COM 230

Entity Diagrams 3/4

Using the notation in our textbook create entity diagrams with attributes for the following set of specifications. For this set of exercises we will be modeling an educational institution like Coleman University.

Of interest to the system are its administrators, instructors and students. For each individual the system needs to store a unique identification number. These will be in a separate number series for each category. Administrators receive a three digit identification number. All other employees has a four digit identification number issue serially by hire date. Students receive a five digit identification number upon enrollment in a field of study. The system needs to store first name, last name, middle initial, title for address, social security number, complete mailing address, a telephone number and an email address. Consideration must be given to the fact that a single person might have more than one of some of these attributes or more than one of such items as telephone number or email address. In order to comply with federal reporting requirements regarding discrimination the system must also store data regarding age, gender and ethnicity. Access to these last three cannot be subject to unlimited access.

The University offers a number of curricula such as CIS, CN, CGG, BIT and WMD. Every instructor works for one of the corresponding departments. Each student may be enrolled in one and only one curriculum at a time. Each curriculum / school offers a number of courses. Each course has a designating number, title, description, unit value. Frequently classes are taught offering instruction in the various courses. Each class has a class number, an assigned instructor, course information, room number, list of meeting days both lab and lecture along with a meeting time and a roster of students enrolled. Records of instructor teaching assignments along with student survey scores must be maintained. An overall listing of all courses currently being taught must be maintained.

Each student’s field of study needs to be retained. A student’s transcript includes a listing of courses currently being attempted as well as those that have been completed along with final numeric grade in the class as well as an overall GPA. Each instructor has a listing of courses he / she may be called upon to teach. Some instructors are full time and some are part time or adjunct. All administrators are full time employees. Each of the support personal have a status or full or part time. The system also needs to track all student absences.

It is not necessary to model payroll information for instructors and administrators at this time.