

CS105.3 - Database Management Systems

Lab Sheet 6

Draw an ER diagram for the below given scenario. State any assumptions you make.

The CeyChin Hospital database stores details about Doctors, Patients, Appointments, Payments, Diagnosis, and Admitted Patient records like in a typical hospital. The data stored in this centralized database helps in recording the details of entities and answering queries useful in such an environment.

You need to consider the following basic requirements:

- Each doctor has a doctor ID. All the personal details of the doctor are recorded. A doctor may see many patients.
- A patient is identified by a patient ID, and other personal details. A patient may make an appointment with many doctors.
- Appointments to see a doctor are recorded by the secretary, which includes the appointment number, patient ID, patient name, doctor, location, time/date, and a contact number.
- Payments are recorded for all completed appointments and include the mode of payments as cash or credit-card.
- The doctors may record a Diagnosis after seeing the patients. The diagnosis record includes the diagnosis ID, patient details, id of the last appointment, and diagnosis determined by the doctor.
- Admitted Patients are assigned to a ward and a room number. Each admitted patient is also assigned a Nurse who looks after the patient.
- There are many nurses working in the hospital, but a nurse is assigned to look after only 1 patient. Nurses work only on the ward they are allocated.
- There are 4 wards in the hospital, indicated by ward number, name and floor. Each ward is managed by a Head Nurse working in hospital.

Given those conditions, do the following:

- Identify Entities in this scenario.
- Identify the relationships among the identified entities.
- Identify the connectivity and the cardinality of each relationship.
- Draw the Chen ERDs to represent the JCBC database.

Deliverables:

Submit the answer as a pdf format. (Note: Draw the ER diagram using an Online ER drawing tool.)