

We added 9 new classes

1. `CourseEvents <<interface>>`
An interface have to methods
1-`toString()`
2-`getStudents()`
2. `E0Success implements CourseEvents`
Records the object of the students who successfully registered to a specific course
3. `E1RetakeCourse implements CourseEvents`
Records the object of the students who took a specific course again
4. `E2Prerequisite implements CourseEvents`
Records the object of the students who field to register in a specific course due to prerequisite
5. `E3HourCollusion implements CourseEvents`
Records the object of the students who field to register in a specific course due to Hour Collusion
6. `E4NoEnoughCredits implements CourseEvents`
Records the object of the students who field to register in a specific course due to credits
7. `E5Quota implements CourseEvents`
Records the object of the students who field to register in a specific course due to quota
8. `JsonService`
We moved all json related methods form main class into this class.
Added methods:
 1. `ouputFileCreator()`
which prints all the 6 events for each course one by one.
9. `StudentUtils`
We moved all student registration related methods form student class into this class.
updated methods:
 1. `enrollTheCourse`
sends the student selected courses to registration system to be checked then calls `sendToApprove()` method.
 2. `sendToApprove()`
sends student selected courses to the student advisor to be checked and returns a string of registration statue.

We updated in the following classes

1. CourseRegistrationSystem

Added methods:

1. checkPrerequisite()
checks prerequisite between student's passed courses and the selected course

Updated method:

1. checkSelectedCourses()
checks the quota and the prerequisite of the course for the student and add the student to course events if necessary and returns the list of available courses.

2. Advisor

Updated methods:

1. CourseApproval()
Now it can checks if a course require from the student a specific number of credits or not, and checks if the student taking the course again, and add the students to course events. Also adds the successfully added students to the course success event, and finally sends the approved courses to be add to the transcript.

3. Course

We added (ArrayList<CourseEvents> courseEvents) attribute;