ERD assignment:

1. The corporate owner (franchisor) of a national chain is seeking to automate the management of its franchised restaurants, franchisees, and contract data. The company wants an information system whereby it could obtain, for any given restaurant, type of contract in effect, phone number and location of each restaurant (including street address, city, state and zip code), and detailed information about the restaurant owner (including owner’s social security number, full name, address, email and phone number). The various contract arrangements are:

   Contract 1: 99-year term, Contract 2: 5-year term, Contract 3: 10-year term

   Other contract types may be offered in the future. The company currently has 500 franchised restaurants. Expansion plans call for opening an additional 200 restaurants each year for the next three years, all of which are to be franchised. There is no limit on the number of restaurants an individual may own, and owners are encouraged to apply for multiple restaurants. Draw the Entity-Relationship diagram with attributes for this information system. In case that the relationship is not clear from the description you have to state your assumption about the relationship. You must indicate if a relationship is mandatory or optional. Draw the ERD with appropriate attributes for each entity type.

2. Design a database for a company to keep track of employees, departments, projects and employee dependents. The company is organized into departments. Each department has a unique number, name. Each department controls a number of projects, each of which has a unique number, and name. Several employees may work on the same project. We store each employee's SSN, name, address, salary, and birthday. An employee is assigned to one department but may work on several projects. We want to keep track of the dependents of each employee for insurance purpose. We keep each dependent’s SSN, name, sex and birthday. You must indicate if a relationship is mandatory or optional. Draw the ER diagram with attributes for this database.

Requirement: You must use a drawing tool such as Draw IO to draw the ERD.

Submit the ERD screenshots to my email: dchao@sfsu.edu