CS 3810 Principles of Database System

Project Proposal for Grade Book DB Design
Requirements Specifications / Business Rules
Design Document
10/29/2018

Team member(s);
Abinet Kenore
Brook Beyene
Mutumba Tonny
Rohit Shrestha

GRADE BOOK DATABASE DESIGN

STUDENT INFO .. keys			COURSE INFO		GRADING/EVALUATION OF THE COURSE.....		GRADE Num . .ltr			
First_name	Str		Course_name	Str	Class_work/cw		90 -100	A		
Last_name	Str		Course_num	Int	Homework/hw		80 -90	B		
Email	Str		Credit_hr	Int	Tests/ts		70_80	C		
Date_birth	DATE		Course_id	Int	Class_pro/cp		60-70	D		
Student_id	int									
Sex	Str		Course_descrp		Final_exam/fe		<=59	F		
Phone	Str				Consider the date exam taken					
City	Str									
State	Str									
Zip	Int									

figure 1.1

The project that we will like to go ahead and do is grade book DB. We fill that by creating a grade book DBS, manly teachers might be interested accumulating multiple students' class-oriented records and be able to retrieve them easily. That being said, some of the important features we would like to include for the teachers grading will have some of these segments for; student, course, universal grading metrics, and other related info. The basic idea for the segments we will feature are displayed in figure 1.1. Also, in this DB system, we will provide a professor the required DB query implementation (CRUD).

The design will be implemented using a programing language Java, for a DB config MySQL5, and GUI if we have enough time.

Note: There may be a change in the tools we use for the seek of implementation and easiness of the work! At the end of the semester we will provide a presentation for the class and a documentation of the project for the professor for the later use.

Gradebook consists of having many different things playing their own parts, in order to correctly evaluate the individual student work. Below is list of requirements we seek to incorporate within our design.

List of requirements:

- Student:
  - Student identification number (SIN), First, last name, major, student email address (SEA).
- Course:
  - Course record number (CRN), section identification number (SIN), course name, course number (CN), term, year.
- Instructor:
  - Instructor, first, Last name, department, instructor identification number (IIN), instructor email address (IEA).
- Grading system:
  - Raw score, letter grade, student identification number (SID), course record number (CRN).
- Assignment:
  - Student assignment, course record number (CRN), assignment name, average points, maximum point, weight, assignment identification number (AIN).

Below we have the design document (figure 1.2) how we are to create a grading book. Then right below that we have the rules (figure 1.3) of our ER diagram for this particular design.

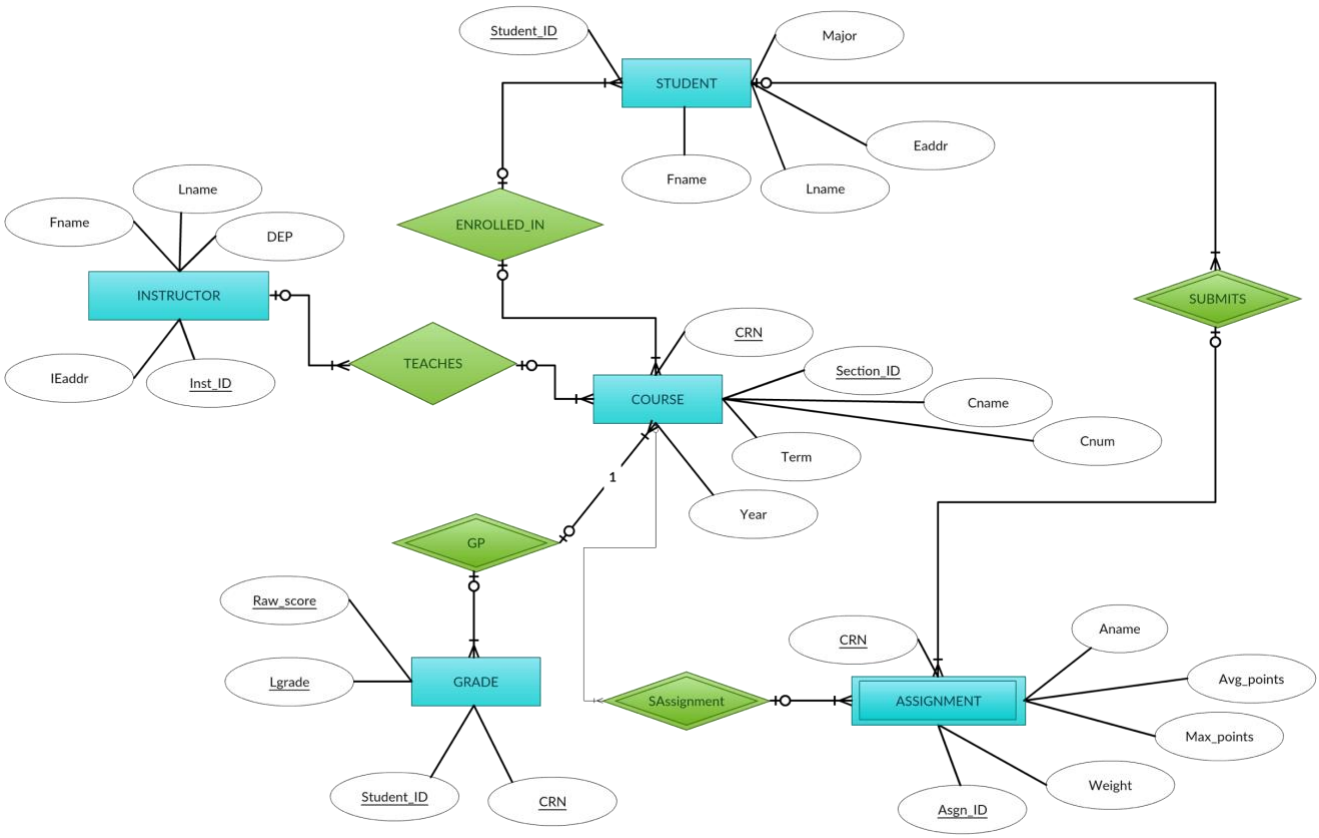

figure 1.2

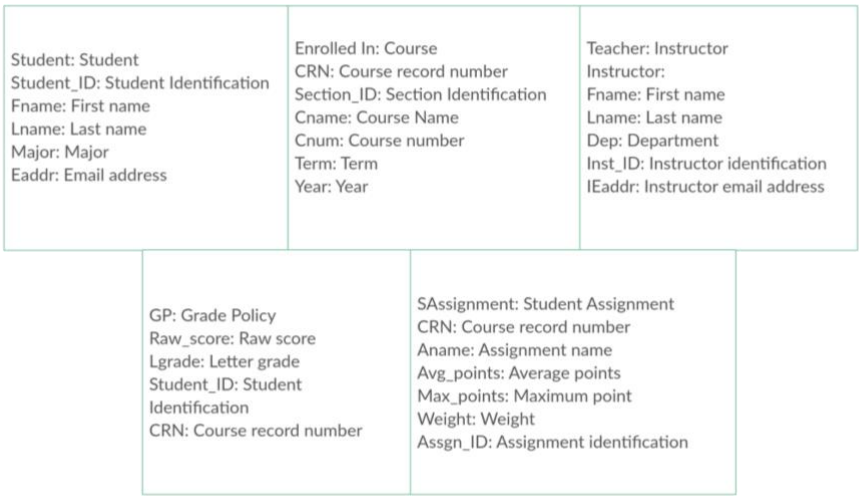
Student: Student
Student_ID: Student Identification
Fname: First name
Lname: Last name
Major: Major
Eaddr: Email address
Enrolled In: Course
CRN: Course record number
Section_ID: Section Identification
Cname: Course Name
Cnum: Course number
Term: Term
Year: Year
Teacher: Instructor
Instructor:
Fname: First name
Lname: Last name
Dep: Department
Inst_ID: Instructor identification
IEaddr: Instructor email address
GP: Grade Policy
Raw_score: Raw score
Lgrade: Letter grade
Student_ID: Student Identification
CRN: Course record number
SAssignment: Student Assignment
CRN: Course record number
Aname: Assignment name
Avg_points: Average points
Max_points: Maximum point
Weight: Weight
Assgn_ID: Assignment identification

figure 1.3