CECS323

Midterm 2 Review Problems

1. The bookstore needs a list of which textbooks are need for each class for the Fall 2019. They need to know if each book is required or if it is optional for that course.
2. Some people have a hard time remember which books they’ve read and when they have read them. If any of them are like me, they have read the same book many times.
3. For this course, I need a list of students and the programming languages that they have learned.
4. For this course, I need a list of students and the programming languages that they have learned and when they learned it
5. You are designing a database for an automobile repair shop. When a customer brings in a vehicle, a service advisor will write up a repair order. This order will identify the customer and the vehicle, along with the date of service and the name of the advisor.A vehicle might need several different types of service in a single visit. These could include oil change, lubrication, rotate tires, and so on. Each type of service is billed at a pre-determined number of hours work, regardless of the actual time spent by the technician. Each type of service also has a flat book rate of dollars-per-hour that is charged.

Design a solution with a many-to-many-relationship between the repair order and the services.

1. Same application but let’s look at the relationship between vehicles and services.
2. Sometimes automobile manufacturers need to recall a vehicle to fix a mistake that the manufacturer made on that automobile. For that recall, they need to know who owns the vehicle currently. An automobile can have several owners.
3. When you buy a used car it helps to research prior service/repairs on that vehicle. A Vehicle History report will have a list of services/repairs done on a particular vehicle, when the repair was done and who owned the vehicle at any point in time.
4. Most audio playing software allows you to create a playlist. A playlist has a name and a list of the songs you want to listen to along with the artist who recorded it, the length of the song and the song’s position on that playlist.
5. I do a lot of computer embroidery. Each embroidery file has a list of the colors needed to make that particular design.
6. I do a lot of computer embroidery. Each embroidery file has a list of the thread colors needed to make that design and the amount of thread I need in each color.

Here we are dealing with multiple attributes for each thread: color and amount.

1. Every year I throw a birthday party for my husband. I do like to keep track of who I invited and who attended each year.