

# CS387 Project Proposal

Project Title: GAME(GrAding Made Easy)

Team Members:

160050041	Sudhanshu Raj
160050044	Ankit
160050053	Aryan
160050055	Sushant Tarun

Overview:

The project takes its essence from one of your suggested projects (Online Paper Correction) from the list.

The main goal of the project is to get all the answer sheets scanned and then distribute them among the TAs in such a manner that a TA doesn't have to shuffle through all the pages to get to the question he is grading but only the ones relevant to him. Also no need to upload marks manually as an excel sheet will be created there itself for each exam with appropriate distribution of marks.

It can prove to be quite effective for classes with large number of students since doing them manually proves to be tedious sometimes.

We will also be tracking all the courses, sections, exams of each Instructor, TAs and Students(like Moodle) but mostly focusing on quiz and exam content of these.

We will also try to do some OCR(Optical Character Recognition) stuff which may help in detecting the roll no. of the student and maybe even Question numbers.

Along with every question graded, there will be a comment area which will allow the grader and student to interact which will help in exclusion of the crib session to some extent.

Extras(if we get time):

If we are able to get hold of a good OCR with high accuracy, we can also try auto-grading of Objective questions like MCQs, True/False.

We can also try doing some statistical analysis on the students on the basis of their performance to determine who need more attention.

## Major Roles:

### Student:

Entries in the exams section will be automatically created for each student. When all the copies of an exam will be checked, students will be able to see their marks and comments and file for cribs (if needed).

### TA:

When a prof. allocates a TA to check a specific set of questions(from a particular exam), a link of that exam will appear in the TA's account. When (s)he will check all the papers, the prof will be notified. When TA will check a copy, (s)he can comment on the paper and (s)he will award the marks.

### Instructor:

An instructor can create an exam and then (s)he can divide the questions among different TAs. When a TA will check all of her/his papers, the instructor will be notified. The instructor will be given some extra privileges to override some stuff manually which will be decided as they come along.

### Functional specification:

Here is a basic layout on how we expect the things to get played out:

1. A guy scans all the copies related to an exam/quiz and then sends the collated pdf (or a folder of pdf) to the instructor.
2. The instructor creates a new link of an exam of a course which automatically is conveyed to the respective TAs and students. He/She then uploads the pdf on to the system wherein the pages are sorted in accordance with their roll no. and question no. using the OCR.
3. Now the instructor assigns questions to the TAs which notifies the TAs which part they are gonna check.
4. The TAs click on the question they have to check and pages from that question comes one by one for each student. This includes marking and commenting. The marksheet will be updated automatically.
5. When one TA finishes his work the instructor is notified and after grading is completed by all of them he can call for an online crib session which means the students can view their marks and get their query resolved by the respective TAs without the hassle of anyone going anywhere.
6. Finally, when cribs are done, the mark sheets are updated accordingly, the tedious task of grading is over.

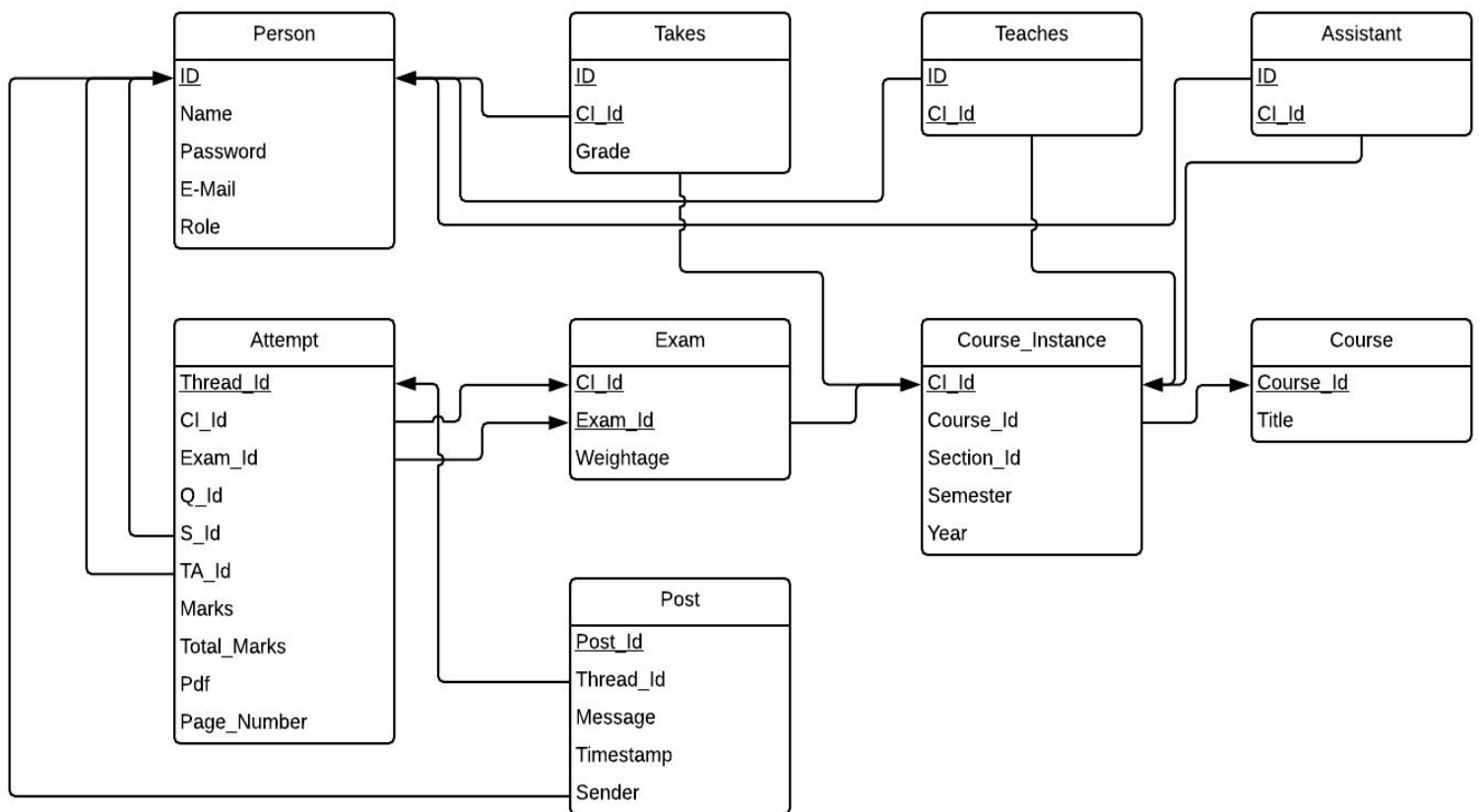
Interface specification:

Accessing the website will take users to Login/Signup page. On successful login, just like Moodle, we will show the list of courses, and an option to create a new course, or to join a course. The interface after clicking on a course will be different for profs and TAs and for students.

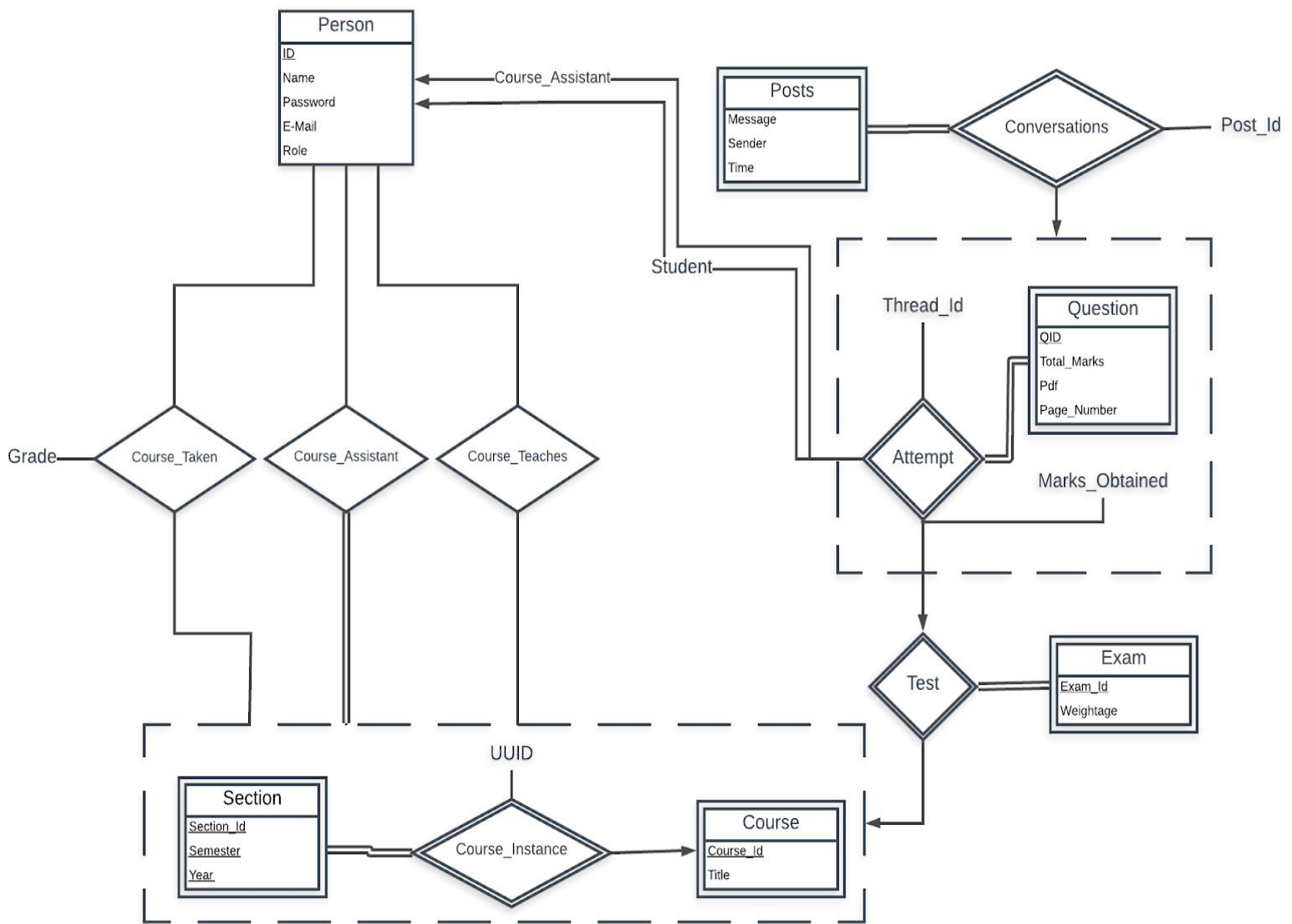
For profs and TAs, there will be a link to manage people (add/remove students/TAs, see the statistics of a student). Needless to say, only prof can remove TAs and TAs can't remove the prof. Another link will be to create a new test and there will be links for already created tests.

For students, there will be a list of tests, on clicking on each test, (s)he will be able to see his/her marks of each question along with the pic of that question. There will also be a comment thread in which, the student can comment to talk with the TA(cribs).

Relation Table:



ER Model: The weak entities are enclosed in double lined box but their keys are not dashed underlined rather just underlined.



### Plans For Testing:

We plan to distribute some printed questionnaire among peers and then ask them to fill something and later give it back us using their camscanner. In this way we are gonna get the quiz data. Apart from that the database for instructor, TA, students will be hypothetical and will be generated as we move along with the project.