ER DIAGRAMS

Entity Name

Entity
Person,place,object,event
or concept about which
data is to be maintained
Example: Car, Student

Jack

**Attribute
Name**

Attribute
Property or characteristic of
an entity
Example: Color of car Entity
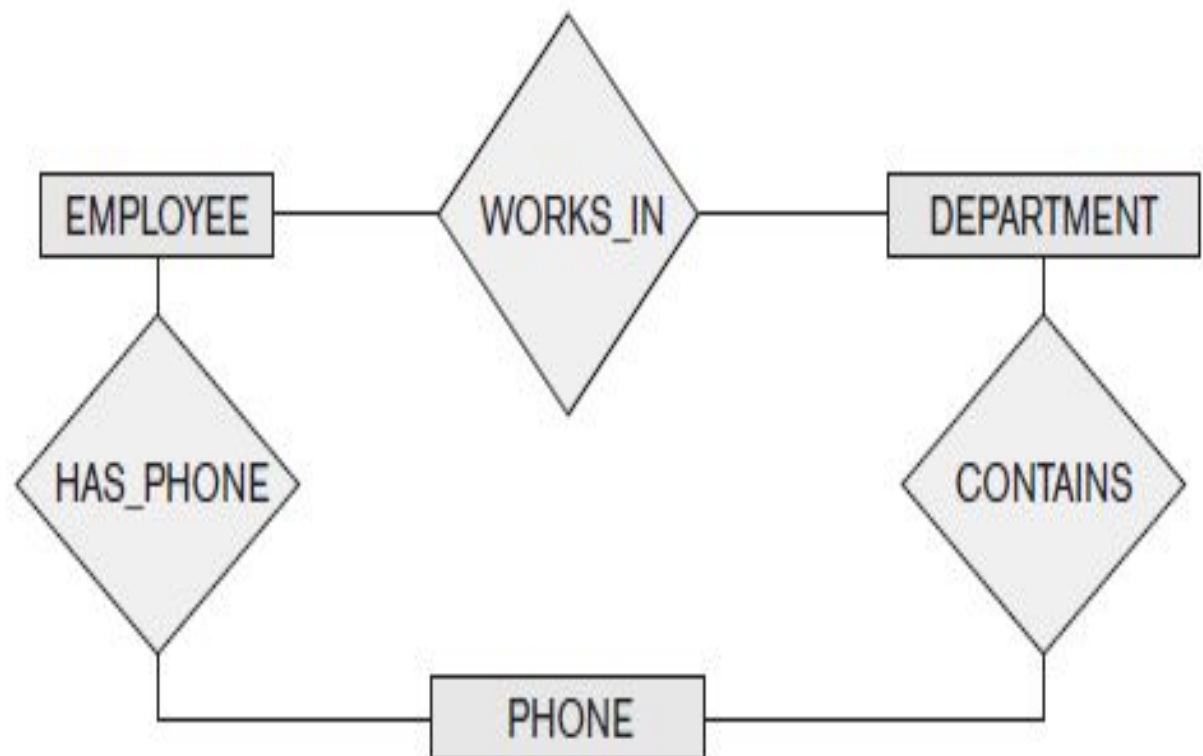Name of Student Entity

Relation

**Verb
Phrase**

Association between the instances of one or
more entity types
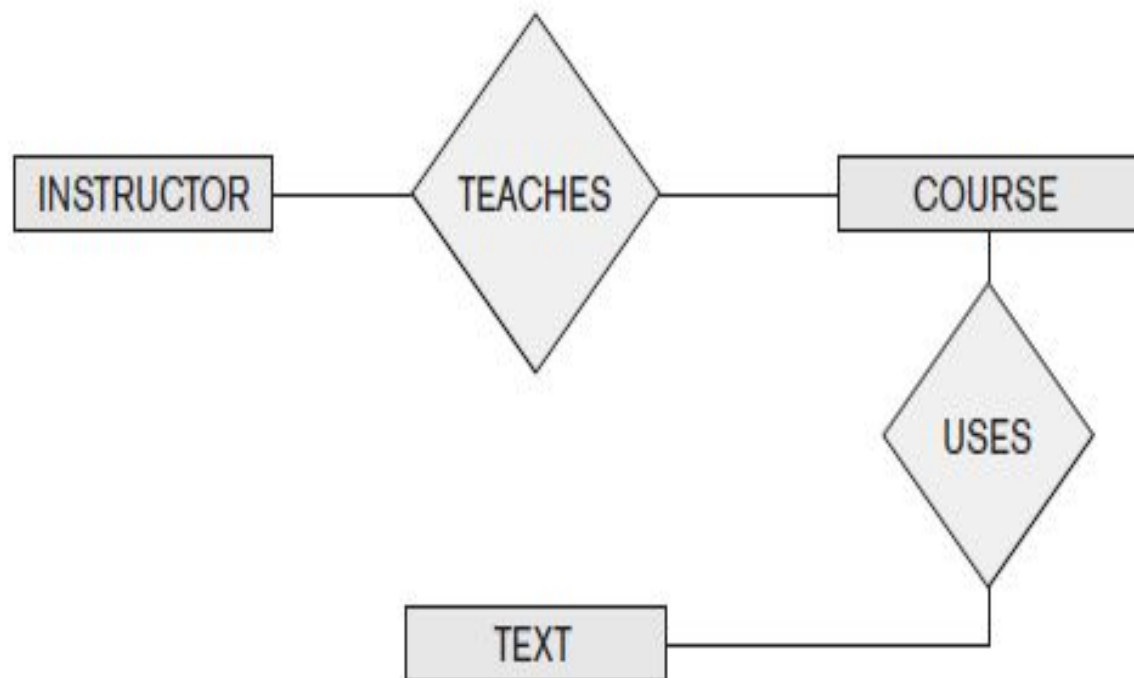**Example**: Blue Car Belongs to Student Jack

Components of the ER Diagram

Figure 3.23
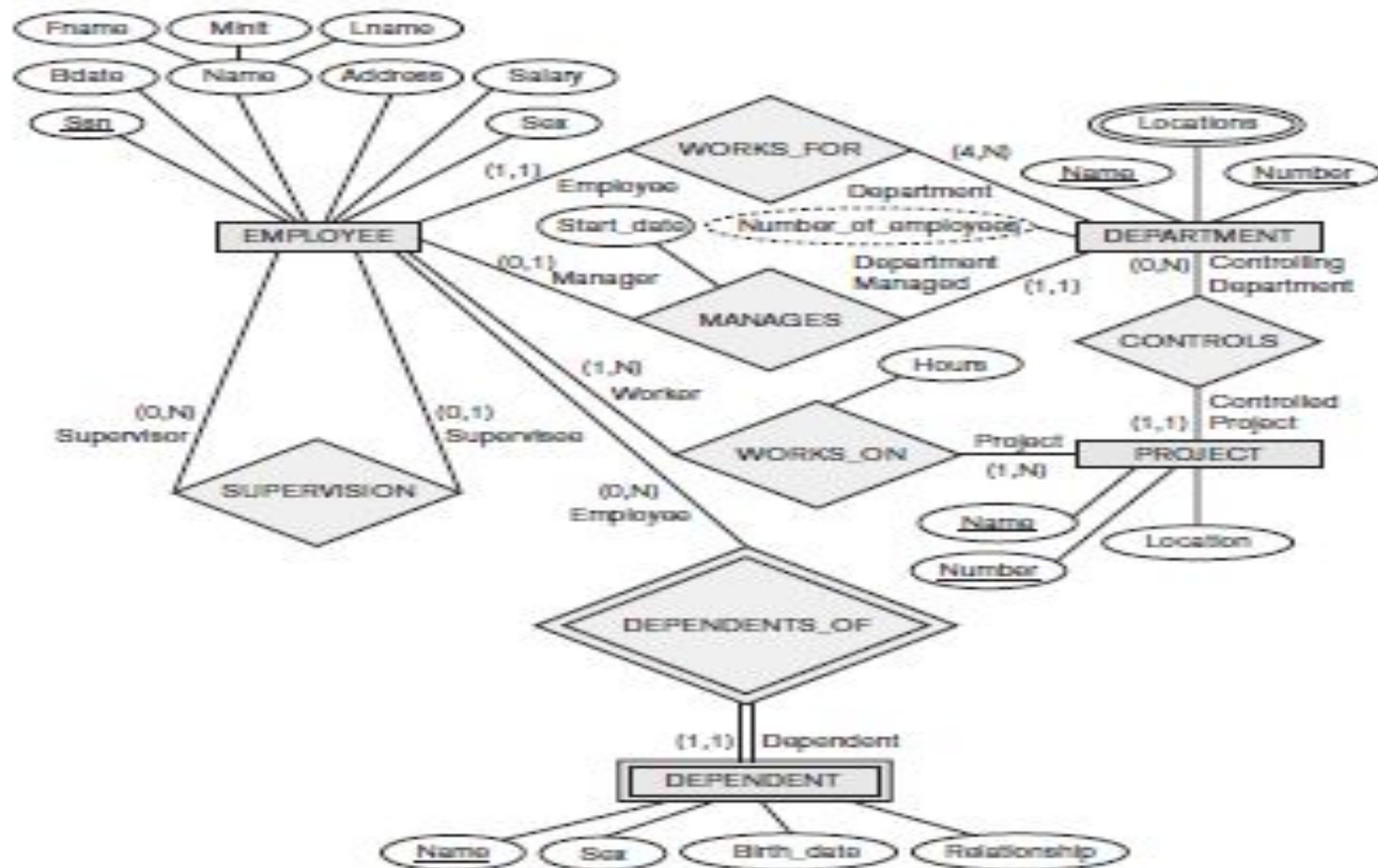Part of an ER diagram for a COMPANY database.

Figure 3.24

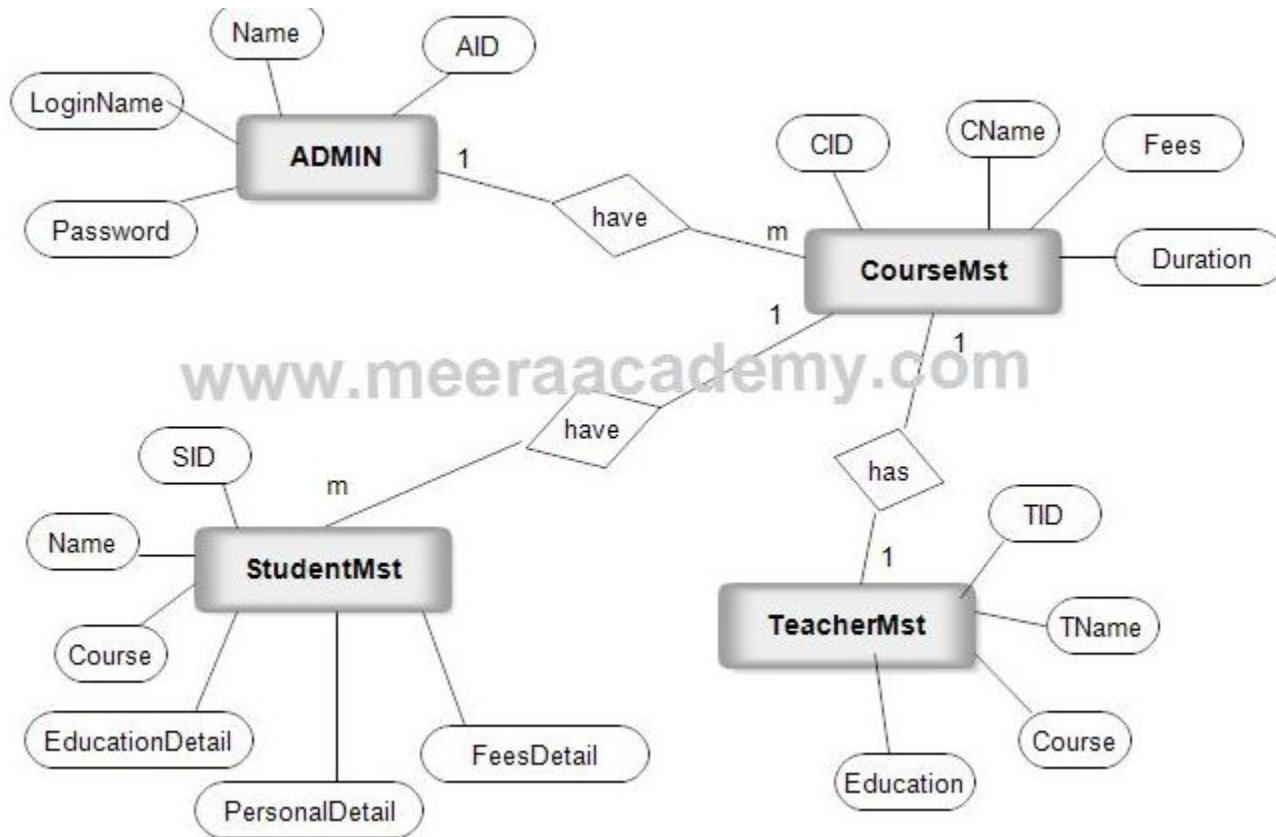Part of an ER diagram for a COURSES database.
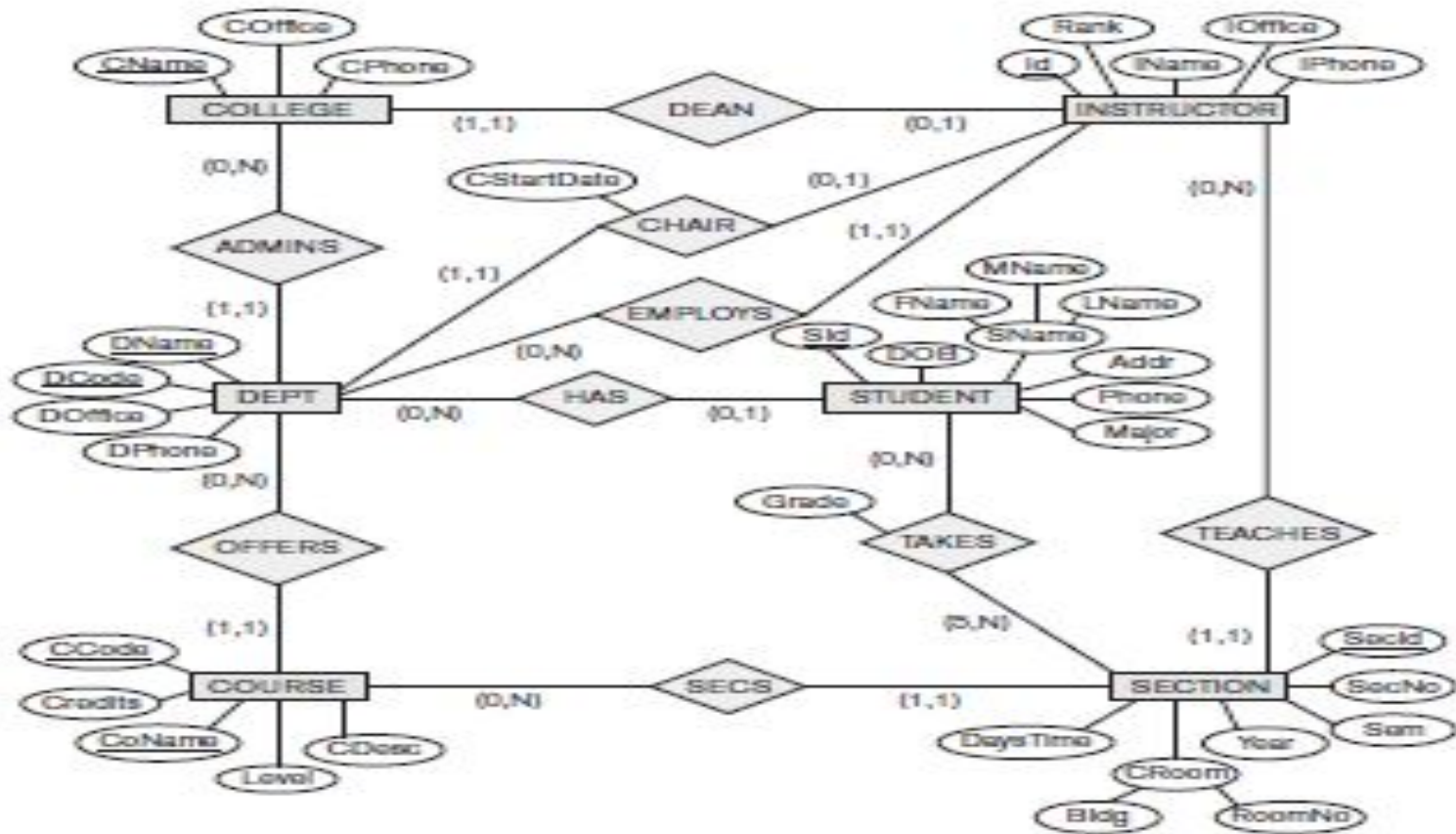
Company Schema

Figure 3.15
ER diagrams for the company schema, with structural constraints specified using (min, max) notation and role names.

Student Management System

ER Diagram for Student Management System showing entities ADMIN (with attributes Name, AID, LoginName, Password), CourseMst (with attributes CID, CName, Fees, Duration), StudentMst (with attributes SID, Name, Course, EducationDetail, PersonalDetail, FeesDetail), and TeacherMst (with attributes TID, TName, Course, Education). ADMIN has (1:m) CourseMst, CourseMst have (1:m) StudentMst, and CourseMst has (1:1) TeacherMst.
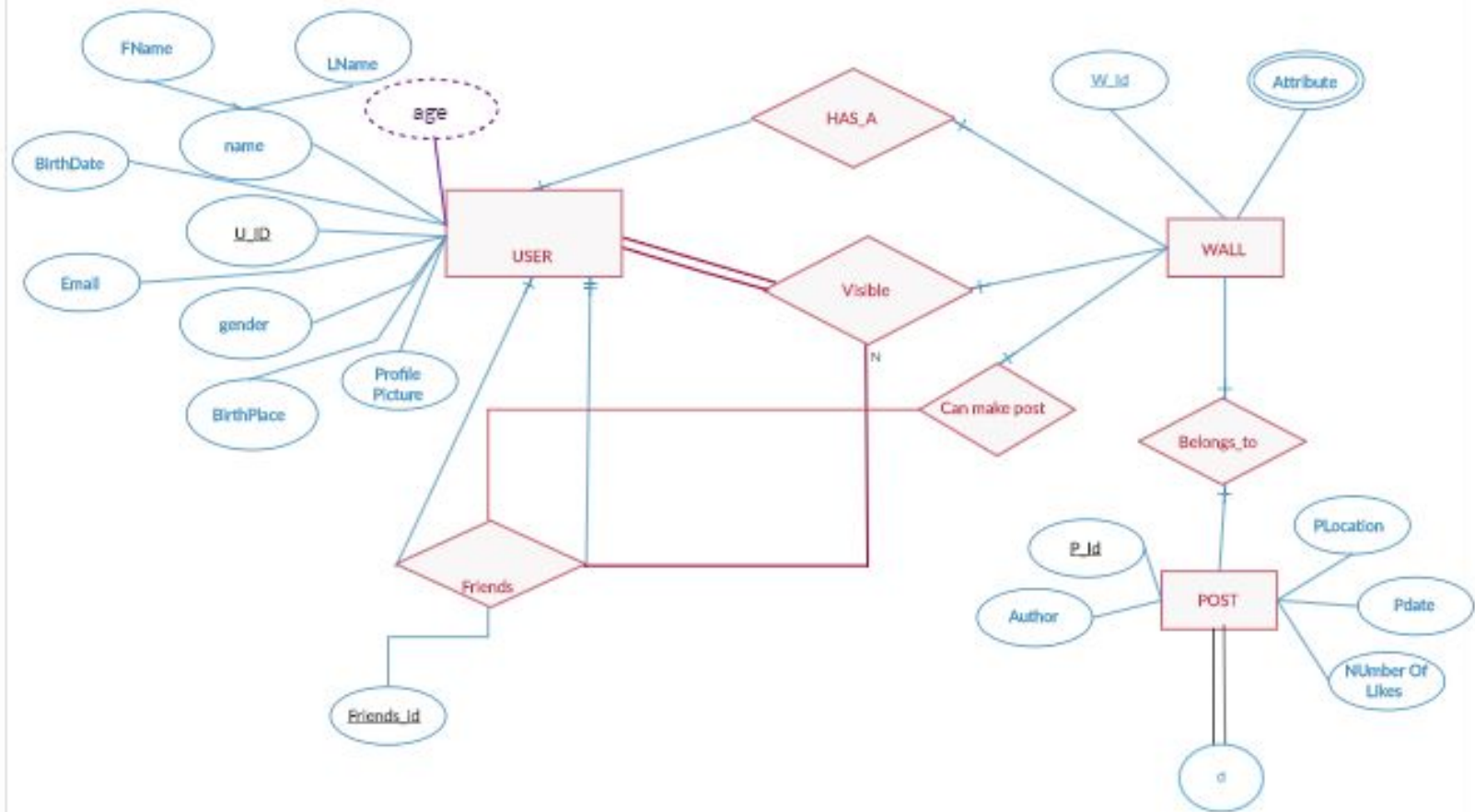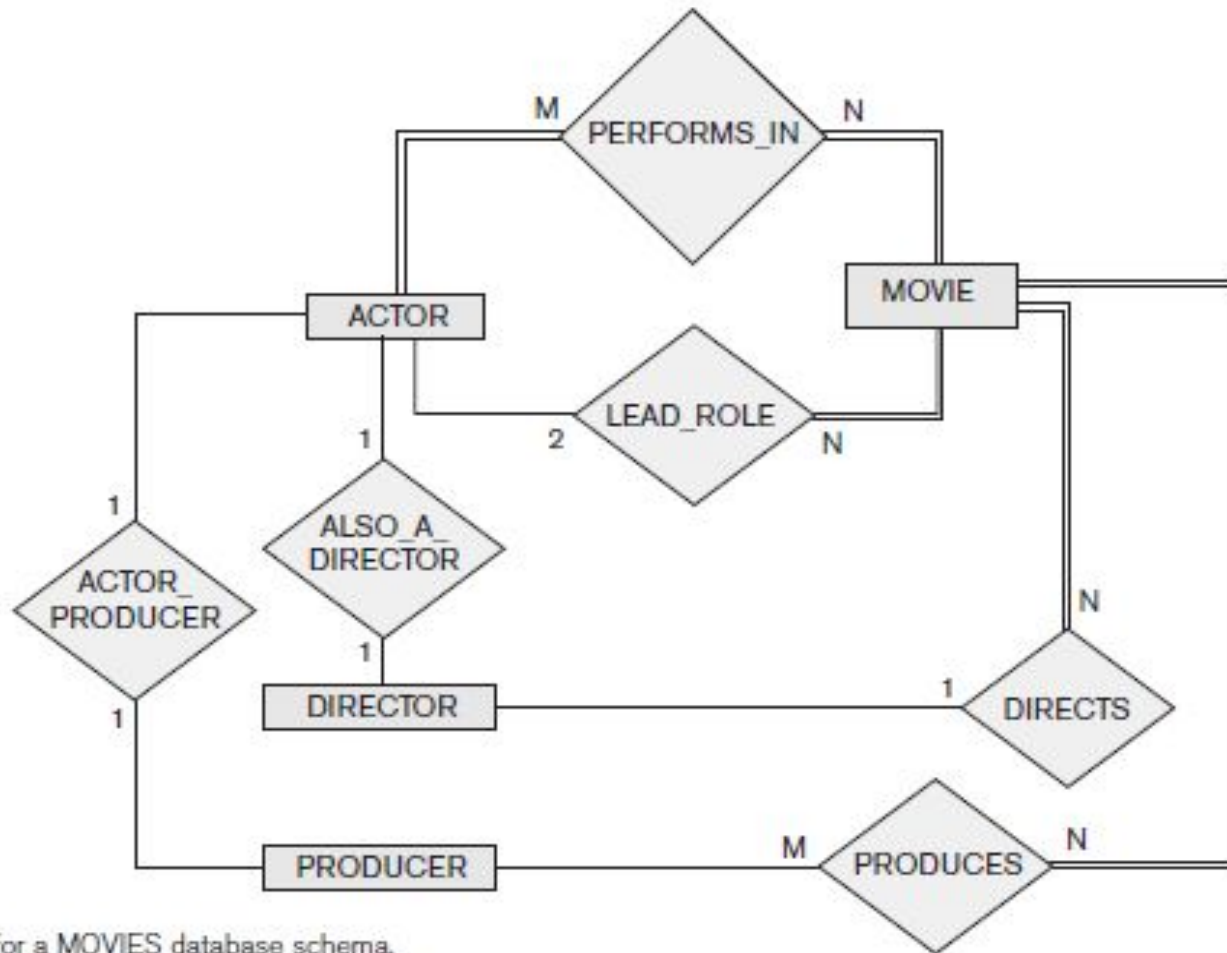
University database schema

Figure 3.20
An ER diagram for a UNIVERSITY database schema.
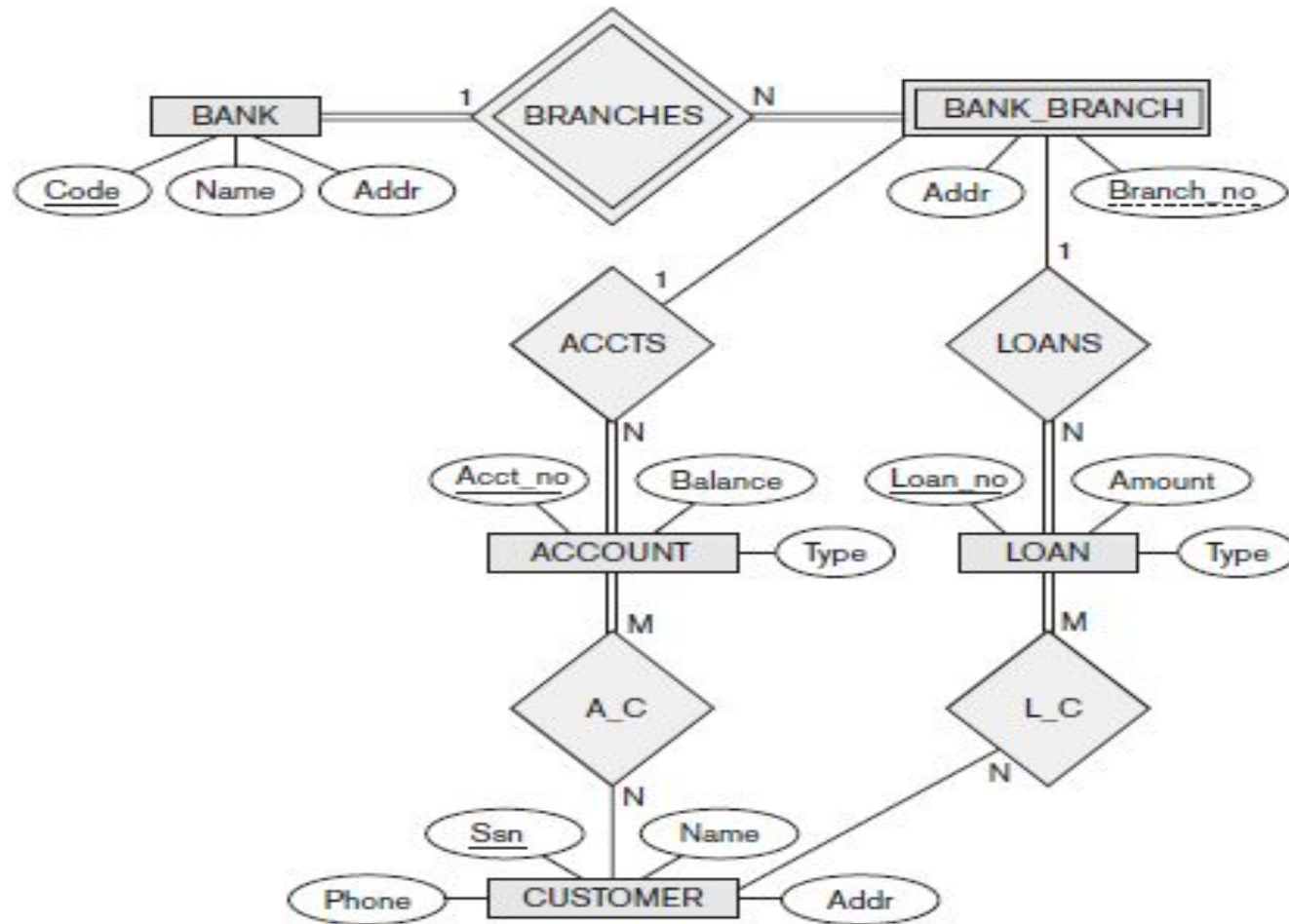
Facebook Database
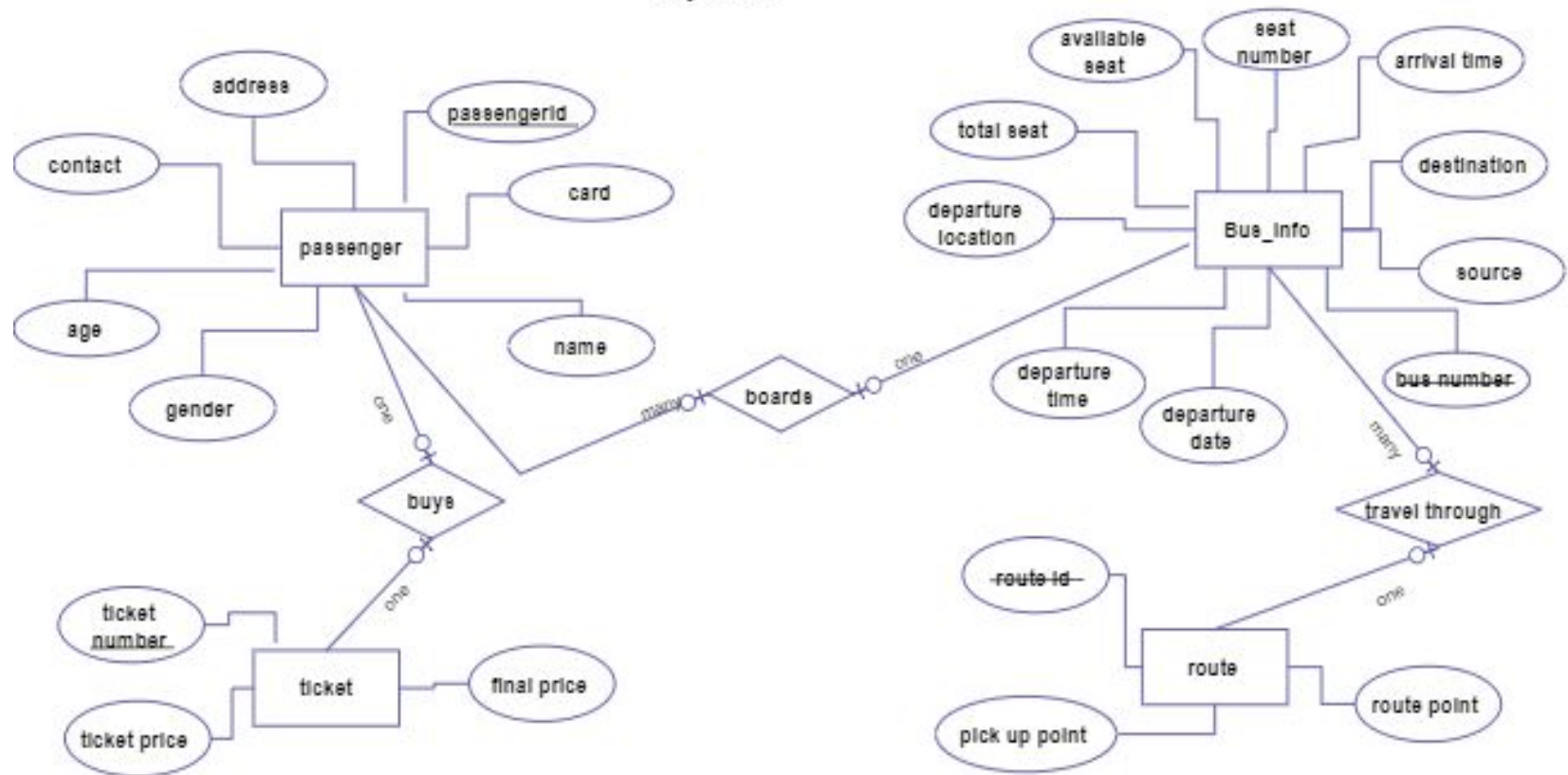
Movies database schema

Figure 3.25
An ER diagram for a MOVIES database schema.
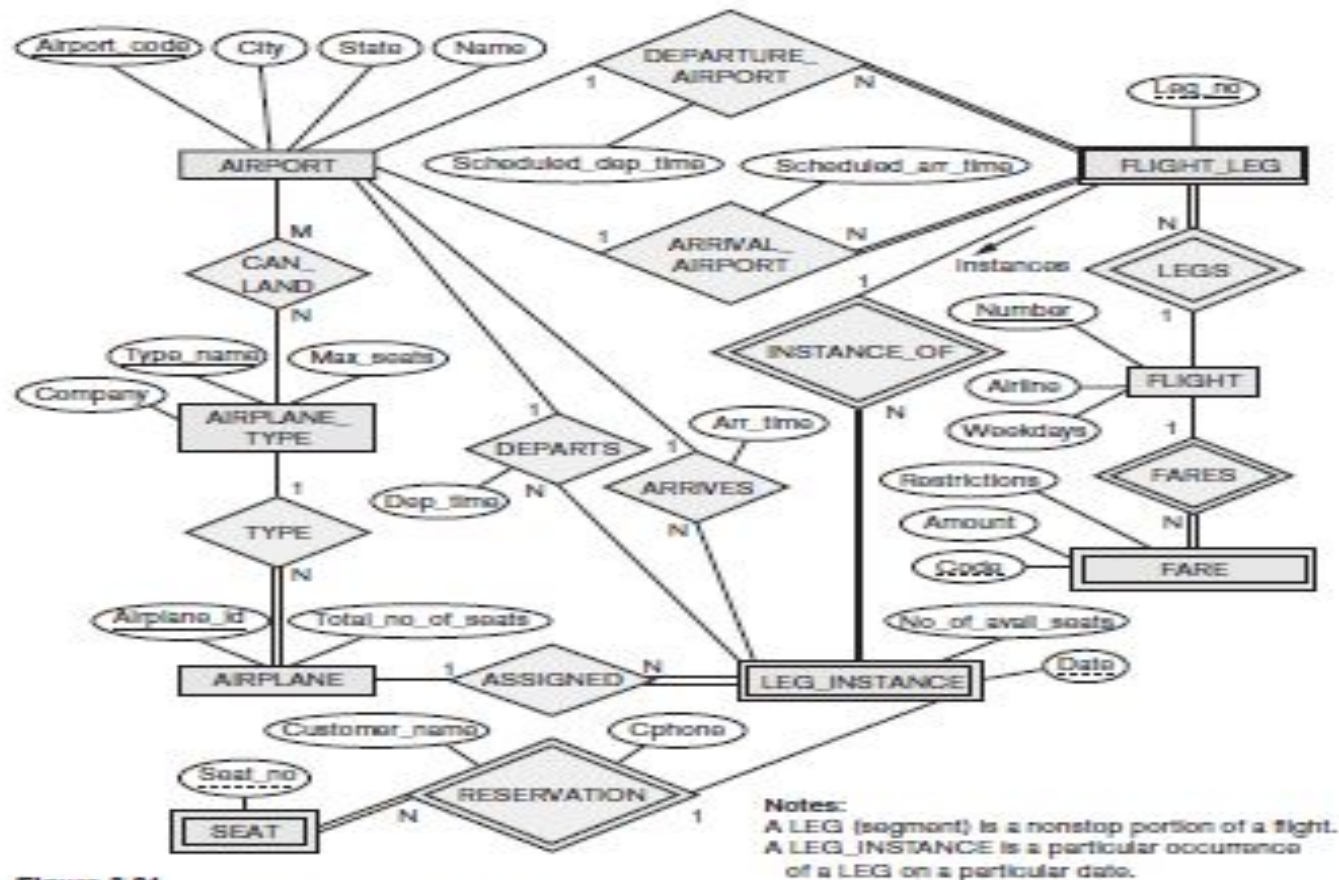
Bank database schema

Bus Ticketing System
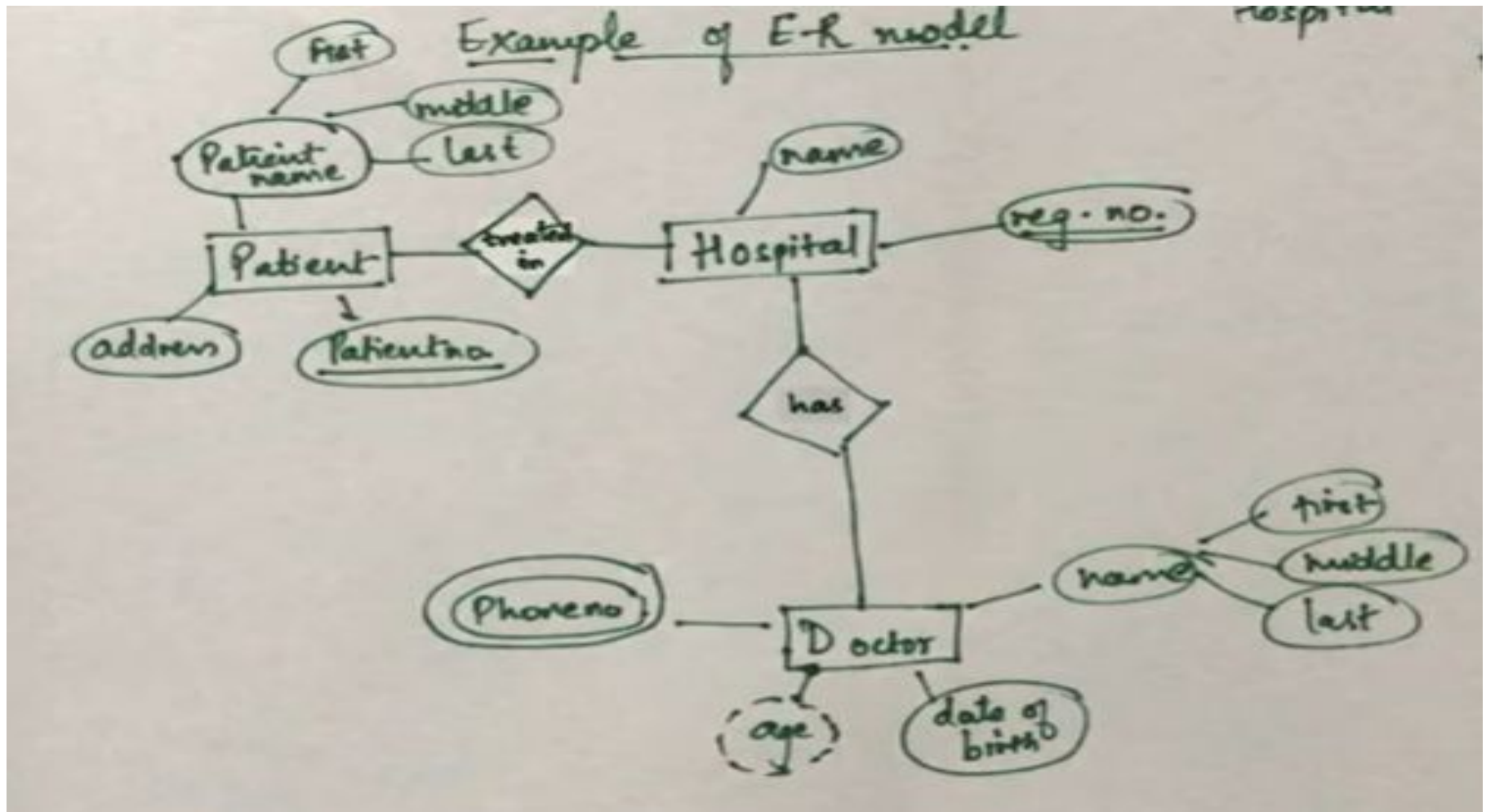

ER Diagram of Bus Ticketing System
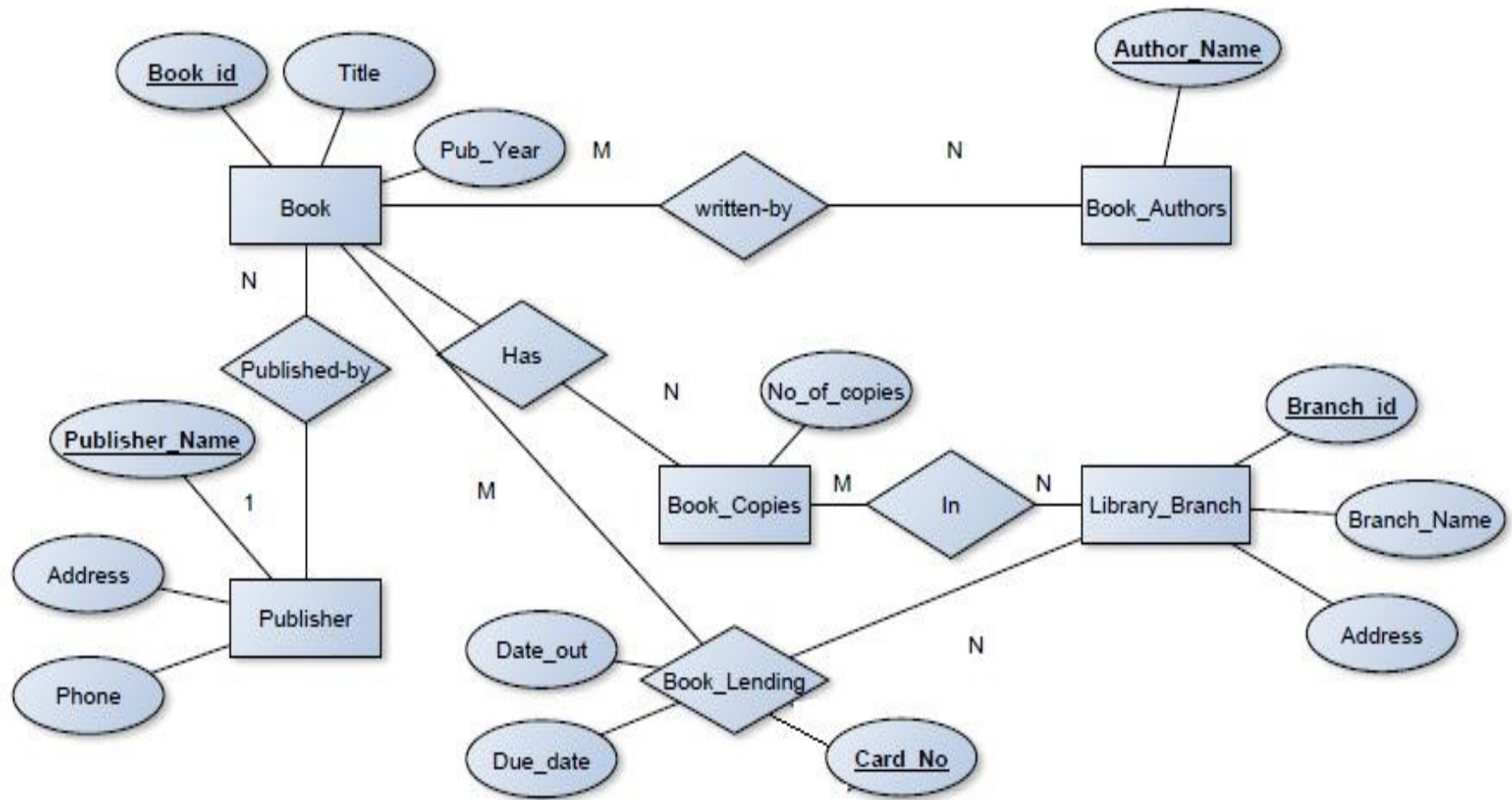
Airline database schema

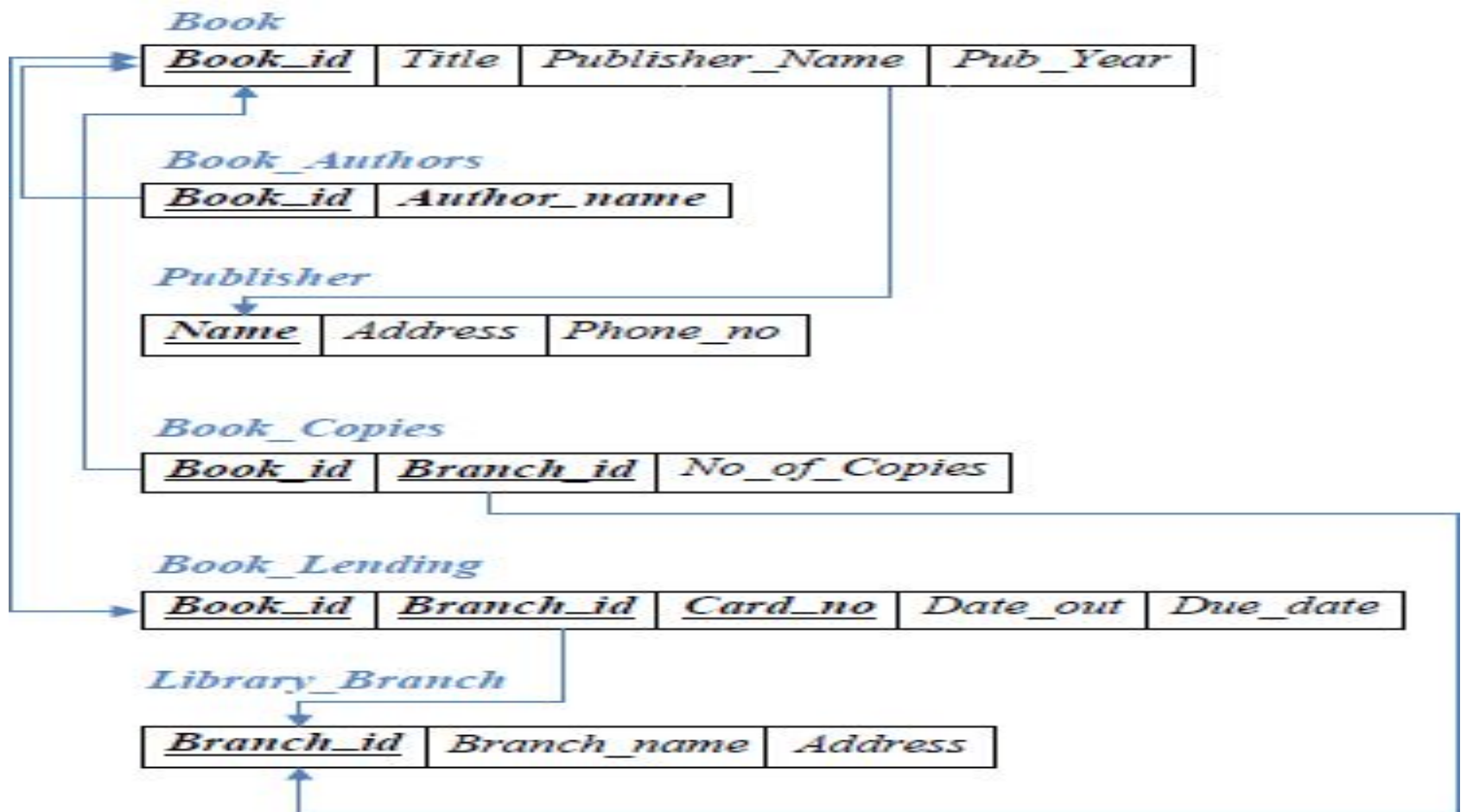**Figure 3.21**
An ER diagram for an AIRLINE database schema.

Hospital Management System

Library Database:

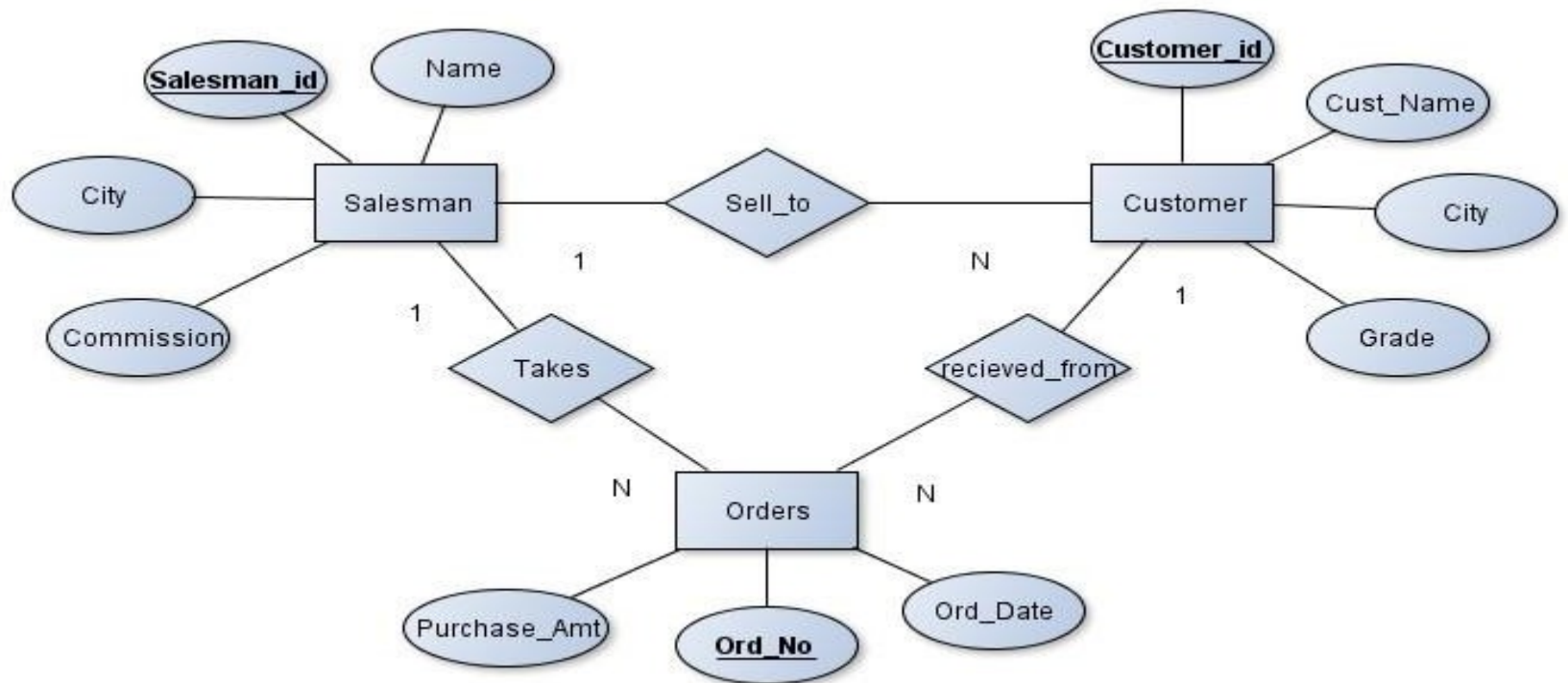**Book**

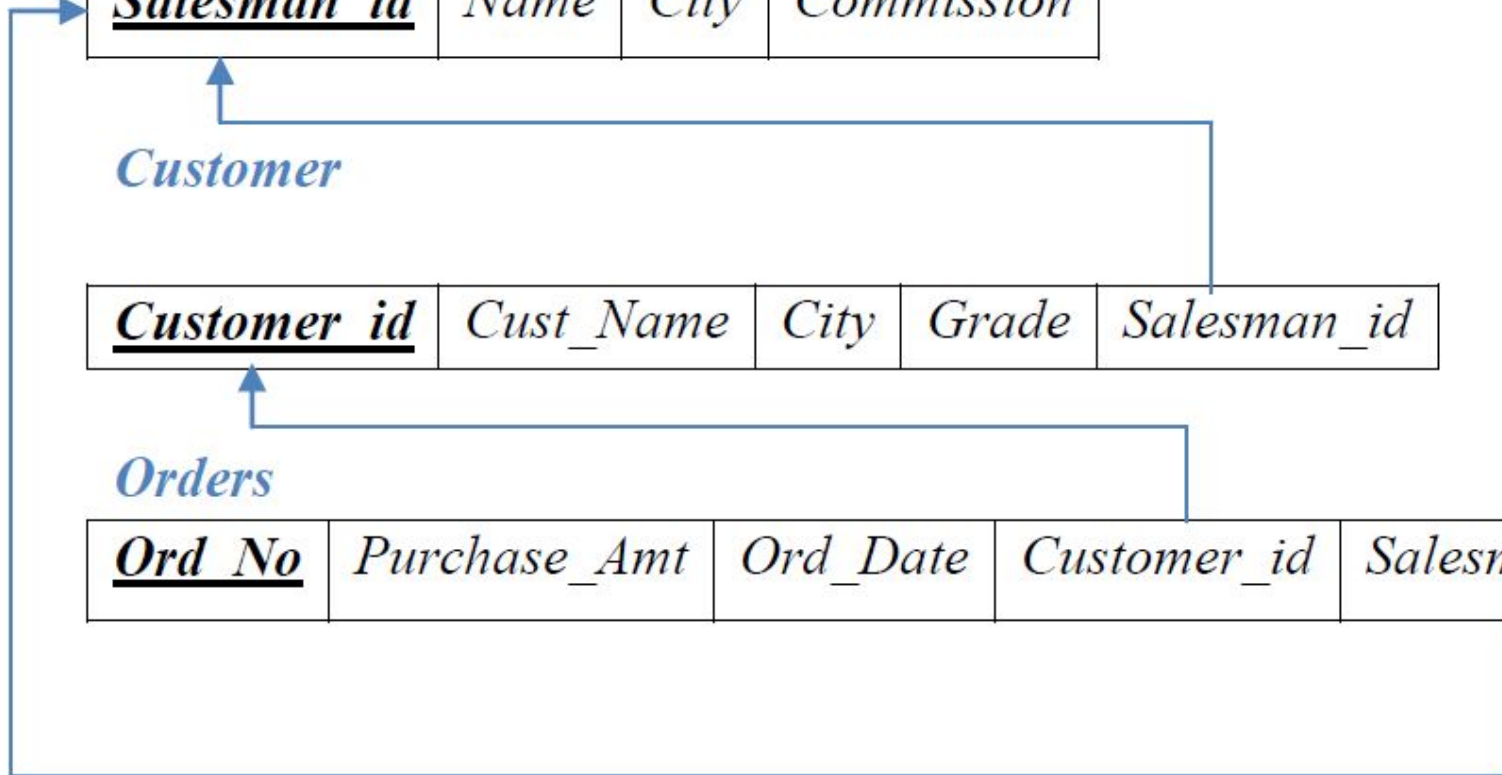| Book_id	Title	Publisher_Name	Pub_Year

Book_Authors

Book_id	Author_name

Publisher

Name	Address	Phone_no

Book_Copies

Book_id	Branch_id	No_of_Copies

Book_Lending

Book_id	Branch_id	Card_no	Date_out	Due_date

Library_Branch

Branch_id	Branch_name	Address

ORDER DATABASE

Salesman

Salesman_id	Name	City	Commission

Customer

Customer_id	Cust_Name	City	Grade	Salesman_id

Orders

Ord_No	Purchase_Amt	Ord_Date	Customer_id	Salesman_id

MOVIE DATABASE
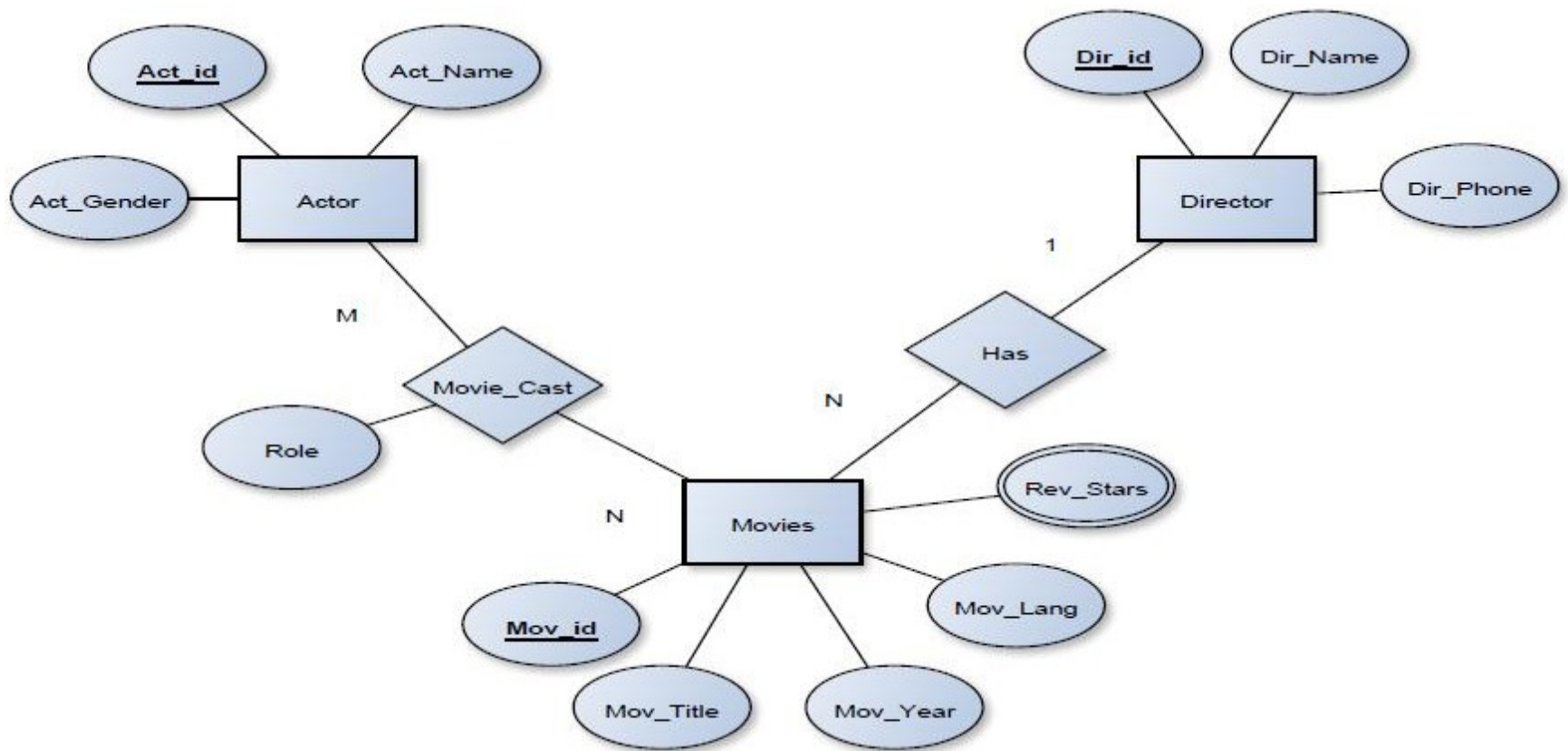
Actor

Act_id	Act_Name	Act_Gender

Director

Dir_id	Dir_Name	Dir_Phone

Movies

Mov_id	Mov_Title	Mov_Year	Mov_Lang	Dir_id

Movie_cast

Act_id	Mov_id	Role

Rating

Mov_id	Rev_Stars

NHL