DreamHome Case Study - The Supervisor's Requirements Specification

The requirements collection and analysis phase of the database development lifecycle was carried out at a DreamHome branch office and involved interviewing members of staff with the job title of Supervisor and reviewing any documentation used or generated in their day-to-day work.

This phase resulted in the production of a requirements specification for the Supervisor's view of the company, which describes the information to be held in the DreamHome database and the transactions required by the Supervisor.

Data Requirements

- (1) Each branch of DreamHome has staff who are dedicated to the management of property for rent. The staff work in groups that are supervised by a Supervisor and supported by a Secretary.
- (2) The information stored on each branch office includes a unique branch number, address (street, area, city, postcode), telephone number, and fax number.
- (3) The information held on all members of staff includes a staff number, name (first and last name), address, telephone number, sex, date of birth (DOB), job title, and the number and address of the branch office at which they work. Additional information held on staff with the job title of Secretary is their typing speed. The staff number is unique across all branches of the DreamHome company.
- (4) Each Supervisor supervises the day-to-day work of a group of staff (minimum 5 to a maximum of 10 members of staff, at any one time).
- (5) A portfolio of property for rent is available at each DreamHome branch. Each property for rent is managed by a particular member of staff. A member of staff may manage a maximum of 10 properties for rent at any one time. The information stored on each property for rent includes: the property number, address (street, area, city, postcode), type, number of rooms, monthly rent, and the name and address of the property owner. The monthly rent for a property is reviewed annually. Most of the properties rented out by DreamHome are flats. Each property is owned by a single owner.
- (6) The details of owners of property are also stored. There are two main types of property owner: private owners and business owners. The information stored on private owners includes: the owner number, name (first and last name), address, and telephone number. The information stored on business owners includes: the owner number, name of business, business type, address, telephone number, and contact name. Each owner owns at least one property.
- (7) The staff responsible for the management of property for rent must undertake the following activities:

1

(a) To ensure that property is rented out continuously. This may require placing an advert describing a property for rent in an appropriate newspaper. The information stored on each advert includes the advert number, the date the advert was placed in the newspaper, the name of the newspaper, the cost, and some details of the property including the property number, type, and address. The advert number is unique

across all DreamHome branches. The information stored on each newspaper includes the newspaper name, address, telephone number, fax number, and contact name. Properties are only advertised in the newspapers if they prove difficult to rent out.

- (b) To set up interviews with clients interested in renting property. The information stored as a result of each interview includes the date of the interview and any general comments about the client. During the interview, the details of clients are also collected. However, some clients do not attend an interview and simply provide their details by telephone or on their first visit to a DreamHome branch office. The information stored on clients includes the client number, name (first and last name), current address, telephone number, and some information on the desired property, including the preferred type of accommodation, and the maximum rent the client is prepared to pay. The client number is unique across all DreamHome branches.
- (c) To encourage clients to view properties for rent. The information stored includes the client's number, name, and telephone number, the property number and address, the date the client viewed the property, and any comments made by the client regarding the suitability, or otherwise, of the property. A client may view the same property only once on a given date.
- (d) To organize the lease agreement between a client and a property. Once a client agrees to rent a property, a lease agreement is organized by a member of staff. The information on the lease includes the lease number, the client number, and name, the property number, address, type and number of rooms, the monthly rent, method of payment, deposit (calculated as twice the monthly rent), whether the deposit is paid, the date the rent period starts and finishes, and the duration of the lease. The lease number is unique across all DreamHome branches. A client may hold a lease agreement associated with a given property for a minimum of three months to a maximum of 1 year.
- (e) To carry out inspections of property on a regular basis to ensure that the property is correctly maintained. Each property is inspected at least once over a six month period. However, DreamHome staff only carry out inspections of property that is currently being rented or is available for rent. The information stored on the inspection includes the property number, and address, date of the inspection, the name of the member of staff who carried out the inspection, and any comments on the condition of the property.

Transaction Requirements

The main transactions required by Supervisors include:

- (a) Produce a list of staff supervised by a Supervisor.
- (b) Produce a list of staff supported by a Secretary.
- (c) Produce a list of Supervisors at each branch.
- (d) Create and maintain records recording the details of property for rent and the owners at each branch.
- (e) Produce a report listing the details of property (including the rental deposit) at each branch.
- (f) Produce a list of properties managed by a specific member of staff.
- (g) Create and maintain records describing the details of clients at each branch,
- (h) Produce a list of clients registered at each branch,
- (i) Search for properties that satisfy various criteria.
- (j) Create and maintain records holding the details of viewings of properties made by clients.
- (k) Produce a report listing the comments of clients concerning a specific property.
- (1) Create and maintain records detailing the adverts placed in newspapers for properties.
- (m) Produce a list of all adverts for a specific property.
- (n) Produce a list of all adverts placed in a specific newspaper.
- (o) Create and maintain records describing the details of lease agreements between a client and a property.
- (p) List the details of the lease agreement for a specific property.
- (q) Create and maintain records describing the details of inspections of properties.
- (r) Produce a list of all inspections of a specific property.