Write a Java Program to simulate simple E-learning Registration System.

The program must have a menu showing system services as shown below:

E-learning Registration System Menu:
1. Add new Student.
2. Add new Course.
3. Register Course for a student.
4. Delete Course for a student.
5. Print student schedule.
6. Exit the System.

The above services must do the following actions.

1. Add new Student

The system prompts the user for adding a new student data. The student data should contain the following items:

- Student id: holds a unique number for a student, must consist of 4 digits.

- Student name: holds the full name of the student.

- Student level: holds a value of student level and should have a value of one of the following levels only **[Beginner, Intermediate, Advanced].**

- Student wallet: the amount of money in student's online wallet, used to buy courses.

- Course list: holds the current registered courses data for the student, these data will be added later when student register new courses using menu option 3.

The system returns to the main menu after adding the student successfully.

2. Add new Course

The system prompts the user for adding data for a new course. The course data
Should contain the following items:
- **Course id**: holds a unique number for a course.
- **Course name**: holds a name of the course.
- **Course price**: holds the price of the course.
- **Course level**: holds a value of course level and should have a value of one of the
following levels only **[Beginner, Intermediate, Advanced].**
- **Course hours**: hold the number of hours during the week.
- **Course time**: holds Week days and times. The course time should be added like
the following:
Select Lecture 1 [day]:
1. Saturday.
2. Sunday.
3. Monday.
4. Tuesday.
5. Wednesday.
6. Thursday.
7. Friday.
Enter Your choice: 2
After selecting the day, the system will ask the student to select lecture time as
follows:
Select Lecture 1 Time [hour] for Sunday.
1. 8-9
2. 9-10
3. 10-11
4. 11-12
5. 12-1
6. 1-2
7. 2-3
Enter Your choice: 3
You selected Sunday. 10-11
After adding the times for all days. The system will ask the user:

Do you want add another new course (y/n)?

The System will repeat adding new course, if the user answer yes for the question "**Do you want add another new course (y/n)?**". if the user selected no, the system will return to the main menu.

3. Register Course for Student.

The system asks the user to register course for specific student. The system will allow the user to specify the student by entering student id. The system will search about the specified student to show if he/she exists or not. If the student exists, the system will display all courses course id, course name, course hours and course price of student level only, Then the system will ask the user to enter the course number that the user wants to register. For each input the system will check if student wallet has amount of money more than the selected course price. If yes, then the course registration is done for the student and the system asks the user.

If the user registered the same course more than one time, the system will show message "The course is already registered" and the wallet value will not be changed.

"Do you want to register another course for this student (y/n)?"

else, if student's wallet has amount of money less than the selected course price, the system will show message that the wallet money is less than course price. After that the system will ask the user **"Do you want to register another course for this student (y/n)?"**

if yes, then add another course, if no return to the main menu.

Sample input for this case:

Enter student id: 1234

The student does not exist, do you want try again(y/n)? y

Enter student id: 2154

Student id :2145, student name: Ali Ahmed, Level: Intermediate, wallet: 32$.

Intermediate Level Courses

1. 1401 Introduction to Computing. [3 hours]. 20$

2. 1311 Electronics (2). [2 hours] .15$

3. 1402 Calculus (2). [4 hours]. 40$

4. 1101 Introduction to Engineering [1 hour]. 10$

…….

0. Return to a main menu

Enter your choice :3

The course [1402 Calculus (2)] price is 40$ and student wallet contains only 32$.

Do you want to register another course for this student (y/n)? y.

Enter your choice :2

The course [1311 Electronics (2)] registration success.

 Student wallet: 17$

Do you want to register another course for this student (y/n)? y.

Enter your choice number:2

The course [1311 Electronics (2)] is already registered.

Student wallet: 17$

Do you want to register another course for this student (y/n)? y.

Enter your choice number:4

The course [1101 Introduction to Engineering [1 hour]] registration success.

Student wallet: 7$

Do you want to register another course for this student (y/n)?

…

4. Delete course for student.

When the user selects this option, the System will prompt the user to enter a student id and the system will search about the specified student to show if he/she exists or not. If the student exists, the system will display all courses course id and course name of student registered courses only. Then the system will ask the user to enter the course number to be deleted for the student, and the course will be deleted from student courses.

Sample input for this case:

Enter student id: 1234

The student does not exist, do you want try again(y/n)? y

Enter student id: 2154

Student id :2145, student name: Ali Ahmed, Level: Intermediate, wallet: 7$.

The current registered courses list of Intermediate Level for the student.

1. 1311 Electronics (2).

2. 1101 Introduction to Engineering.

….

0. Return to a main menu

Enter your choice :1

The course [Electronics (2)] is deleted.

"Do you want to delete another course? (y/n)"?y.

The current registered courses list of Intermediate Level for the student.

1. 1101 Introduction to Engineering.

..

0. Return to a main menu

Enter your choice :1

The course [Introduction to Engineering] is deleted.

5. Print Schedule

The system asks the user to enter student id for displaying his/her schedule. The system will search about the specified student to show if he/she exists or not. If the student is found, the System should display a student schedule in tabular format. The schedule should contain week days, hours ranges and courses.

Hint: use JTextArea for displaying the schedule.

Day	8-9	9-10	10-11	11-12 ……
Sat	Calculus	Computer prog.	…..	
Sun	Calculus	…..		
…				

Instruction:

- Your solution must contain multiple classes for example: Student class, Course class, Registration class and so on.

- This project can be performed individually or by group consists of two students at most.

- If a student copies the Project of another student, he/she will be assigned a zero grade for the project.

- The discussion will be on :28 ,29 ,30/4/2019 and 2/5/2019.

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