**I am planning to do it individually to get a chance to learn and discover the things myself rather than doing part of the project in the group. I think it will help me to gain deeper knowledge about database.**

**Requirements:**

I suppose I have been hired as a consultant to design a database for a small hospital, where the database will help to keep track record of hospitals all activities including patients reports, schedule, treatments given, inventory etc. which are presently prepared manually. Preparing and storing this information manually has great labor and maintenance cost to the hospital. To solve this issue with the help of relational database, I think the following could be the rough requirements specification need to be considered:

The Hospital needs to know each patient’s ID number first name, last name, mailing address, contact number, birth date, age, and gender. The patient ID number gives a unique value for each patient. We will capture multiple contact numbers (including parents or guardians’ numbers) for each patient if these are provided, but we don’t differentiate these numbers as work vs home vs cell – we just treat each as a potential way to contact the patient and communicate any information.

The hospital has many rooms. Each patient once admitted will be associated with the room. Each room has id, name, type and floor location.

The hospital also maintains all record of treatments. Each patient is given one or more treatment. Treatment has unique id, name, time spent on treatment and outcome. Also, each treatment is associated with one or more medicines and given by one or more specialized doctors.

Each patient record has record id, appointment and description. Also, each patient record is associated with single patient. And each patient could receive one or more treatment from one or more specialized doctors.

The hospital maintains inventory records for medicinal supplies. Each treatment uses multiple medicines. Each medicine has unique medicine name, price, quantity, and code.

The hospital has many employees. Each employee could be categorized as doctor, nurse or receptionists. Further, employee has unique id, name, address, gender, contact number (one to many) and salary.

Each employee serves under one department. Each department has unique id, and name.

The doctor has all the properties of employee along with specialization and his/her highest degree. The doctor could treat one or more patients.

The nurse has all the properties of employee. Each nurse governs one or more rooms.

The receptionist has all the properties of employee. Each receptionist has access to one or more patients records.

Lastly, hospital maintains the record of schedules for the patients, doctors and nurses. Each schedule has unique id, timespan, date and purpose/ description.