Assignment1

1. Requirement Specification Report for Hospital Management System.

Introduction

Hospital Management System is majorly to organise Patients, Employees and Services provided. Patients are the customers of the Hospital Management System, every data corresponding to the Patients must be stored and they must be provided with Services or Medication requested.

Working

The flow of Hospital Management System is as below
There are three categories of persons who enter the Hospital.
Patient, the person who is entering the Hospital for medical treatment.
Visitor, the person who is entering the Hospital for visiting other patients.
Emergency Patient, the person who is entering the Hospital with dire need of medical attention. In the case of an Emergency Patient the information collected need not be collected with the information, they are assigned with an id and rushed to the emergency ward. The patient can either avail the services which require no doctor prescription, provided by the hospital like Blood test, Urine test, Coronavirus test, ECG, X-Ray, Medicines etc or book an appointment to visit the doctor. The appointment booking will be for a doctor who is an expert in the area in which the patient requires consultation. The doctor then consults the patient either asking him to avail the services like MRI Scanning, CT Scanning, X-Ray, Blood test, medicines or in more serious situations perform surgery on the patient. The details regarding the surgeries are also stored. The surgeries are scheduled in operation theatres, so the assignment of an operation theatre to a patient is very crucial. After the surgery the patient is admitted into admit rooms and advised to stay in the admit rooms for a certain period of time before discharging from the hospital. Emergency patients and surgery undergoing patients are attended by the nurses. Who are the employees of the hospital like doctors. Employees are the backbone of the hospital.

The commercial part of the Hospital Management System relies on three major commodities. Services availment, Surgery payments. After the patient avails the services provided by the hospital, he needs to make the payment. Also, bills generated from the surgery of the patient need to be paid. It is also the hospital's responsibility to store the records of patients who are deceased.

Requirement

There is a requirement to store the data corresponding to
Patients, the persons who enter the hospital intending to get medical attention or avail any non-prescribed services. So, that the further procedures of the patient can be kept track of starting from here. Their details are to be stored.
Visitors, the persons who enter the hospital intending to visit patients in the hospital. Each visitor is given a visitor id, so that they are restricted to visit only the patient they are related to and only at certain periods of time. Their details such as contact number, address are collected for storing in case of any mishappening related to the visitor and the patient they visit.
Storing the details of emergency patients is another key requirement. But the patients need not provide the details prior to their admit into the hospital, they or their guardians can provide the hospital with the details post treatment.
Services like Blood test, Urine test, Coronavirus test, ECG, MRI scanning, CT scanning, X-Ray etc availed by each patient is to be stored. So, that each patient can be linked to the tests and find out the results corresponding to the test. The doctors can also prescribe any test which the patient then avails, and provides the doctor with reports. The doctor can make the diagnosis or perform any surgery based on the reports.
The surgery details are stored with the corresponding patient id, there may be a lot of doctors operating on a single patient. The complete data of the doctors operated on the patient in the surgery is to be stored.

Billing details are the commercial aspect of the hospital. Bill corresponding to each service, surgery is to be stored along with the patient id. This way total payment of each patient can be kept track of.

Employees data is also to be stored, to provide them their salary on time and keep track of their information for the times of any mishappening. Rooms are intended to be of two types, operation theatres and admit rooms, the patient undergoing a surgery is related to the operation theatre in which their surgery takes place and the admit room where he is admitted after the surgery or in case of any mild medication. The details corresponding to the rooms are to be stored. Also, the details of patients who died due to unfortunate circumstances in the hospital are recorded and stored.

2. Entity Relationship Diagram