COMP2411 HW 2 (USER MANUAL)

1. Overview

 Consists of 2 options based on the user's identity, which is whether the user is a student or an admin. If the user is a student, input 0. If the user is an administrator, input 1. (Main page)

A. Student

- Ask for the input of the user's student id.
- It will go to the system, which the user has to choose the following options:
 - 1. List all the courses in the system
 - 2. List the courses that he/she has registered
 - 3. Register a course in the system
 - 4. Modify his/her personal information

B. Administrator

- It will automatically go to the system without asking the user to input his/her student id since he/she is an administrator, which has full access to all data, with the following options:
 - 1. List all courses or students in the system
 - 2. List all the students in the department, which the administrator will decide which department that he/she wants to query
 - 3. Add a new course or students to the system
 - 4. Modify the information of a course or a student in the system
 - 5. Delete a course or a student from the system
 - 6. Modify the grade of a student for one of his/her registered courses
 - 7. List the top 5 students that have most courses registered
 - 8. List the top 5 students with the highest average grade values

2. User guide

- 1. In the main page:
 - If you type 0, it means that your identity is a Student
 - If you type 1, it means that your identity is an Administrator
 - Else, it will print out "Invalid input. Please try again." which will go back to the previous options

2. As a Student:

- The student will be required to put the student id
- If a student types the student id **NOT** in a **string** type, it will print out "Sorry! A student with such an ID was not found in the system. Try again." which will go back to ask for new input.
- If a student types the student id in a **string** type, a student will be given an option for querying or modifying
 - 1. If a student input 0 (Student):
 - It will exit
 - 2. If a student input 1 (Student):
 - It will print out all the course id and course title in the Student data
 - 3. If a student input 2 (Student):
 - It will print out all the student id, course id, and course title based on a particular student id of the student in the student data
 - 4. If a student input 3 (Student):
 - The student will be asked to input a course id to be added.
 - If the course id NOT exists in the student's data, it will be added to the student's data.
 - If the course id exists in the student's data, it will not be added to the student's data
 - 5. If a student input 4 (Student):
 - The student will be given options:
 - 1. If the student chooses 0, then the student wants to exit
 - 2. If the student chooses 1, then the student wants to change his/her student id.
 - 3. If the student chooses 2, then the student wants to change his/her student name
 - 4. If the student chooses 3, then the student wants to change his/her department
 - 5. If the student chooses 4, then the student wants to change his/her address
 - 6. If the student chooses 5, then the student wants to change his/her birthdate
 - 7. If the student chooses 6, then the student wants to change his/her gender
 - 8. If the student chooses other numbers, It will print out "Error! Please type a valid input."

3. As an administrator:

• The administrator will automatically be given options:

- 1. If an administrator input 0:
 - It will exit
- 2. If an administrator input 1:
 - It will print the list of all students pieces of information
- 3. If an administrator input 2:
 - It will ask the administrator to input the information of new course pieces of information, such as course id, the course title, staff name, and section
 - If it is successful, it will print out "New course is successfully added"
- 4. If an administrator input 3:
 - It will ask the administrator to input the information of new student pieces of information, such as student id, the student name, department, address, birth date, and gender
 - If it is successful, it will print out "New student is successfully added"
- 5. If an administrator input 4:
 - It will modify student and course pieces of information
 - It will give administrator options of tables:
 - 1. If an administrator input 1:
 - It will refer to the courses table
 - It will give administrator options:
 - 1. If an administrator input 1:
 - It will change the course id of a chosen student pieces of information
 - 2. If an administrator input 2
 - It will change the course title of a chosen student pieces of information
 - 3. If an administrator input 3:
 - It will change the staff name of a chosen student pieces of information
 - 4. If an administrator input 4:
 - It will change the section of a chosen student pieces of information
 - 2. If an administrator input 2:
 - It will refer to the students' table
 - It will give administrator options:
 - 1. If an administrator input 1:
 - It will change the student id of a chosen student pieces of information
 - 2. If an administrator input 2:
 - It will change the student name of a chosen student pieces of information

- 3. If an administrator input 3:
 - It will change the department of a chosen student pieces of information
- 4. If an administrator input 4:
 - It will change the address of a chosen student pieces of information
- 5. If an administrator input 5:
 - It will change the birth date of a chosen student pieces of information
- 6. If an administrator input 6:
 - It will change the gender of a chosen student pieces of information
- 6. If an administrator input 5:
 - It will delete student and course pieces of information
 - It will give administrator options of tables:
 - 1. If an administrator input 1:
 - It will refer to the courses table
 - It will delete all the information of a chosen course pieces of information
 - 2. If an administrator input 2:
 - It will refer to the students' table
 - It will delete all the information of a chosen student pieces of information
- 7. If an administrator input 6:
 - It will add a new grade of a chosen course pieces of information
 - If it is successful, it will print out "Edit is successfully made!"