

STUDENT REGISTRATION OF COURSE SYSTEM

REQUIREMENTS ANALYSIS DOCUMENT

Vision

In the first iteration, our vision for Student Registration Of Course System is to create simulation of student course registration which used our department. it will be modelled as our department rules and regulations for taking courses. Our system will be developed as a simulation that takes arguments of user command line and input file. Simulation runs until all students' transcripts have been produced.

Scope

Student Registration Of Course System will be simulation for the first iteration. This system will be getting a dataset as a Json file. There are prerequisites of the courses and other business logic will also be modelled after our departments rules and regulations for taking courses. In this iteration, students will be selected randomly and there will be random number of courses. After processing all instances, the system will create output Json file.

Functional Requirements

- User can view student's transcript screen. In this screen there are taken courses, grades, YANO, GANO, given credit, completed credit, offered courses and errors while in registration.
- User can recreate students.
- After advisor checks the courses and approves schedule.

Nonfunctional Requirements

- Software Language and plan

We used Java to handle object oriented programming more efficiently

- Capacity

70 students for each year. In total 280 student.

- Availability

User can view the system when a user would like to use it.

- Usability

It is to access to student information files and offered courses. The student can complete the registration process in a short time.

- **Iteration Plan**

As a result of this project, we will have a student registration system that can work both step by step and as a simulation. We will have an equal number of students in each of the 8 semesters. While registering for these students; There will be restrictions such as completing the prerequisite courses, not exceeding the course quota. Moreover, students will need to achieve a certain number of credits in order to take final year courses. After the registration process is completed, the user interface will be informed about the actions taken.

Glossary

Advisor: He/She is the lecturer who helps the student with course registration and gives advice.

Course: It is a set of classes that focus on a certain topic given throughout the semester..

Java: Java is a high-level, class-based, object-oriented programming language that we will use in the project.

JSON File: A JSON file is a file that stores simple data structures and objects in JavaScript Object Notation (JSON) format, which is a standard data interchange format.

Offered Courses: It is the list of courses that the student can enroll in the current semester.

Prerequisite Tree: These are the rules that contain the necessary conditions for a student to enrolling in a course.

Quota: The maximum number of students who can enroll in a course.

Registration System: It is a system that helps students for enrolling in a course.

Semester: A half-year term in a school or university

Student: Student is the person that enrolls in a course.

Transcript: Transcript is the document which shows the student enrolled and succeeded or failed courses with scores.

Stakeholders

Customer:

Murat Can Ganiz

Developers:

Serkan Koç

İbrahim Hakkı Candan

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Use Case: Register to Course

Actor : Student,Advisor

- 1-) Student enters to the system.
- 2-) System presents the list of the courses that student can take.
- 3-) Student browses listed courses.
- 4-) Student selects courses from the list.
- 5-) Student sends the courses that he/she selected to the advisor's approval.
- 6-) System shows the result of the advisor's approval to the student who selected courses.

Alternative: Selection Failure

- 4a.** At step 4, system gives error for selection overlapping courses . The system allows to the student to re-select courses in the list.
- 4b.** System gives error because of quota problem for selected courses.

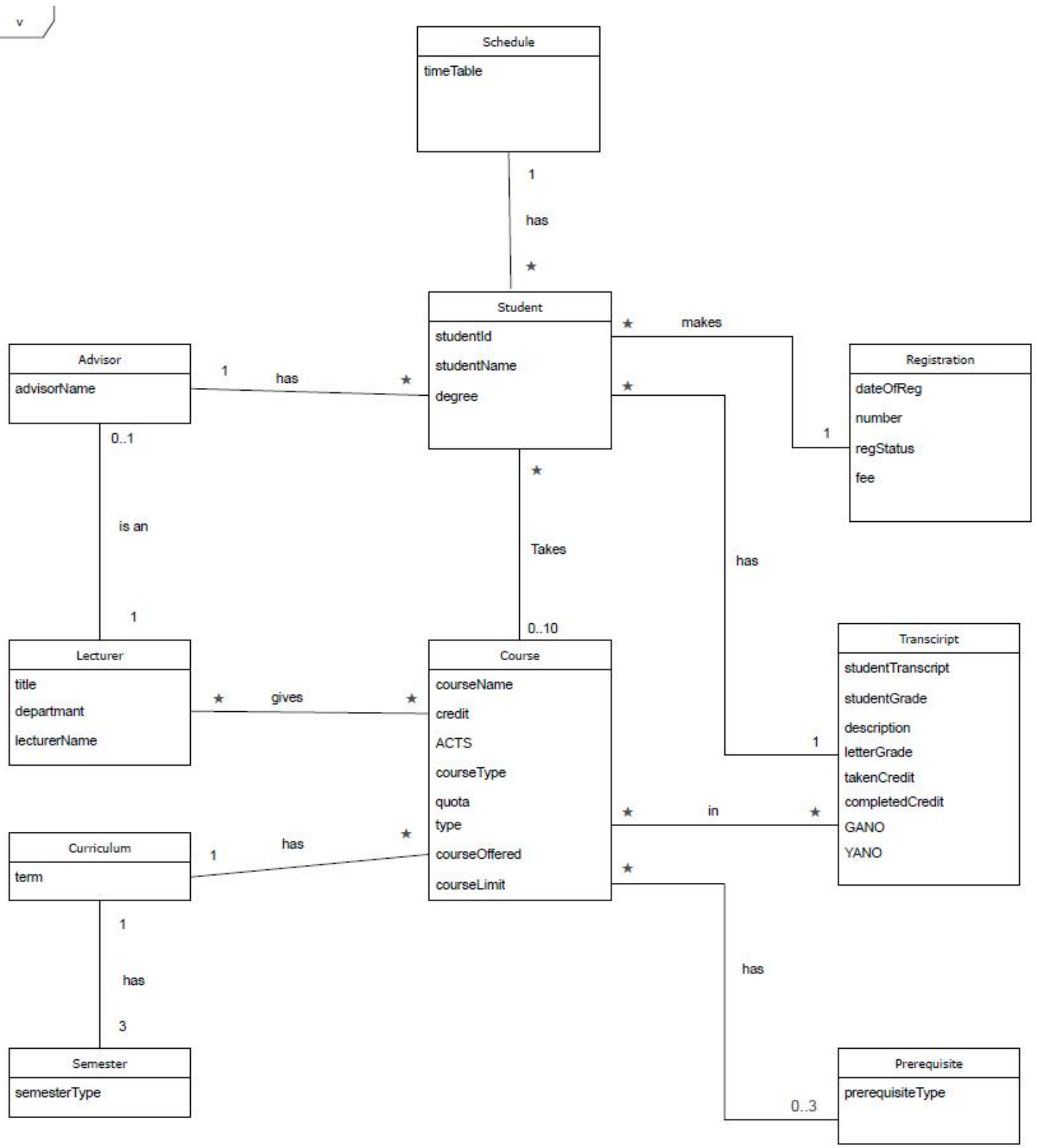
Use Case: Advisor's Approval

Actor: Advisor, System–

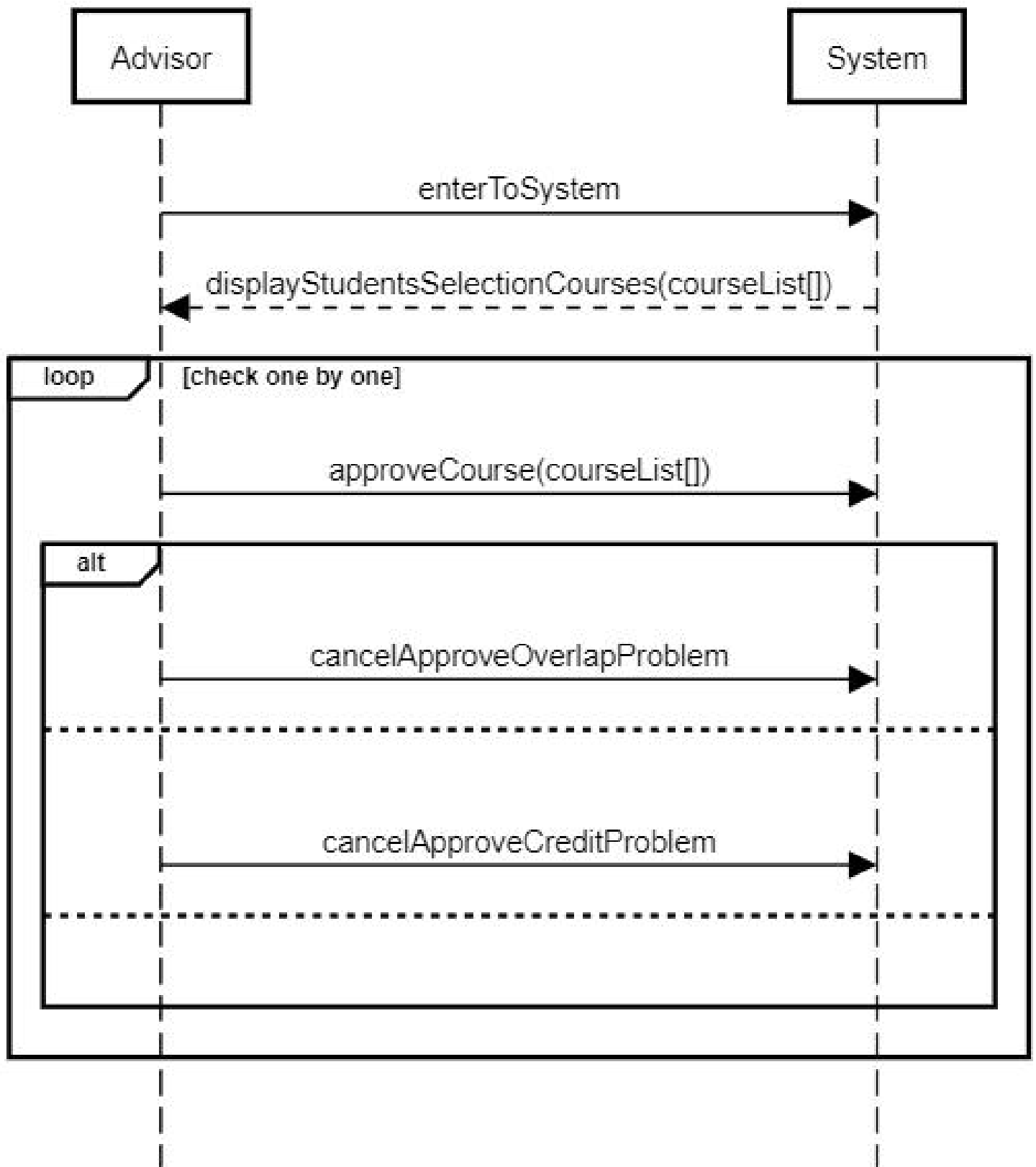
- 1-) Advisor enters to the system.
- 2-) System displays the student's selection course request to the advisor.
- 3-) Advisor browses the courses selected by the student.
- 4-) Advisor starts to the process of approving course selection request.
- 5-) Advisor approves the courses one by one.

Alternative: Disapproval the selection

- 5a.** At step 5, the advisor do not approve because of overlapping courses.
- 5b.** The advisor do not approve graduation Project because student completed credits < 165.



Advisor's Approval



Register To Course

