Carleton Class Database Project

Description

This project is motivated by the needs of Professor Nel for COMP3005. A Carleton Class database will monitor classes that Carleton Offers as well as the students registered in those classes. This will aide university students as it will display the courses needed for their degree as well the required prerequisites. This will also aide students while taking courses as the letter grade they receive will be a reflection on how well they understand the material.

The Carleton Class Database will also be of use to professors as they are able to see how their students are doing in their class. This will allow for professors to adjust their teaching style or course content to aid the students in succeeding.

Finally, it will aid Carleton University as will keep track of all students and their required classes, their average, a class average for a professor and ultimately determine whether a student can graduate.

The Carleton Class Database has three entities, a student, a class, and a professor. Each of these entities have various attributes.
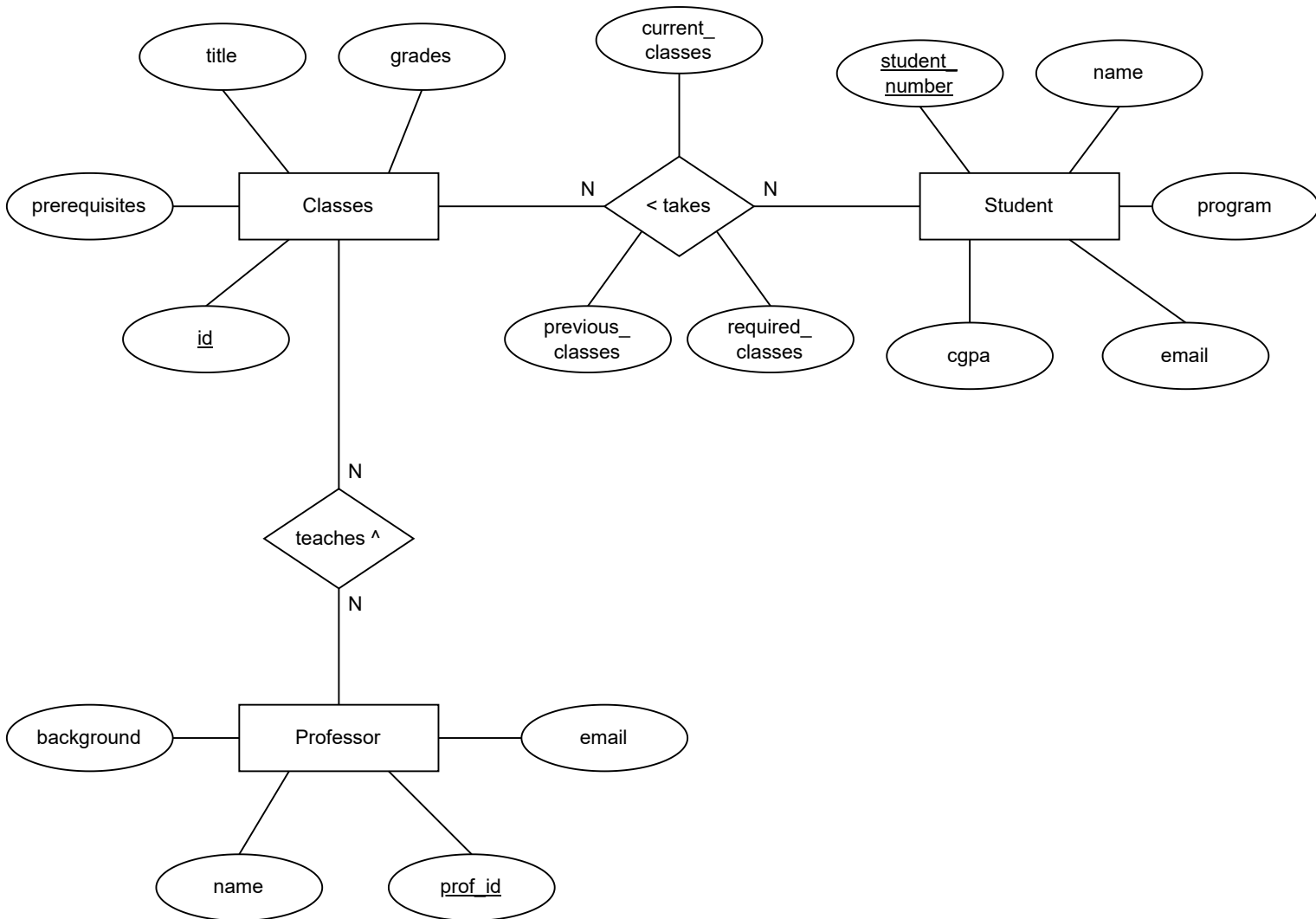
The student has a name, student number, email, program and cgpa. The student_number is the primary key for this entity as only one student shall have a unique student number.

The class entity has a title, id, grade, and prerequisites. The id is the primary key for a class as there will only be one class with that specific id (Note: there is no course sections included in the database).

Finally, the professor entity has a name, prof_id, background, and email. The prof_id is the primary key for a professor, as similar to the student, only has one professor with that unique prof_id.

Carleton Class Database ER Model
COMP3005A

Schema

Assumptions:

- Background is the professors teaching i.e. software, math, English, etc.
- Classes can in fact exist if there are no students or professors as it is its own entity
- The previous_classes attribute stores classes that students have taken, including grades

Student							
student_number	Name	Email	Program	Cgpa	Current_classes	Previous_classes	Reqired_classes

Class			
Id	Title	Grades	prerequisites

Professor			
prof_id	Name	Email	background