1. Preliminaries

Before starting on this assignment, please read the General Information document available in the Lab Assignments section on the Class Resources page on Piazza.

2. Goal

The goal of this first assignment is to design a database schema. For this assignment, the schema does not have to be created in PostgreSQL.

3. Lab Assignment 1 Description

PVS hospital maintains information about *Patients, Medicines, Doctors* and *Prescriptions. T*he hospital has hired you to to design a database for this information that has four relations.

The specifications for these relations are as follows:

Patients

- The relation must contain descriptions for each patient. This includes the patient's Name, Address, Email, Primary Doctor, and the Date that the patient record was created.
- Note that a unique ID should be assigned to each patient as well.

Medicines

- The relation must contain an inventory of all medicines available. The relation should consist of Medicine Name and Price. There should also be a unique ID for each Medicine.

Doctors

- The relation must contain information about each doctor, including Name, Location and Specialty. There should be a unique ID for each doctor.

Prescriptions

- The relation must also contain information about each prescription, including patient, doctor who made the prescription, and the medicine prescribed, and the date that the prescription was made. There should also be a unique id for each prescription.
- There may be more than one prescription prescribed for a patient on a given date. Patients may consult doctors other than their primary doctor.

Your assignment is to design a relational database schema based on the above specifications. This includes identifying the relations and attributes that are needed to store the required information.

The data types of the attributes in each relation schema are not required for this assignment, although you are free to assume that every attribute has a reasonable data type.

3.1 Example Schema

The following is an example of a schema for a pet store database. There are five relations: Sales, Customers, Animals, Species, and Breeds. Each table has a primary key that is underlined. There are some foreign keys, e.g. customer_id in the sales relation.

```
Sales (sale_id, animal_id, customer_id, price)
Customers (customer_id, first_name, last_name, credit_card_number)
Animals (animal_id, species_id, breed_id, name, color)
Species (species_id, common_name, scientific_name)
Breeds (breed_id, name)
```

Listing 1: PetStoreDB

4. Submitting Assignment

1. Using the format of the example schema above, write the relations schemas out in a plain text file named hospital.txt.
2. Copy hospital.txt to your home directory on unix.ic.ucsc.edu.
3. Login to unix.ic.ucsc.edu. At the shell prompt, submit your work:

   > submit cmps182-sf.w16 lab1 hospital.txt

   You can submit more than once. Only your latest submission will be graded. Deadline for submission is Monday, January 18, 2015, 23:59pm.