**Hospital Management System**

**Case Study:**

**Aim: T**o design and develop a database for the hospital to maintain the records of various departments, rooms, and doctors in the hospital and also maintains records of the regular patients, patients admitted in the hospital, the check up of patients done by the doctors, the patients that have been operated, and patients discharged from the hospital.

**Description**:

In hospital, there are many departments like Orthopedic, Pathology, Emergency, Dental, Gynecology, Anesthetics, I.C.U., Blood Bank, Operation Theater, Laboratory, M.R.I., Neurology, Cardiology, Cancer Department, Corpse, etc. There is an OPD where patients come and get a entry card for check up from the concerned doctor. After making entry in the card, they go to the concerned doctor’s room and the doctor checks up their symptoms. Accordingly, the doctor either prescribes medicine or admits the patient in the concerned department. The patient may choose either private or general room according to his/her need. But before getting admission in the hospital, the patient has to fulfill certain formalities of the hospital like room charges, etc. After the treatment is completed, the doctor discharges the patient. Before discharging from the hospital, the patient again has to complete certain formalities of the hospital like balance charges, test charges, operation

charges (if any), blood charges, doctors’ charges, etc.

Next we talk about the doctors of the hospital. There are two types of the doctors in the hospital, namely, *regular doctors* and *call on doctors*. Regular doctors are those doctors who come to the hospital daily. Calls on doctors are those doctors who are called by the hospital if the concerned doctor is not available.

**Table Description:**

Following are the tables used in *Hospital Management* database

1. **DEPARTMENTS:** This table consists of details about the various departments in the hospital. The information stored in this table includes department name, department location, and facilities available in that department.

2. **DOCTORS:** This table stores information about all the doctors working for the hospital and the departments they are associated with. Each doctor is given an identity number starting with DR or DC prefixes only.

3. **REG\_DOC:** This table stores details of regular doctors working in the hospital. Doctors are referred to by their doctor number. This table also stores personal details of doctors like name, qualification, address, phone number, salary, date of joining, etc. must exist in ALL\_DOCTORS table.

4. **ON\_CALL\_DOC:** This table stores details of doctors called by hospital when additional doctors are required. Doctors are referred to by their doctor number. Other personal details like name, qualification, fees per call, payment due, address, phone number, etc. are also stored in ALL\_DOCTORS table.

5. **PATIENTS:** The record in this table is created when any patient arrives in the hospital for a check up. When patient arrives, a patient number is generated which acts as a primary key. Other details like name, age, sex, address, city, phone number, entry date, name of the doctor referred to, diagnosis, and department name are also stored and patient’s current status. After storing the necessary details patient is sent to the doctor for check up.

6.**CHECKUPS:** The record in this table is created after patient gets a check up. The patients status and illness are entered in this table and the medicines prescribed and the status regarding admission of patient in hospital or treatment at home and if discharged.

6.**PAYMENTS: T**his table calculates and stores all the record of a patient - doctor relationship and payment according to doctor's fees, Nurse's Fees, Hospital Treatment Charges.