

Hospital Billing

Roles:

DBA, Billing (each medication, monthly, etc.), and Executive (in term of the staff income)

Data Specification:

Design a database to keep track of information for a hospital. Assume that the following requirements were collected:

- The hospital staffs can be categorized into five groups, i.e. *DOCTORS*, *NURSES*, *FINANCE*, *EXECUTIVES*. Each staff has a unique *Id_no*, *Name*, *Surname*, *Salary*, *Start_contract*, *End_contract* (For those who had terminated). For the *DOCTORS* group, they are categorized into *GENERAL_PRACTICES*, *SURGEONS*, and *ANESTHETISTS*.
- The *PATIENTS* are described by *Id*, *Name*, *Surname*, *Birthdate*, *Blood_group*, *Age*, *Gender*, and their *GENERAL_PRACTICE* doctor (One GP for one patient, but it can be changed).
- Each time a *PATIENT* admits to the hospital, his/her *GENERAL_PRACTICE* doctor will first consult the patient, and this will add a *MEDICATION* file for the *PATIENT*. If the *PATIENT* can be taken care by only the *GENERAL_PRACTICE*, only fixed-rate consultant fee will be charged. If required by the doctor, the *PATIENT* will be given a *PRESCRIPTION* to be purchased from any pharmacy store. The *GENERAL_PRACTICE* will record the ordered prescription to track each medication.
- Otherwise, if the patient requires any surgery the *GENERAL_PRACTICE* doctor will assign *SURGEONS*, *ANESTHETISTS*, and *NURSES* to take the *OPERATION*. An *OPERATION* will incur charges for the *SURGEONS* and *ANESTHETISTS* depends on the number of hours taken in the *OPERATION*, plus the *OPERATION_ROOM* fee. Note that the operation can not be proceeded, if there is no available *OPERATION_ROOM*, nor *PATIENT_ROOM*.
- After each operation, the head of the *SURGEON* doctors will schedule the rest-time in the hospital for the *PATIENT*. A group of *NURSES* will be assigned to take care of the patient. At this stage, the *PATIENT* will be charged for the *BED* fee, and the *NURSES* fee depends on the number of days in the hospital.
- Before a *PATIENT* to leave the hospital, the patient must meet again with his/her *GENERAL_PRACTICE* to obtain any advice after the operation in which the consultant fee will be incurred. If required by the doctor, the *PATIENT* will be given a *PRESCRIPTION* to be purchased from any pharmacy store. The *GENERAL_PRACTICE* will record the ordered prescription to track each medication.