Homework 1b

Design the ER model for CS department system

Goal:

You need to draw the ER diagram using the UML tool, *creately* (<https://creately.com>) based on the entities and relations as follows.

Entities:

* Professor

The attributes of professor are ID, name, area and rank.

* Graduate student

The attributes of graduate student are ID, name, age, degree and program.

* Undergraduate student

The attributes of undergraduate student are ID, name, age, class and program.

* Lab

The attributes of lab are ID, name, location.

* Project

The attributes of project are ID, sponsor, start time, end time and budget.

* Course

The attributes of course are ID, year, name, professor ID, and additional information (timetable, syllabus).

* Address book

The attributes of address book are student ID, address, email, phone number and Line ID

* Evaluation

The attributes of evaluation are student ID, complete, and additional information (number of credits remain).

Relations:

* Student (graduate, undergraduate) can apply for multiple courses.
* Some courses are compulsory to student and some courses are elective.

For example, Jenny belongs to Computer Science and Electrical Engineering program, one of her compulsory course is “Digital Circuit Design” and one of her elective course is “Introduction to Computer Security”

* Each professor can teach multiple courses, but every course has only one professor.

For example, professor Peng has two courses: Introduction to Database Systems and Data Mining, which have him as only one professor.

* Each lab is managed by one graduate students and each lab has a chair professor.
* Each project is led by at least one professor.
* Each student’s information is contained in the address book.
* Each student has one mentor professor.
* The relationship between students and courses can be further aggregated, forms a relationship named “eval\_for” with the entity “Evaluation”, to show if the student meet the requirement of graduation.

Submission:

* Be sure to upload your ER-diagram to E3 by due date and name your file as “**HW1\_xxxxxxx.jpeg**”, where **xxxxxxx** is your student ID.

Deadline:

* 2016/4/1 23:59