DBAS 1100 Week 1 - In-Class Case Studies

Case Study 1

Dr. Phil Harmonic is the chairman of the music department at the local university. He recently purchased a computer and he wants to use it to keep track of all the courses offered by the department.

Dr. Harmonic currently has five instructors who work in the department. He would like to use the computer to keep track of each instructor's basic contact information, such as employee id, name, office location, and phone number.

For each course, the department needs to keep track of the course code, title, and the number of credit hours it is worth. When courses are offered, the section of the course receives a call number, and with that number the department keeps track of which instructor is teaching the course.

Finally, Dr. Harmonic would also like to be able to keep track of his students and to know which courses a student has taken. The information he would like to know about each student includes student number, name, dorm room, and phone number. He also needs to know what grade the student receives in each course.

Case Study 2

Dr. U. R. Sick is the admin of General Hospital. He is interested in creating a database for the hospital's outpatient clinic, where patients come for emergency treatment.

As a patient arrives for the first time, we need to record some basic information, such as name, address, and phone number, about each patient. In addition, we need to know by which insurance companies the patient is covered.

It is common for patients coming to this clinic to be covered by more than one insurance company. To assist with billing, we need to keep a list of the insurance companies our patients use, so that we have the company name, phone number, and contact name for each insurance company.

Because the clinic is really for emergencies, we need to keep track of the patients' family doctors so we can send information to them. Each patient is associated with one family doctor. To assist with the contact process, we maintain a doctor list that includes the doctor's name, cell phone number, and office phone number.