UML Class Diagram

<<Abstract>> University Member
- -first_name : string
- -last_name : string
- -ID : string
- -address : string
- -phone : string
- - email : string

Student_answers_in_exam
- -correct : boolean[]
- -Ans_score : int[]
- -grade : int
- sumGrade()

Exam
- -Date : date
- -Time : String
- -Term : int
- - find(moed),
- -create(num,pts)

Question_In_Exam
- - Points : int
- -Number : int

Questions_in_repo
- - options : int
- - level : double
- - estimated_time : double
- - Content : String
- - serialNumber : int
- - Owner : string
- - Locked : boolean

Answer
- -correct : boolean
- Number : int

Notification
- -Text : string
- SendSucessEmail(email, username, password)

חושב שאפשר לעשות observer בין משתמשים ל-notification

<<Abstract>> Mivhanet user
- -user_name : string
- -password : sring
- -Login()
- -updateUsernameDetails (Fname, Lname, ID, adrs, phone, email)
- -create(user_name)

Faculty
- -Faculty_ID : string
- -Faculty_name : string

Department
- -Dept_ID : string
- -Dept_name : string

Comment
- - Content : String

<<Abstract>> Logger
- - Entries : String[]

Student
- getAnswers(exam)

Secretary
- RegisterUser()
- openCourse(moed,year)

Course
- -Course_ID : string

<<Abstract>> Staff
- GetCourses()

Teaching Assistant

Lecturer
- createExam(userName, courseID, season)

Course_per_semester
- -Term : int
- -Login()
- - Semester_season : Season
- - Year : int
- -Course_ID : string
- -Edit_Staff(), add(q), createExam()

Course Management
- - ApproveHardExam : boolean

לשים פה סינגלטון!!!!!!!!!
Logger_error

לשים פה סינגלטון!!!!!!!!!
Logger_action

<<ENUM>> Season
- - Fall
- - Spring
- - Summer

חושב שאפשר לעשות composite בין מנהל קורס לבין student

Relationships / Labels
- Alerts
- 0..n
- Composed of
- 0..20
- Has 1..n
- 0..n
- Belongs to 0..n
- 0..n
- Written 0..10
- Takes
- Occur in
- Written by
- 0..n
- Contains
- Offers 1
- 0..n
- Create
- Signs up 0..n
- Belongs to
- Creates 1
- Part of 1
- 1
- 0..n
- Belongs to 1..3
- AND / AND
- XOR
- 0..4
- Taught by 0..n
- Managed by 0..n
- 1

Assumptions
1. A manager of a course is also a lecturer.
2. There are 10 comments for each questions in the repository.
3. In the class Student_answers_in_exam, the ans_score array is the same length as the first array and contains the score given for each question.

IMPORTANT: Due to space constraints not all the functions we deemed necessary are listed here, we will attach a separate file listing them. Thank you