CS105.3 - Database Management Systems

Lab Sheet 4

Draw ER diagrams for the given scenarios by using suitable relationships.

Scenario 1:

Suppose that you are designing a database to record information about reality shows on TV. The database needs to record information about reality show, producer, TV channel and user. For each reality show it has a unique ID, name, basic information and participants' name. any reality show has at least 2 or more participants. For each producer it has a unique producer ID, company name and country. A show is produced by exactly one producer and one producer can produce many shows. Foreach tv channel it has a unique ID, name, start year, head office. A tv channel may broadcast multiple shows. Each show is broadcast by exactly one tv channel. Each user has a unique ID, username, password and age. A user can rate only one show and a show may be rated by multiple users.

Scenario 2:

A general hospital consists of several wards. Each ward has a unique ward number, a name and number of patients in that ward. A doctor is assigned to a single ward, but a ward can have many doctors. A ward hosts several patients. Each patient's admission number (unique), name, address, telephone number and the date of admission is stored. The hospital DB stores the prescribed treatments for a patient. Each treatment has a unique number and description. It also keeps tracks of the treatment dosage for each patient. One patient may be treated more than one treatment and the same treatment can be given to many patients. The hospital also keeps tracks of the hospital ID number of each doctor (unique), name, address, telephone number and specialization of each doctor. A patient is assigned to one doctor, but a doctor can treat many patients.