

Project Proposal

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March 28, 2017

1 Database Domain

For my project I would like to create a scheduling database for myself. This database will include my courses, extracurriculars, tasks, grades, a profile of myself, and positive messages.

I would like this database so I can keep better track of my current standing as a student and analyze trends in my performance. I also believe it will boost my confidence (hence the positive messages :-)), performance and contain information which I am prone to forgetting (ie my SSN, license number, insurance, etc). "Super Planner" best describes the domain of my database.

2 User Requirements

1. **Add/remove a Course** For adding, specify meeting days, meeting times, professor (People Index #), and attendance weighting on final grade.
2. **Update Attendance** Specify the course number and whether or not the absence was excused. (Cumulative so it adds 1 to the sum of preexisting absences and depending on whether or not the absence was excused it does the same for excused absences).
3. **Add/remove an Extracurricular** Contains meeting days, meeting times, supervisor (People Index #).
4. **Add/remove a Task** Specify due date and course number/extracurricular number.

5. **Update a Task's completion status** Specify the taskID and the completion status.
6. **Update a Task's grade (or quality of completion)** Specify the taskID and grade it is to be given.
7. **Add/remove/update attribute to Profile** This table only has one row. Just specify the attribute to be changed, and what it is to be changed to. If adding or removing specify attribute to remove or attribute to add with the attribute's value.
8. **Add/remove positive comments :-)** All I will need to specify is the comment when adding and the preexisting comment id if removing.

3 Data Requirements

Entities

All of the below will also have their own unique index generated with the table.

3.1 Course

Contains meeting days, meeting times, professor (People Index #), attendance weighting on final grade, days class has been missed, days excused.

3.2 Extracurricular

Contains meeting days, meeting times, supervisor (People Index #).

3.3 Tasks

Contains due date, start date, grade, course number, and extracurricular number. Course number or extracurricular number must be NULL, but not both. These numbers will link back to the task's associated course/extracurricular.

3.4 Profile

Undecided number of attributes. Current attributes include: full name, cumulative GPA, current GPA, SSN, date of birth, blood-type, license plate number insurance number, health-care provider. `fullName`, `bloodtype` and `date of birth` are both `CHARACTERS` containing their respective information. Cumulative GPA and current GPA are both `FLOAT` s with a precision of 5. Health care provider is a `VARCHAR` containing the name of my current health care provider. SSN, license plate number, and insurance number are all `INTEGER`s with 0s replacing unused digits.

3.5 PositiveComments

Two attribute: `Comment index` and `comment`. The `comment index` is a unique `INTEGER` identifying each positive comment. The `comment` is a `VARCHAR` containing a positive comment from me to me :-)

3.6 People

Contains person's name, email, phone-number and office hours. Office hours and phone-number may be `NULL`.