Assignment 3a

Team: RAIR Data

Hospital Management Database

Entity

In this database we have created a hospital management system. To make sure we cover all the working requirements of a hospital, we need at least the following entities:
- Patient
- Doctor
- Department
- Ward
- Hospital_stay
- Building

Attributes

To make sense of the database, each of the entities need some attributes. For example, doctors and patients need their names, date of birth, and contact information. Some of the major attributes in our ER diagram are as follows, but this is not an exhaustive list:
- An optional attribute of address on the patient entity
- A composite attribute of address on the building entity
- Multivalued attribute of contact details for both doctors and patients
- Derived attributes of age on both the doctor and patient

Relationships

To link our entities together, we need to create some relationships. These relationships help us understand how everything fits together. This is the list of the relationships in our ER diagram:
- A patient is cared by one or more doctors, while a doctor can care for 0 or many patients
- A doctor works in one department, while one department can have one or many doctors
- A single department is located in one building, while one building may have many departments
- A single ward may be located in one building, while one building may have many wards
- A patient can stay in a ward (or different wards on different dates), while a ward may contain 0 or more patients
- A single hospital stay is located in a single ward, while a ward may have 0 or many stays