

Detailed Class List

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Subsystem: Academic Planner

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Detailed List of Classes

1. Course

- Instance Variables:
 - id: UUID
 - code: String
 - name: String
 - description: String
 - credits: float
 - term: String
 - requisites: int
 - sections: Section
 - offered: String
 - officeHours: String
 - instructor: String
- Constructors:
 - Course(id: UUID, code: String, name: String, description: String, credits: float, term: String, requisites: int, sections: Section, offered: String, officeHours: String, instructor: String)
- Methods:
 - createSummary() : String
 - Creates a paragraph summary of this course
 - public String getInstructor()
 - public boolean setInstructor(String instructor)

- public Section getSection(UUID sectionId)
- Modified getCode() to return String instead of int
- public ArrayList<Section> getAllSections()
- public boolean addRequisite(UUID courseId)
- public boolean removeRequisite(UUID courseId)
- public boolean addSection(Section section)
- public boolean removeSection(Section section)
- public boolean addOfficeHours(LocalDateTime startTime, LocalDateTime endTime)
- public boolean removeOfficeHours(LocalDateTime startTime, LocalDateTime endTime)
- getId() : int
 - Returns the course id
- getCode() : int
 - Returns the course code
- getName() : String
 - Returns the name of the course
- getDescription() : String
 - Returns the description of the course
- getCredits() : float
 - Returns the number of credits that the course is worth
- getTerm() : String
 - Returns the course term
- getRequisites() : int
 - Returns the ids of courses that are requisites of this course
- getOffered() : String
 - Returns a string that states the terms that the course is offered in
- getOfficeHours() : String
 - Returns a list of strings representing office hours availability
- setCode(code: String) : boolean
 - Assigns the input string as the course code
- setName(name: String) : boolean
 - Assigns the input string as the course name
- setDescription(description: String) : boolean
 - Assigns the input string as the course description
- setCredits(credits: float) : boolean
 - Assigns the input float as the number of credits that the course is worth
- setTerm(term: String) : boolean
 - Assigns the input string as the terms that the course is offered in
- setOffered(offerred: String) : boolean
 - Assigns the input string as the terms that the course is offered in

2. Section

- Instance Variables:
 - id: UUID

- capacity: int
 - registered: int
 - times: LocalDateTime
 - locations: String
- Constructors:
 - Section(id: UUID, capacity: int, registered: int, instructor: string, time: LocalDateTime, locations: String)
- Methods:
 - createSummary() : String
 - creates a paragraph summary of this section
 - addTime(time: LocalDateTime)
 - Assigns a time variable to the section
 - removeTime(time: LocalDateTime)
 - Removes a time variable to the section
 - addLocation(location: String)
 - Assigns a location to the section
 - removeLocation(location: String)
 - Removes a location to the section
 - getId() : int
 - Returns the section id
 - getCapacity() : int
 - Returns the section capacity
 - getRegistered() : int
 - Returns the number of registered students
 - getTimes() : String
 - Returns the lecture and lab times in a string
 - getLocations() : String
 - Returns a string stating the locations of the lectures/labs
 - setCapacity(capacity: int) : boolean
 - Assigns the input integer as the section capacity
 - setRegistered(registered: int) : boolean
 - Assigns the input integer as the number of registered students for the section

3. Student

- Instance Variables:
 - planner: Planner
 - id: String
 - name: String
 - email: String
 - password: String
 - major: String
 - minor: String

- gpa: float
 - completedCourses: ArrayList
- Constructors:
 - Student(name: String, password: String)
 - Student(other: Student)
- Methods:
 - viewAllCourses() : String
 - Returns a string listing all courses
 - viewCourse(courseId: int) : String
 - Returns a string of a course corresponding to the inputted course id
 - checkEligibility(courseCode: String) : boolean
 - Returns whether or not the student is eligible to take the inputted course
 - registerCourse(courseCode: String, userID: UUID) : boolean
 - Registers the student for the input course and section
 - dropCourse(courseCode: String, userID: UUID) : boolean
 - Drops the student out of the input course and section
 - addCompletedCourse(course: Course) : void
 - Adds a completed course to a students ArrayList
 - viewTimetable() : Timetable
 - Returns the student's timetable
 - createSummary() : String
 - Creates a string summary of the student
 - getId() : int
 - Returns the student's id
 - getName() : String
 - Returns the student's name
 - getEmail() : String
 - Returns the student's email
 - getPassword() : String
 - Returns the student's password
 - getMajor() : String
 - Returns the student's major
 - getMinor() : String
 - Returns the student's minor
 - getGpa() : float
 - Returns the student's gpa
 - setName(name: String) : boolean
 - Assigns the input string as the student's name
 - setEmail(email: String) : boolean
 - Assigns the input string as the student's email
 - setPassword(password: String) : boolean
 - Assigns the input string as the student's password
 - setMajor(major: String) : boolean
 - Assigns the input string as the student's major

- setMinor(minor: String) : boolean
 - Assigns the input string as the student's minor
- setGpa(gpa: float) : boolean
 - Assigns the input float as the student's gpa

4. Professor

- Instance Variables:
 - planner: Planner
 - id: UUID
 - name: String
 - email: String
 - password: String
 - department: String
 - phone: String
 - office: String
 - description: String
- Constructors:
 - Professor(name: String, password: String, department: String, phone: String, description: String)
- Methods:
 - viewAllCourses() : String
 - Returns a string of all the courses
 - viewCourse(courseId: int) : String
 - Returns a string of the course corresponding to the input course id
 - inputOfficeHours(professorId: int, courseId: int, time: LocalDateTime) : boolean
 - Assigns the input integer as the course id and the input string as the times that this professor offers office hours
 - getClasslist(courseId: int) : ClassList
 - Returns a classlist for the inputted course id
 - createSummary() : String
 - Creates a paragraph summary for this professor
 - getId() : int
 - Returns the professor id
 - getName() : String
 - Returns the name of the professor
 - getEmail() : String
 - Returns the email of the professor
 - getPassword() : String
 - Returns the password of the professor
 - getDepartment() : String
 - Returns the professor's department
 - getPhone() : String
 - Returns the professor's phone number
 - getOffice() : String

- Returns the professor's office room
- getDescription() : String
 - Returns the professor's description
- setName(name: String) : boolean
 - Assigns the input string as the professor name
- setEmail(email: String) : boolean
 - Assigns the input string as the professor email
- setPassword(password: String) : boolean
 - Assigns the input string as the professor password
- setDepartment(department: String) : boolean
 - Assigns the input string as the professor's department
- setPhone(phone: String) : boolean
 - Assigns the input string as the professor's phone number
- setOffice(office: String) : boolean
 - Assigns the input string as the professor's office room
- setDescription(office: String) : boolean
 - Assigns the input string as the professor's description

5. Applicant

- Instance Variables:
 - planner: Planner
 - id: UUID
 - name: String
 - email: String
 - password: String
- Constructors:
 - Applicant(name: String, email: String)
- Methods:
 - viewAllCourses() : String
 - Returns a string listing all the courses
 - viewCourse(courseId: int) : String
 - Returns a string that states the course corresponding to the inputted course id
 - createSummary() : String
 - Creates a paragraph summary of the applicant
 - getId() : int
 - Returns the applicant's id
 - getName() : String
 - Returns the applicant's name
 - getEmail() : String
 - Returns the applicant's email
 - getPassword() : String
 - Returns the applicant's password
 - setName(name: String) : boolean

- Assigns the input string as the applicant's name
- setEmail(email: String) : boolean
 - Assigns the input string as the applicant's email
- setPassword(password: String) : boolean
 - Assigns the input string as the applicant's password

6. StudentCounselor

- Instance Variables:
 - planner: Planner
 - id: UUID
 - name: String
 - email: String
 - password: String
 - department: String
 - phone: String
 - courses: ArrayList<Course>
- Constructors:
 - StudentCounselor(name: String, password: String, department: String, phone: String)
- Methods:
 - viewAllCourses() : String
 - Returns a string listing all courses
 - viewCourse(courseId: int) : String
 - Returns a string that states the course corresponding to the inputted course id
 - checkEligibility(studentId: int, courseId: int) : boolean
 - Returns whether or not the inputted student id is eligible to enroll in the inputted course id
 - registerCourse(studentId: int, courseId: int, sectionId: int) : boolean
 - Registers the input student into the input course and section
 - dropCourse(studentId: int, courseId: int, sectionId: int) : boolean
 - Drops the input student from the input course and section
 - viewTimetable(studentId: int) : Timetable
 - Returns the input student's timetable
 - viewClasslist(courseId: int) : Classlist
 - Returns the list of students taking the input course
 - createSummary() : String
 - Creates a string summary of the student counselor
 - getId() : int
 - Returns the student counselor's id
 - getName() : String
 - Returns the student counselor's name
 - getEmail() : String

- Returns the student counselor's email
- getPassword() : String
 - Returns the student counselor's password
- getDepartment() : String
 - Returns the student counselor's department
- getPhone() : String
 - Returns the student counselor's phone number
- setName(name: String) : boolean
 - Assigns the input string as the student counselor's name
- setEmail(email: String) : boolean
 - Assigns the input string as the student counselor's email
- setPassword(password: String) : boolean
 - Assigns the input string as the student counselor's password
- setDepartment(department: String) : boolean
 - Assigns the input string as the student counselor's department
- setPhone(phone: String) : boolean
 - Assigns the input string as the student counselor's phone number

7. Timetable

- Instance Variables:
 - studentId: int
 - courses: String
 - lectureTimes: String
 - labTimes: String
 - examTimes: String
 - examDate: String
- Constructors:
 - Timetable(studentId: int, courses: String, lectureTimes: String, labTimes: String, examTimes: String, examDate: String)
- Methods:
 - createSummary() : String
 - Creates a string summary of the timetable
 - isLectureConflict(lectureTimes: String): boolean
 - Returns whether or not the passed lecture times conflict with the courses in the table
 - isLabConflict(labTimes: String): boolean
 - Returns whether or not the passed lab times conflict with the courses in the table
 - getStudentId() : int
 - Returns the student's id
 - getCourses() : String
 - Returns the courses
 - getLectureTimes() : String
 - Returns the lecture times

- getLabTimes() : String
 - Returns the lab times
- getExamTimes() : String
 - Returns the exam times
- getExamDate() : String
 - Returns the exam dates
- setStudentId(id: UUID) : boolean
 - Assigns the input integer as the student's id
- setCourses(courses: String) : boolean
 - Assigns the input string as the student's courses
- setLectureTimes(lectureTimes: String) : boolean
 - Assigns the input string as the student's lecture times
- setLabTimes(labTimes: String) : boolean
 - Assigns the input string as the student's lab times
- setExamTimes(examTimes: String) : boolean
 - Assigns the input string as the student's exam times
- setExamDates(examDate: String) : boolean
 - Assigns the input string as the student's exam dates

8. Planner

- Instance Variables:
 - registrationList: RegistrationInfo
 - courses: Course
 - _planner: Planner
 - users: HashMap<UUID, User>
- Constructors:
 - Timetable(studentId: int, courses: String, lectureTimes: String, labTimes: String, examTimes: String, examDate: String)
- Methods:
 - verifyProf(professorId: int, courseId: int): boolean
 - Returns whether the supplied professor id is the instructor of a course
 - setOfficeHours(courseId: int, time: LocalDateTime): boolean
 - Sets the office hours of the supplied course
 - getClassList(courseId: int): ClassList
 - Returns the ClassList for a specific course
 - viewAllCourses(): Course
 - Returns a list containing the entire course catalog
 - viewAllSections(courseId: int): Section
 - Returns a list containing all the sections of a supplied course
 - getCourse(courseId: int): Course
 - Returns a specific course given its id
 - registerCourse(studentId: int, courseId: int, sectionId: int) : boolean
 - Registers the input student for the input course and section
 - waitlistCourse(studentId: int, courseId: int, sectionId: int): boolean

- Waitlist the input student for the input course and section
- dropCourse(studentId: int, courseId: int, sectionId: int) : boolean
 - Drops the input student from the input course and section
- completeCourse(studentId: int, courseId: int, sectionId: int) : boolean
 - Marks the input course as complete for the input student
- getCourseInfo(courseId: int) : String
 - Returns the course info
- getSectionInfo(courseId: int, sectionId: int) : String
 - Returns the section info
- createTimetable(studentId: int) : Timetable
 - Creates a timetable for the input student
- createClassList(courseId: int): ClassList
 - Creates a classlist for the input course

9. RegistrationInfo

- Instance Variables:
 - studentId: int
 - registeredCourses: int
 - registeredSections: int
 - completedCourses: int
 - sectionId: int
 - completedSections: Array
- Constructors:
 - RegistrationInfo(studentId: int)
- Methods:
 - getStudentId() : UUID
 - getRegisteredCourses() : ArrayList<UUID>
 - Returns an ArryList of registered courses for the student
 - getRegisteredSections() : ArrayList<UUID>
 - Returns an ArryList of registered section fpr the student
 - getCompletedCourses() : ArrayList<UUID>
 - Returns an ArryList of completed courses for the student
 - getCompletedSections() : ArrayList<UUID>
 - Returns an ArryList of completed sections for the student
 - addCourse(courseId: int) : boolean
 - Adds a course for the student
 - removeCourse(courseId: int) : boolean
 - Removes a course for the student
 - addSection(courseId: int, sectionId: int) : boolean
 - Adds a section for the student
 - removeSection(courseId: int, sectionId: int) : boolean
 - Removes a section for the student
 - addCompleted(courseId: int, sectionId: int) : boolean
 - Adds the student's completed courses

- removeCompleted(courseId: int, sectionId: int) : boolean
 - Removes the student's completed courses

10. User

- Instance Variables:
 - planner: Planner
 - id: UUID
 - name: String
 - email: String
 - password: String
- Methods:
 - viewAllCourses() : String
 - Returns a string listing all courses
 - viewCourse(courseId: int) : String
 - Returns the course name for the inputted course id
 - createSummary() : String
 - Returns a string summary of the user

11. ClassList

- Instance Variables:
 - classId: int
 - studentIds: int
- Constructors:
 - ClassList(classId: int, studentIds: int, studentNames: String)
- Methods:
 - createSummary() : String
 - Creates a string summary of the classlist
 - addStudent(studentId: int) : boolean
 - Adds a student to the classlist
 - removeStudent(studentId: int) : boolean
 - Removes a student from the classlist
 - getClassId() : int
 - Returns the class id
 - getStudentIds() : int
 - Returns the class's student ids
 - setClassId(classId: int) : boolean
 - Assigns the input integer as the class id
 - setStudentIds(studentIds: int) : boolean
 - Assigns the input integer as the student ids for the classlist

12. OfficeHours - new class

- Instance Variables:
 - start: LocalDateTime;
 - End: LocalDateTime;
- Constructor:
- Methods:
 - getStart() : LocalDateTime
 - setStart(LocalDateTime start) : boolean
 - getEnd() : LocalDateTime
 - setEnd(LocalDateTime end) : boolean