

Use Case - Day 2 - Final Project

Consider the following description for a university information system that is used to keep track of students' transcripts. One of the first things concerns the data to be kept in permanent storage, which is further broken down into five parts.

1a. The university keeps track of each student's name, student number, social security number, current address and phone, permanent address and phone, birthdate, sex, class (freshman, sophomore, ..., graduate), major department, minor department (if any), and degree program (B.A., B.S., ..., Ph.D.). Some user applications need to refer to the city, state, and zip of the student's permanent address, and to the students' last name. Both social security number and student number have unique values for each student.

1b. Each department is described by a name, department code, office number, office phone and college. Both name and code have unique values for each department.

1c. Each course has a course name, description, code number, number of semester hours, level, and offering department. The value of code number is unique for each course.

1d. Each section has an instructor, semester, year, course, and section number. The section number distinguishes different sections of the same course that are taught during the same semester/year; its values are 1, 2, 3, ...; up to the number of sections taught during each semester.

1e. A grade report has a student, section, and grade.

The other things for this application are:

- An administrator can update the courses to be taught by instructors, and enter the list of students taking a course.
- An instructor can enter and update the grades of the course(s) taught by this instructor.
- A student can request a grade report from the information system.

Make a use case model of this description