The *DreamHome* Case Study

Objectives

- **About a property rental company called *DreamHome*.**

The *DreamHome* Case Study – An Overview

- The first branch office of *DreamHome* was opened in 1992 in a city called Glasgow in the UK.

- Since then, the Company has grown steadily and now has several offices in most of the main cities of the UK.

- However, the Company is now so large that more and more administrative staff are being employed to cope with the ever-increasing amount of paperwork.

- Furthermore, the communication and sharing of information between offices, even in the same city, is poor.

→ how to handle these problems??

The *DreamHome* Case Study

- The Director of the Company, Sally feels that too many mistakes are being made and that the success of the Company will be short-lived if she does not do something to remedy the situation.

- She knows that **a database** could help in part to solve the problem.

- She requests that a database application be developed to support the running of *DreamHome*.

- The Director has provided the following brief description of how *DreamHome* currently operates.

Mission Statement for *DreamHome* Database System

'The purpose of the *DreamHome* database system is to maintain the data that is used and generated to support the property rentals business for our clients and property owners and to facilitate the cooperation and sharing of information between branches.'

The *DreamHome* Case Study

♦ *DreamHome* specializes in property management, by taking an intermediate role between owners who wish to rent out their furnished property and clients of *DreamHome* who require to rent furnished property for a fixed period.

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  Owner  ———  Dream Home  ———  client
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♦ *DreamHome* currently has about 2000 staff working in 100 branches.

– When a member of staff joins the Company, the *DreamHome* staff registration form is used.

» Example: The staff registration form for Susan Brand is shown in Figure 1.

Staff Registration Form

DreamHome
Staff Registration Form

Staff Number SG5

Full Name Susan Brand

Sex F   **DOB** 3-Jun-40

Position Manager

Salary 24000

Branch Number B003

Branch Address

163 Main St, Glasgow

Telephone Number(s)

0141-339-2178 / 0141-339-4439

Enter details where applicable

Supervisor Name

Manager Start Date 01-Jun-90

Manager Bonus 2350

Branch Office

- Each branch has an appropriate number and type of staff including
  - » a Manager,
  - » Supervisors,
  - » and Assistants.
- The Manager is responsible for the day-to-day running of a branch
- and each Supervisor is responsible for supervising a group of staff called Assistants.
  - − An example of the first page of a report listing the details of staff working at a branch office in Glasgow is shown next

The first page of a report listing the details of staff working at a *DreamHome* branch office in Glasgow

DreamHome
Staff Listing

Branch Number B003

Branch Address
163 Main St, Glasgow
G11 9QX

Telephone Number(s)
0141-339-2178 / 0141-339-4439

Staff Number	Name	Position
SG5	Susan Brand	Manager
SG14	David Ford	Supervisor
SG37	Ann Beech	Assistant
SG112	Annet Longhorn	Supervisor
SG126	Chris Lawrence	Assistant
SG132	Sofie Walters	Assistant

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Branch office responsibilities

- Each branch office offers a range of properties for rent.

- To offer property through *DreamHome*, a property owner normally contacts the *DreamHome* branch office nearest to the property for rent.

- The owner provides the details of the property and agrees an appropriate rent for the property with the branch Manager.

  » Ex: The registration form for a property in Glasgow is shown next

The *DreamHome* property registration

DreamHome
Property Registration Form

Property Number PG16

Type Flat   **Rooms** 4

Rent 450

Address
5 Novar Drive,
Glasgow, G12 9AX

Owner Number CO93
(If known)

Person/Business Name
Tony Shaw

Address 12 Park Pl,
Glasgow G4 OQR

Tel No 0141-225-7025

Enter details where applicable

Type of business _____

Contact Name _____

Managed by staff
David Ford

Registered at branch
163 Main St, Glasgow

Renting process

- Once a property is registered, *DreamHome* provides services to ensure that the property is rented out for maximum return for both the property owner and of course, *DreamHome*.

- These services include:
  - interviewing prospective renters (called clients),
  - organizing viewings of the property by clients,
  - advertising the property in the local or national newspapers (when necessary),
  - and negotiating the lease.
  - Once rented, *DreamHome* assumes responsibility for the property including the collection of rent.

Renting process

◆ Members of the public interested in renting out property must first contact their nearest *DreamHome* branch office to register as clients of *DreamHome*.

◆ However, before registration is accepted, a prospective client is normally interviewed to record personal details and preferences of the client in terms of property requirements.

– *Ex:* The registration form for a client called Mike Ritchie is shown in Figure 4.

The *DreamHome* client registration

DreamHome
Client Registration Form

Client Number (Enter if known) _CR74_

Full Name _Mike Ritchie_

Enter property requirements

Type _Flat_

Max Rent _750_

Branch Number _B003_

Branch Address _163 Main St, Glasgow_

Registered By _Ann Beech_

Date Registered _16-Nov-02_

Client services

- Once Client (renter) registration is complete, clients are provided with weekly reports that list properties currently available for rent.

- An example of the first page of a report listing the properties available for rent at a branch office in Glasgow is shown next.

of the *DreamHome* property for rent report listing property available for rental

DreamHome
Property Listing for Week beginning 01/06/04

If you are interested in viewing or renting any of the properties in this l st please contact our branch office as soon as poss ble.

Branch Address

163 Main St, Glasgow

G11 9QX

Telephone Number(s)

0141-339-2178 / 0141-339-4439

Property No	Address	Type	Rooms	Rent
PG4	6 Lawrence St, Glasgow	Flat	3	350
PG36	2 Manor Rd, Glasgow	Flat	3	375
PG 21	18 Dale Road, Glasgow	House	5	600
PG16	5 Novar Drive, Glasgow	Flat	4	450
PG77	100A Apple Lane, Glasgow	House	6	560
PG 81	781 Greentree Dr, Glasgow	Flat	4	440

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Client services

- Clients may request to view one or more properties from the list

- and after viewing will normally provide a comment on the suitability of the property.

- The first page of a report describing the comments made by clients on a property in Glasgow is shown next.

- Properties that prove difficult to rent out are normally advertised in local and national newspapers.

the *DreamHome* property viewing report for a property in Glasgow

DreamHome
Property Viewing Report

Property Numner PG4

Type Flat

Rent 350

Property Address

6 Lawrence St, Glasgow

Client No	Name	Date	Comments
CR76	John Kay	20/04/04	Too remote.
CR56	Aline Stewart	26/05/04	
CR74	Mike Ritchie	11/11/04	
CR62	Mary Tregear	11/11/04	OK, but needs redecoration throughout.

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The Lease document

- Once a client has identified a suitable property, a member of staff draws up a lease.

- The lease between a client called Mike Ritchie and a property in Glasgow is shown next.

- At the end of a rental period a client may request that the rental be continued.

  - however this requires that a new lease be drawn up.
  - Alternatively, a client may request to view alternative properties for the purposes of renting (a new cycle).

The *DreamHome* lease form

DreamHome Lease
Number 00345810

Client Number   CR74
(Enter if known)

Full Name   Mike Ritchie
(Please print)

Client Signature _____

Property Number   PG16

Property Address

          5 Novar Dr, Glasgow

Enter payment details

Monthly Rent   450

Payment Method   Cheque

Deposit Paid (Y or N)   Yes

Rent Start   01/06/04

Rent Finish   31/05/05

Duration   1 year

Task

- Draw the E-R diagram based on user's specification.

- Determine the number of relations and its associated attributes required.

- Apply the necessary constraints required on the possible set of relations.