be updated: 3 Please, Update student GPA: 3.9