

Hospital Management Information System (HMIS)

Team Members:

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Objectives: To create and maintain a database consisting of records of the various patients visiting a particular hospital.

Description/Features:

Description of the people involved:

1. Patients:

- a. Every patient will be given a unique ID, called PatientID. A patient can visit a hospital one or more times, but will have the same PatientID. However, every time the patient visits the hospital, he/she will be assigned a unique SrNo. This will be the Primary Key for our database.
- b. We shall record personal details of the patient, e.g., Patient's Name, Age, Sex, Contact No., Address, Date of Visit, etc.
- c. The patient will be assigned to a doctor and will be provided with some diagnosis.
- d. A patient can have multiple diseases, so, he might be treated by more than one doctor.
- e. A patient can be treated on outdoor basis or may be admitted according to the diagnosis provided (indoor). In case the patient needs to be admitted in the hospital, a room is allocated to him. A nurse and a ward boy are given the responsibility of him.
- f. Finally, the patient is provided with a bill as per the hospital charges. The charges may vary depending on the treatment and diagnosis.

2. Doctors:

- a. Each doctor has a unique ID, called DoctorID.
- b. A doctor specialises in one or more fields.
- c. A doctor can treat multiple patients.
- d. The doctor will advise investigations, provide a diagnosis and advise treatment to the patient.
- e. The doctor might need to check the previous treatment record of the patient, which is stored as his medical history.
- f. The doctor will decide whether the patient needs outdoor or indoor treatment.

3. Nurses and Ward Boys:

- a. Each nurse has a unique ID, called NurseID. Similarly, ward boys.
- b. They take care of indoor Patients.

4. Receptionist:

The patient presents at the reception. The receptionist enters the key details in the database and provides him unique ID and SrNo. and directs him to the relevant doctor.

5. Accountants:

The job of the accountant is to generate the bills of a given patient depending on the treatment and tests involved.

General Queries:

- A patient's attendant can ask enquiry about the patient from the receptionist.
- No. of patients admitted in the hospital of a particular disease/speciality.
- Average no. of patients per day.
- The months of the year having the highest no. of patients.
- The patient's medical history - new patient or old patient?

Complex Queries:

- No. of outdoor/indoor patients on a particular day/month.
- Change in treatment of the patient due to some side effects of a medicine (Update query).
- Or due to some complications (Update query).

- Or due to some co-morbidity, the patient is advised to visit another doctor in the hospital.
So, addition of a doctor (Update query).
- Given a particular month, which disease had the most cases?