

SUNY Korea Community:

Data Design

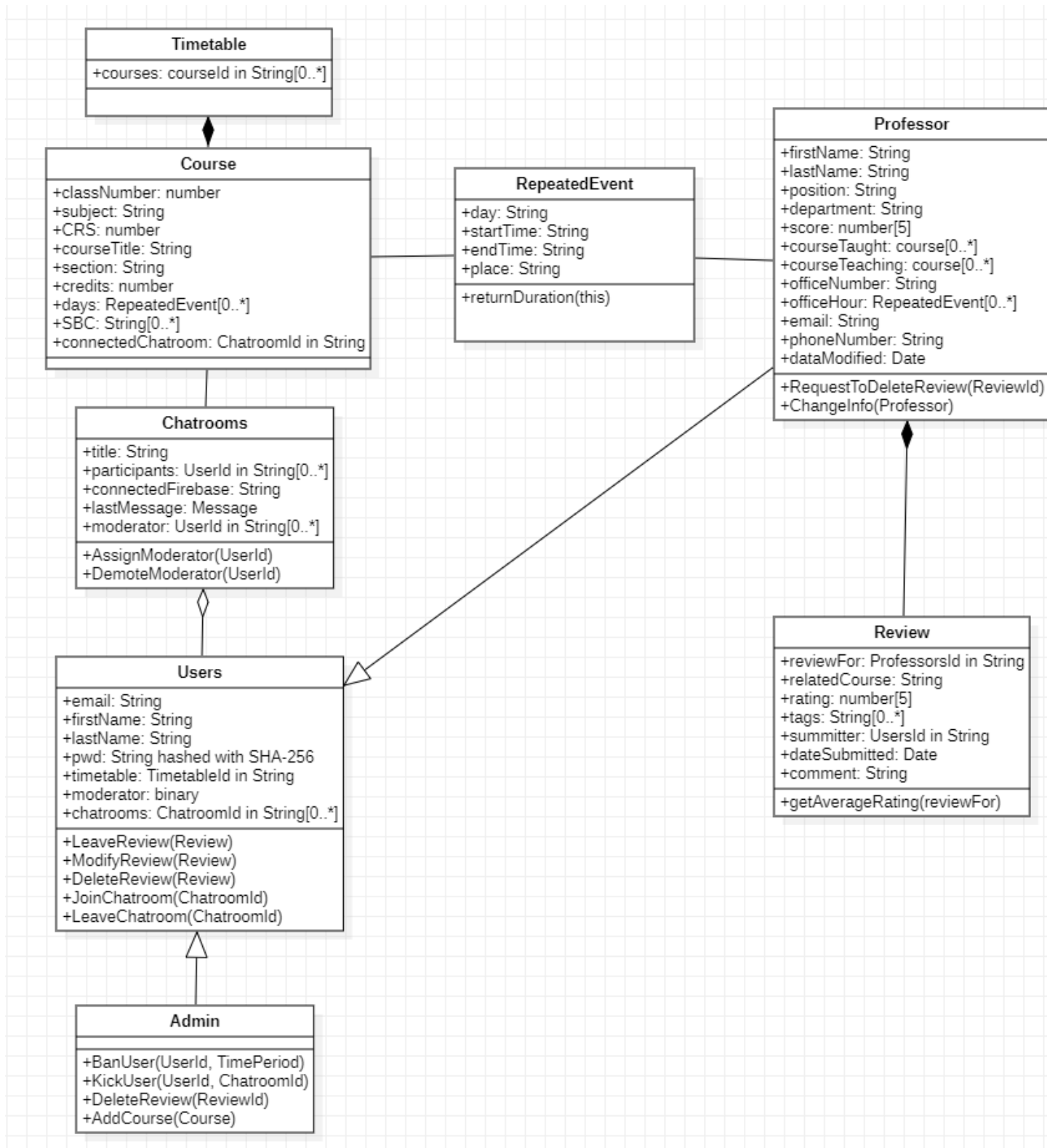
CSE416

Contributors:

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1. UML Class Diagram



2. Class Description

Admin Class - stands for one user of the system

Are composed with

- email in String: This should be in the form of **@stonybrook.edu* or **@fitnyc.edu*. This is used to verify whether the user is a SUNY Korea student.
- firstName in String: This is the first name of the user.
- lastName in String: This is the last name of the user.
- pwd in String: This is the string that is encrypted.
- timetable in String: This is the object ID of the timetable connected to this user.
- moderator in Binary: This is the binary integer which is 1 when the user is moderator or 0 when the user is not moderator.
- chatrooms in String array: This is the list of the Object IDs for chatroom. This is used to determine the chatrooms that the user is in.

Has methods such as

- createReview(Review): This method is used to create a review. This method takes a Review object, and directly inserts it into the DB.
- modifyReview(Review, User): This method is used to modify a review. Review parameter is used to specify which review is to be modified, and User is used to determine whether a user has the right to modify. User should be the moderator or the user who created this review.
- deleteReview(Review, User): This method is used to delete a review. Review parameter is used to specify which review is to be deleted, and User is used to determine whether a user has the right to delete. User should be the moderator or the user who created this review.
- joinChatroom(ChatroomId): This method is used to add a chatroom id in the chatrooms which is in the user.
- leaveChatroom(ChatroomId): This method is used to delete a chatroom id in the chatrooms which is in the user.

Admin Class extends User - stands for the user who has 1 on moderator.

Has methods such as

- banUsers(UserId, Date): This method is used to ban users until the Date parameter. UserId is used to specify the user to ban and date to specify the date to be banned.
- kickUser(UserId, ChatroomId): This method is used to kick users from the ChatroomId. UserId is used to specify the user to kick, and ChatroomId is used to specify which chatroom will kick the user.
- deleteReview(ReviewId): This method is used to delete a review. ReviewId is used to specify which review is to be deleted.
- addCourse(Course): This method is used to insert a course in DBs.

Chatroom Class - stands for the chatroom

Is composed with

- title in String: This is the name of the chatroom
- participants in UserId array: This is the string array has UserIds
- connectedFirebase in String: This string is the key of Firebase to connect.
- lastMessage in Message: This object has the last sent message
- moderator in UserId array: This is the list of UserIDs who are moderators.

Has methods such as

- assignModerator(UserId): This function is to add user on moderator
- demoteModerator(UserId): This function is to delete user on moderator

RepeatedEvent Class - represents an event with time and place

Is composed with

- day in String: The day of the event e.g. "Monday"
- startTime in String: The start time in the format of "00:00 AM"
- endTime in String: The end time in the format of "00:00 PM"
- place in String: The place of the event happening.

Has methods such as

- returnDuration(): This function returns how many seconds the event happened.

Course class - This represent the course information from DB

Is composed with

- classNumber in number: it stands form the number of classNumber which is five digits
- subject in String: It is the subject of the course such as "AMS"
- CRS in number: It is the course level such as "210"
- courseTitle in String: It is the title of course such as "Linear Algebra"
- section in String: It is the section number of the class such as "90" or "R90"
- credits in number: It is the credit for the course like 3
- days in RepeatedEvent array: It is the list of the RepeatedEvent for the course schedule.

Has a method such as

- checkSubject(subject): This function is to check the validity of subject input.

Review class - stands for an object that has all information such as these

Is composed with

- reviewFor in String: This is a string represent ProfessorID in DB
- relatedCourse in String: This is the combination of subject and CRS like "AMS210"
- rating in number array: This is the array of ratings stands for each categories
- tags in String array: This is the list of Strings
- submitter in String: This is the string that stands UserId of submitter.
- dateSubmitted in Date: This is the date that the review is submitted.
- dateModified in Date: This is the date that the review is modified
- comment in String: This is the description of the review.

Timetable Class - the list of courses registered. It is used to represent the timetable

Is composed with

- **courses** in String array: This is the list of the coursesIDs

3. Contribution

For this data design, Sungwoong designed the basic structure of this data design, Gyrui helped and edited to correct the data design.