

EX.NO.1A	CONSTRUCT ENTITY RELATIONSHIP DIAGRAM FOR THE GIVEN SCENARIO
DATE:	

Aim:

To construct the ER diagram to design for the given database that conveying the application structure and details.

Question 1:

Suppose that you are designing a schema to record information about reality shows on TV. Your database needs to record the following information:

_ For each reality show, its name, genre, basic_info and participants name. Any reality show has at least two or more participants.

_ For each producer, the company name, company country. A show is produced by exactly one producer. And one producer produces exactly one show.

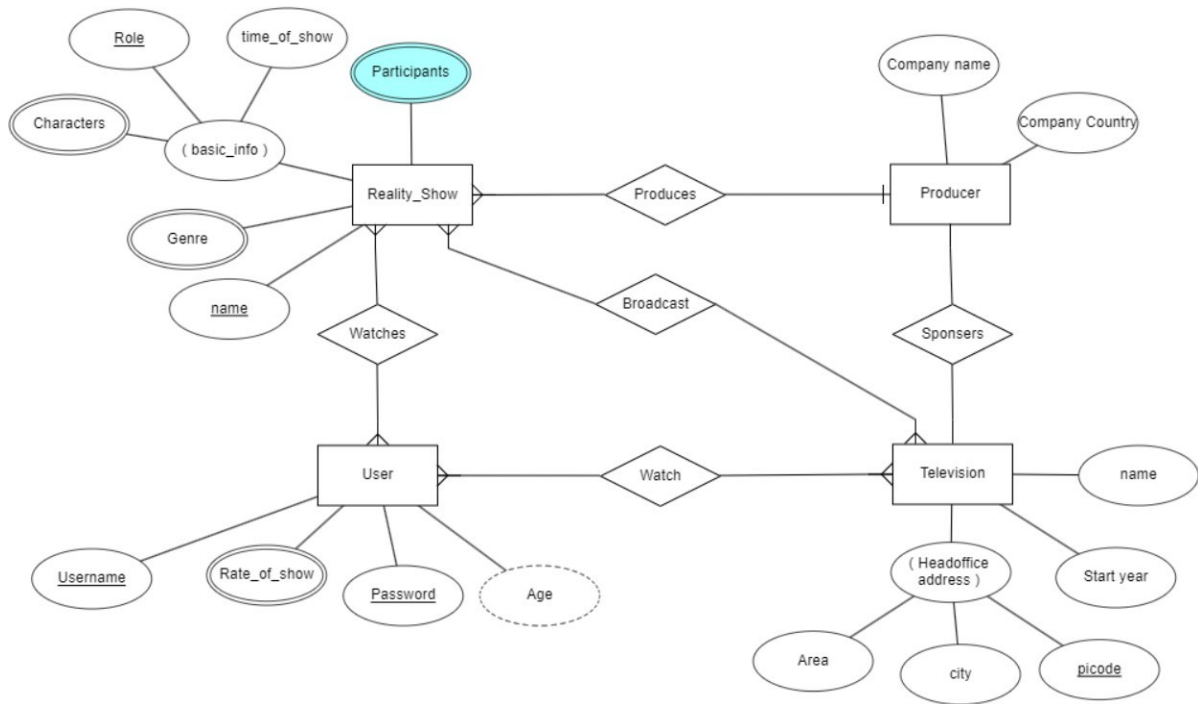
_ For each television, its name, start year, head office. A television may broadcasts multiple shows. Each show is broadcasted by exactly one television.

_ For each user, his/her username, password, and age. A user may rate multiple shows, and a show may be rated by multiple users. Each rating has a score of 0 to 10.

Draw an entity relationship diagram for this database.

- Identify the Entities
- List the attribute and its types.
- Identify the key attribute.
- Identify the cardinalities.
- Identify the relationships present in the ER model.

Answer:



Question 2:

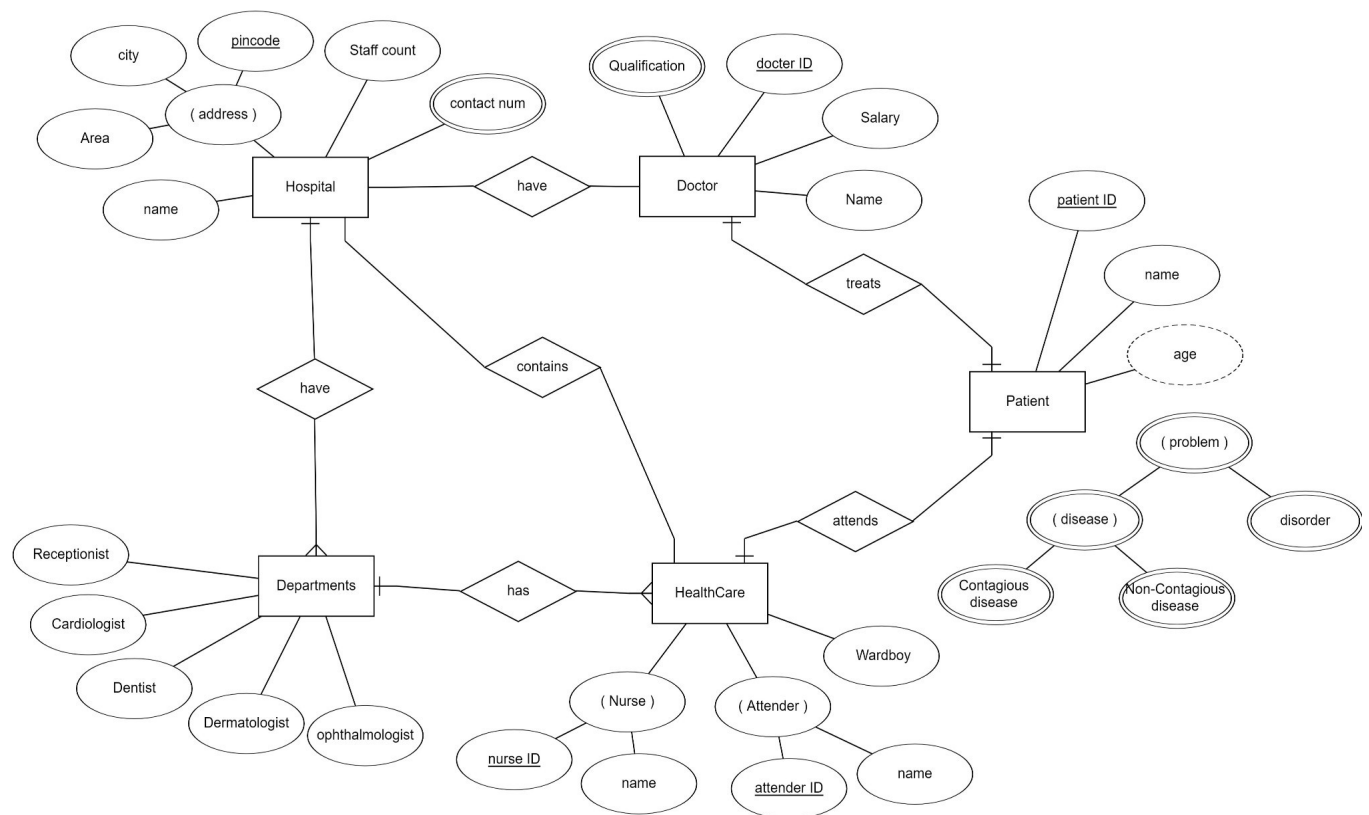
Draw an ER diagram to capture the requirement as stated below:

In a hospital there are different departments. Patient are treated in these departments by the doctor assigned to patient. Usually each patient is treated by a single doctor, but in rare case they will have two or three. Healthcare assistant will also attend patients; every department has many healthcare assistant.

Identify the Entities

- List the attribute and its types.
- Identify the key attribute.
- Identify the cardinalities.
- Identify the relationships present in the ER model.

Answer:



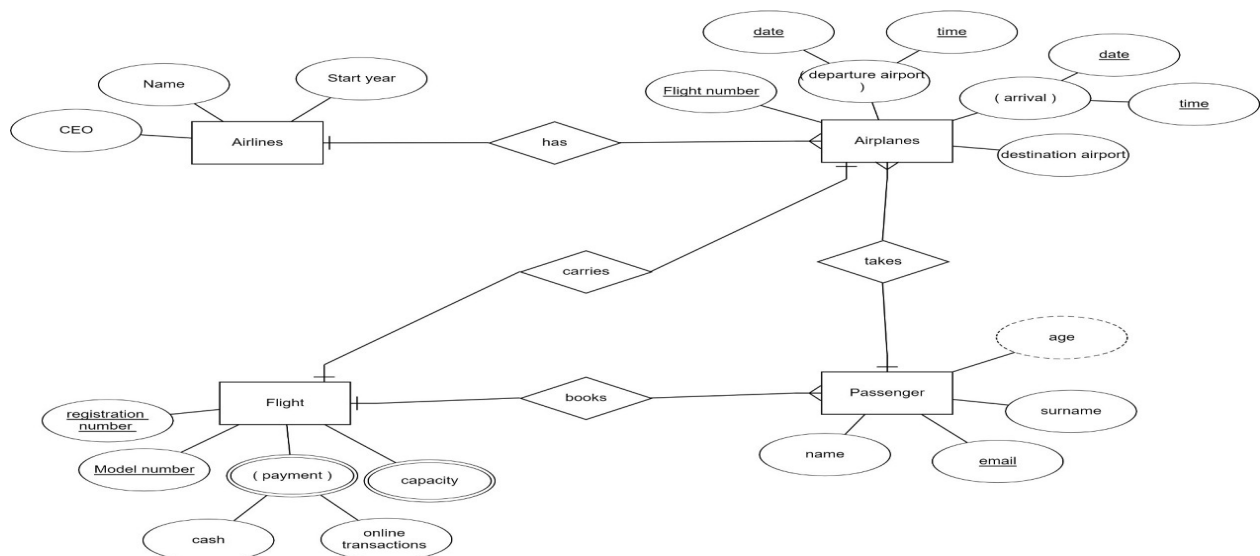
Question 3:

The flight database stores details about an airline's fleet, flights, and seat bookings. Again, it's a hugely simplified version of what a real airline would use, but the principles are the same.

Consider the following requirements list:

- The airline has one or more airplanes.
- An airplane has a model number, a unique registration number, and the capacity to take one or more passengers.
- An airplane flight has a unique flight number, a departure airport, a destination airport, a departure date and time, and an arrival date and time.
- Each flight is carried out by a single airplane.
- A passenger has given names, a surname, and a unique email address.
- A passenger can book a seat on a flight.

Answer:

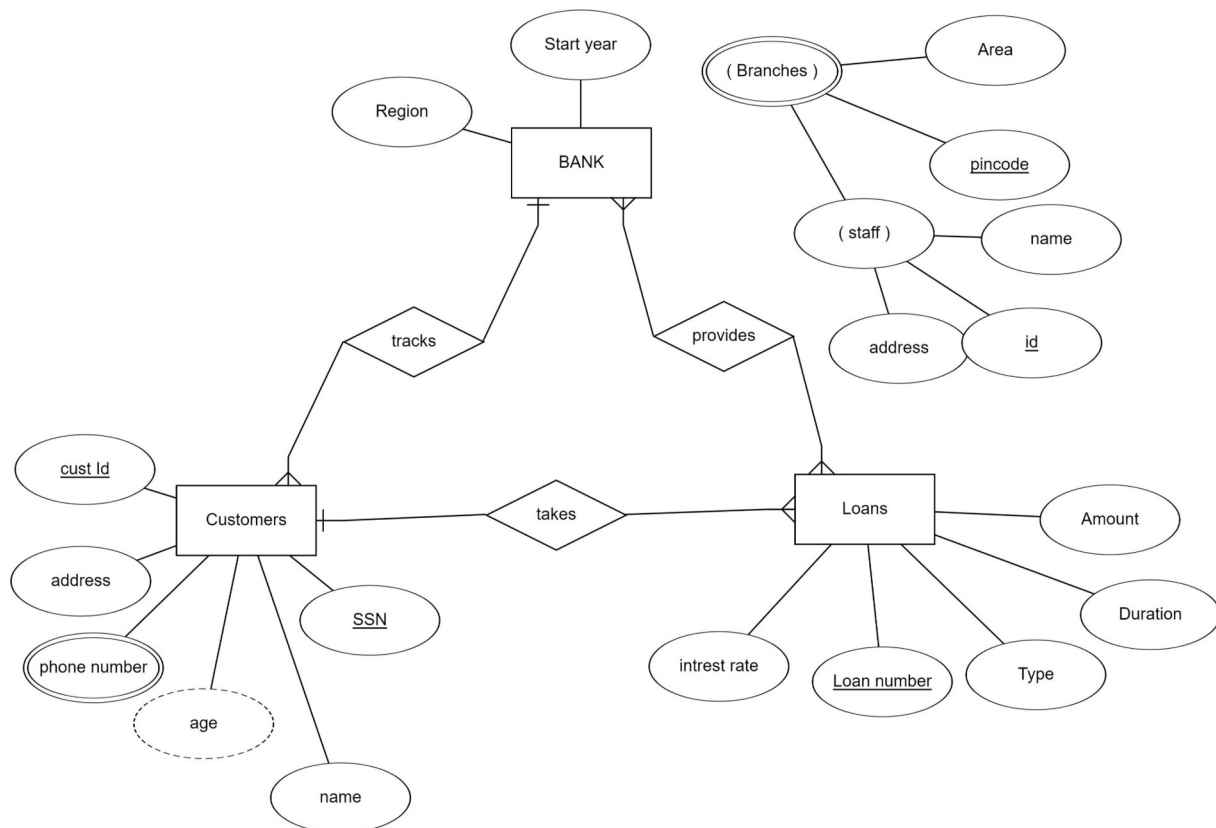


Question 4:

A bank has many branches, and a large number of customers. A customer can open many different kinds of accounts with the bank. The bank keeps track of the customer with his SSN, name, address, and phone number. Age is a factor to check whether he is a major. There are different types of loans, each identified by a loan number. Customer can take out more than one type of loan, and all branches can give loans. Loans have a duration and interest rate. The account holder can enquire about the balance in his account.

Draw an ER Diagram for the bank. Make suitable assumptions and use them in showing maximum and minimum cardinality ratios.

- Identify the Entities
- List the attribute and its types.
- Identify the key attribute.
- Identify the cardinalities.
- Identify the relationships present in the ER model.

Answer:

PREPARATION	30	
LAB PERFORMANCE	30	
REPORT	40	
TOTAL	100	
INITIAL OF FACULTY		

Result:

The Entity Relationship Diagrams for the given scenarios are designed successfully.