# Description

This software simply simulates a course registration environment in a university. There are two kinds of actors in this system: student and advisor. A student may register to a list of courses with certain regulations. Advisor’s duty is to approve or disapprove the course list of the student he/she is advising to.

There is no GUI, so communication with the user of program is done through input/output files and command prompt. This software works in a randomized fashion, so every time it is executed different results are outputted to the user.

# Requirements

## Functional Requirements

* When a student wants to add a course to his/her schedule, it will be sent to advisor by registration system.
* When an instructor receives a list of courses to approval, he/she can approve or disapprove it.
* The software will output the randomized results in related json files and command prompt.
* The software will take the list of courses, types of courses, prerequisites, quota, and semester (fall/spring) from a json file.
* When a student wants to add a course to schedule, registration system will ensure there are no collisions in Student’s schedule.
* While adding a course to a student, system must ensure that all prerequisites of that course is satisfied.
* While adding a course to a student, system will check that sum of credits does not exceed a certain limit.

## Non-functional Requirements

* Object Oriented Programming language Java will be used to develop the program.
* No database system will be used for input or output operations.
* Json file will be used to store input and output.
* There will be no GUI.
* Artifacts will be shared by using GitHub.
* Drawio is used to draw and prepare the analysis and design documents.

# Glossary

* Student: Someone who is studying at a university.
* Course: A series of lessons about a particular subject.
* Elective Course: Non-mandatory course.
* Compulsory Course: Mandatory course.
* Advisor: someone whose job is to give advice about a course registration.
* Transcript: A record of courses and their grades.
* Schedule: A list of times of courses.
* Input: Any action user can do to software or computer.
* Output: Software’s reaction to the user action.
* GUI: Stands for Graphical User Interface. It is a way to communicate with user employing icons, dropdown menus, windows and more.
* Command Prompt: It is a text-based program to the provide communication between user and the computer.
* Json: Stands for Open Standard File Format, it is a standard to exchange data between different computer software.
* Functional Requirement: Describes what a software does with different inputs.
* Non-functional Requirement: Describes how a software achieves a feature in a more technical view.