

In class Activity
University Mini-World Prompt

Work in groups of 2 or 3 to draw the Entity-Relationship diagram for the following University mini-world prompt.

In our mini-world we are tracking information for a University. We need to know the information about students, such as their ID number, name, address, phone number, email, and major. We also need information about instructors, such as their ID, Rank (lecturer, professor, etc) Name, office, email, and phone number.

We also need to track information about the structure of the university. For instance there are colleges, and departments. Both Colleges and Departments have a name, main office and main phone number. Departments also have a numeric code. A College administers several departments, but a department can only belong to one college. One instructor is the dean of each college. One instructor is the Chair of each department, and they have a start date for when they were appointed the chair of the department. The department employs many instructors, but an instructor is only employed by one department. A department has many students, but a student only belongs to one department.

We also need to track information about courses. A course has a code (example CPSC 4620), number of credits, name, and description. A course is offered by a department. A course can have many sections. A section has a room that it meets in, the days and time it meets, section ID, section number, semester and year. A section can only belong to one course. A student takes multiple sections, and earns a grade for each section they take. An instructor teaches multiple sections, but a section is only taught by one instructor.

After you have finished your diagram, consider the following questions:

1. What if a student had 2 majors?
2. How would we add the students GPA?
3. What if an instructor was employed by more than one department?
4. Would it make sense to have location be an entity, or stay as an attribute?
5. How can we tell if a student is part time or full time?