

Course
- courseId:String - courseName:String - prerequisite:List<String> - SeatLimit: int - Semester: String
+ Course(courseId:String) + getCourseId(): String + getCourseName(): String +setCourseName(courseName: String): void +getSeatLimit():int +setSeatLimit(limit int):void +getSemester():String +setSemester(semester String):void +getPrerequisite():List<String> +setPrerequisite(prerequisite: List<String>):void + isEnoughSeatLimit(): boolean + updateSeatLimit(String): void

Registration
- student: Student - course: Course - isRegistered: boolean
+ Registration(student: Student, courses: Course) +getStudent():Student +getCourse():Course +addCourse(course:Course): void +removeCourse(course:Course) +isProvidePrereqs():boolean +isEnoughSeatLimit():boolean +updateJSON(key:String, value.int):void +updateSchedule():void

CourseRegistrationSimulation
- courseRegistrationSystem:CourseRegistrationSystem
+ CourseRegistrationSystem(courseRegistrationSystem: courseRegistrationSystem) + start(): void + registration_simulation(String):void

Lecturer
+ courseSections: List<CourseSection>

randomStudentSimulation
- df: DecimalFormat

Student
- StudentID: String - transcript: Transcript - Semester: String - scheduleStatus: boolean
+ getStudentId(): String + getTranscript():Transcript + getSemester():String + setSemester():void + Student(studentId: String) + ReadName(): void + getStatus(): boolean + setStatus(boolean): void + setStudentId(String): void + setTranscript(Transcript):void +updateStatus(): void +updateJSON(String): void +updateSchedule(Course): void

Person
-name:String -address:String
+ Person(name:String, address:String):

Staff
- staffId: String

randomStudent_accSemester
- semester: int - number: int - df: DecimalFormat
+getSemester(): int +getNumber(): int +getNumber(): int +generate_randomStudent(String,int): void

Advisor
+ ApproveRegistration(Student):void + getRandomBoolean(float): boolean

Log
- key: String
+ create_logFile(semester:String):String +logging_error(String, String): void

StudentAffairsStaff
- advisors: List<Advisor>
+ addAdvisor(advisor:Advisor)

Grade
-courseSection: CourseSection - student:Student - grade:int

CourseRegistrationSystem
- courses:List<Course> - students:List<Student> - staff:List<Staff> - registrations:List<Registrastion> - grades:List<Grade> - courseSections:List<CourseSection>
+ afterReg(Student):void + register(Registration, String): void

Transcript
- studentId: String - passedCourses: List<Course> - Schedule: List<Course> - grades: List<Grade>
+ getStudentId(): String + getpassedCourses(): List<Course> + setpassedCourses(course:Course): List<Course> + getSchedule(): List<Course> + setSchedule(course:Course): List<Course> + addCourseToSchedule(course:Course) + addGrade(grade:Grade): void + GPAchecked(): boolean + isCourseNotPassedBefore(Course): boolean