# Exercise 3: Hospital Bill

In this exercise, you will design various classes and write a program to computerize the billing system of a hospital.

- Design a class called Person with the following attributes:
    - firstName
    - lastName
- Design a class called Doctor which will inherit from the Person class, with an additional data member to store a **_doctor's specialty_**.
- Design a class called Patient that will also inherit from the Person class. The Patient class will also have the following members:
    - patientID
    - dateOfBirth
    - attendingPhysician
    - dateAdmittedToHospital
- Design a class called HospitalCharges that will have the following members:
    - pharmacyCharges
    - doctorFees
    - roomCharges
    - xRayCharges
- Design a class called Hospital with the following members:
    - hospitalName
    - hospitalURL
    - hospitalTelephoneNumber
- Design a class called HospitalBill that will have the following members:
    - hospitalName
    - patientID
    - HospitalCharges

For each class add appropriate constructors and member functions to initialize, access and manipulate the data members.

Use inheritance and composition as you deem appropriate. You will need to write a "driver" program (main()) in which you will demonstrate your classes by initializing a couple of doctor and patient objects and display their values. Also, if you dynamically allocate memory, make sure that your program disposes it correctly so that there are no memory leaks.

Compress your working folder into an archive (.ZIP) and call it **Ex.03-LastNameFirstNameInitial.zip** – i.e. **Ex.03-ZejnilovicA.zip**. Submit it for grading by attaching it to the dropbox in ANGEL.