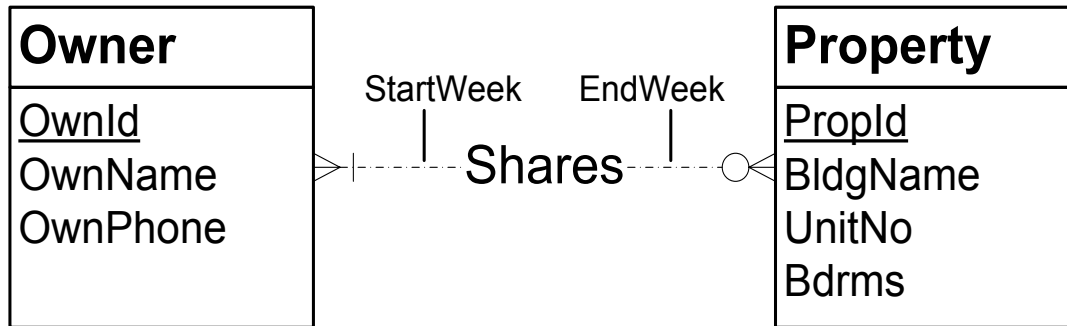


Problem:

Convert the ERD shown in Figure 3 into tables. List the conversion rules used and table design. For each table, you should list the primary key, foreign keys, other columns, and NOT NULL constraints for foreign keys if necessary. You do not need to write CREATE TABLE statements.



Solution:

Conversion Rules:

- Used the entity type rule to convert the Owner and Property entity types
- Used the M-N relationship rule to convert the Shares relationship showing OwnID and PropID as combined primary keys, show the foreign key relationships for OwnID and PropID, and indicate OwnID as NOT NULL since its minimum cardinality in the Shares relationship is one.

Table Design:

Owner (OwnID, OwnName, OwnPhone)
Property (PropID, BldgName, UnitNo, Bdrms)
Shares (OwnID, PropID, StartWeek, EndWeek)
FOREIGN KEY (OwnID) REFERENCES Owner
FOREIGN KEY (PropID) REFERENCES Property
OwnID NOT NULL