Chapter 10

Conceptual Databases Design Methodology
Worked Example
Transparencies

Chapter 10 - Objectives

- **How to use the conceptual database design methodology, described in Chapter 7.**
- **How to use this methodology to create a conceptual database design for the *DreamHome* case study.**

Step 1.1 Identify entity types

Branch
Staff
Supervisor
Secretary
Property_for_Rent
Private_Owner
Business_Owner
Advert
Newspaper
Interview
Client
Lease_Agreement
Inspection

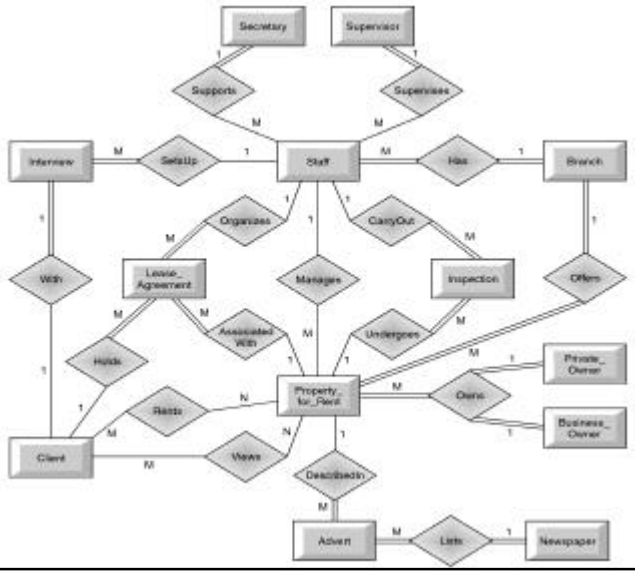
Step 1.2 Identify relationship types

Entity type	*Relationship type*	*Entity type*
Branch	*Has*	Staff
Staff	*Manages*	Property_for_Rent
	SupervisedBy	Supervisor
	SupportedBy	Secretary
	SetsUp	Interview
	Organizes	Lease_Agreement
	CarryOut	Inspection
Supervisor	*Supervises*	Staff
Property_for_Rent	*IsAvailableAt*	Branch
	ManagedBy	Staff
	OwnedBy	Owner
Private_Owner	*Owns*	Property_for_Rent
Business_Owner	*Owns*	Property_for_Rent
Advert	*Describes*	Property_for_Rent
	PlacedIn	Newspaper
Interview	*With*	Client
Client	*Views*	Property_for_Rent
	Rents	Property_for_Rent
	Holds	Lease_Agreement
Lease_Agreement	*AssociatedWith*	Property_for_Rent
Inspection	*MadeOf*	Property_for_Rent

Branch *Has* Staff Relationship

Client *Views* Property_for_Rent relationship

Sketch of Supervisor's Local Conceptual Data Model



Step 1.3 Identify and associate attributes with entity or relationship types

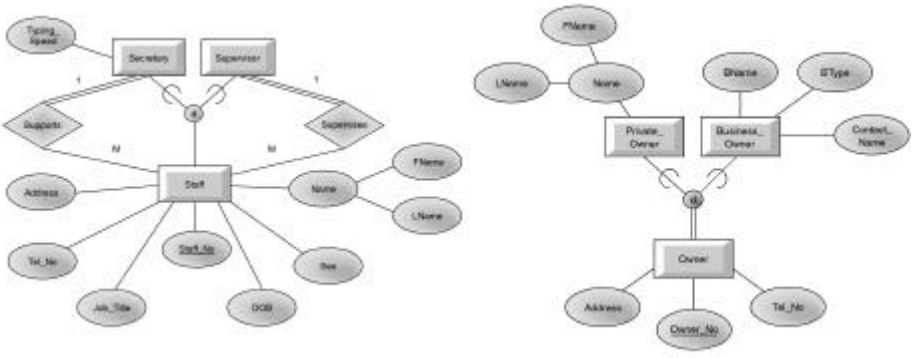
Entity type	*Attribute*
	Tel_No
	Pref_Type
	Max_Rent
Lease_Agreement	Lease_No
	Rent
	Payment_Method
	Deposit_Amount
	Deposit_Paid
	Rent_Start
	Rent_Finish
	Duration
Inspection	Date_Inspect
	Comments

Relationship type	*Attribute*
Views	Date_View
	Comments

Step 1.4 Determine attribute domains

- **For attributes in the Supervisor's local conceptual data model of the *DreamHome* company.**
  - **(e.g. Domain of Branch_No attribute of Branch entity includes a three-character string, with values ranging from B1 to B99).**

Step 1.6 Specialize/generalize entity types (optional step)



Step 1.7 Draw Supervisor's Local Conceptual Data Model