

Project Deliverables: Phase 1

In Phase 1, you will be responsible for submitting the conceptual model of your database in a UML-formatted entity-relationship (E-R) diagram. To simplify the E-R diagram only show entities, relationships, and the cardinality ratio and participation constraint of each relationship. State any assumptions you make when creating the E-R model (if necessary).

Background

A University Dorm Office requires you to design a database to assist with the administration of the office. The requirements collection and analysis phase of the database design process based on the University's view has provided the following requirements specification for the dorm Office database.

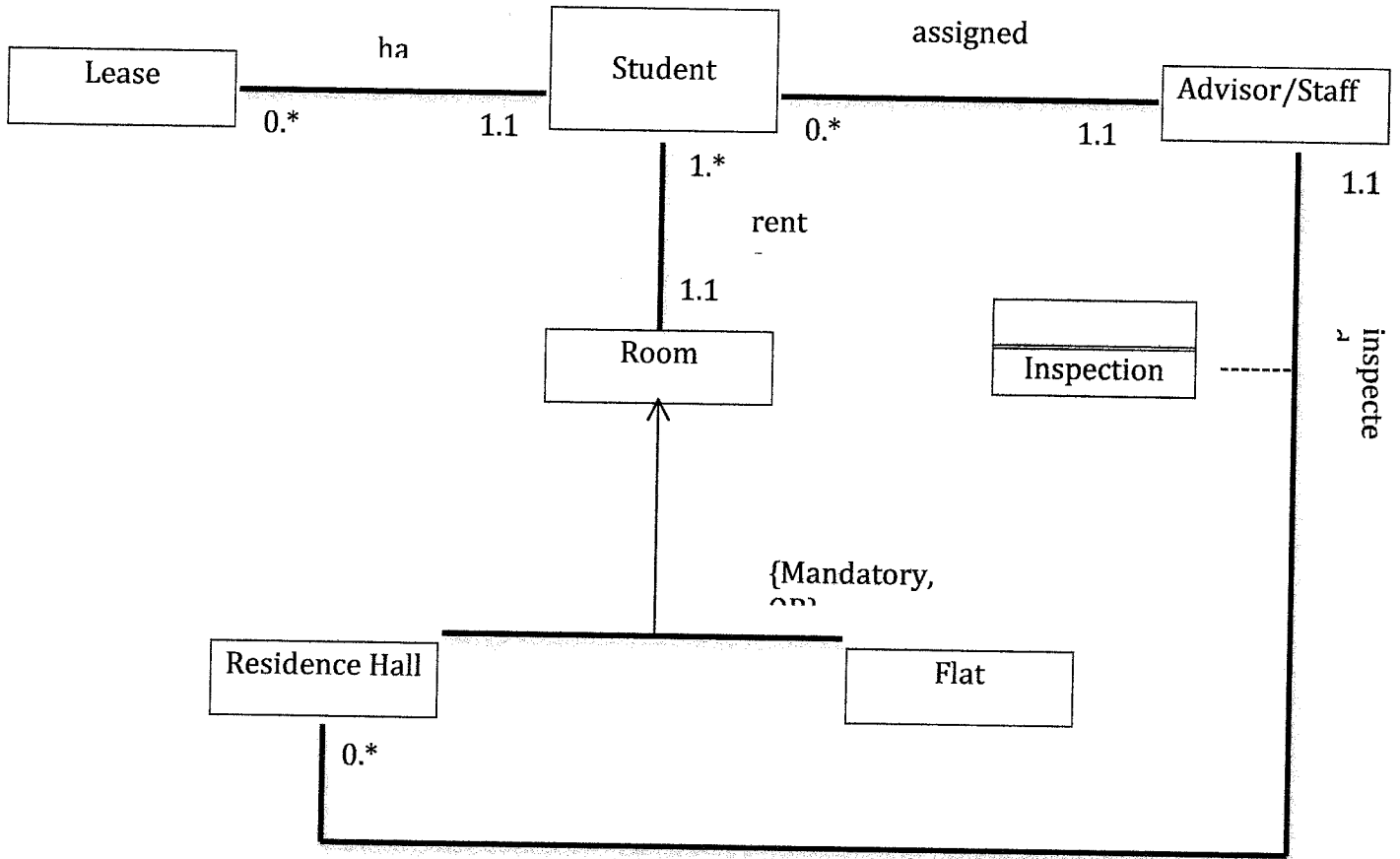
Mission statement

The purpose of this database application is to maintain the data generated and to provide an efficient and effective service for the students on behalf of the University Dorm.

Mission objectives:

- To maintain data on students wishing accommodation and their next-of-kin.
 - To maintain data on residence halls and student flats.
 - To maintain data on leases.
 - To maintain data on student hall inspections.
 - To maintain data on accommodation staff.
1. The data stored on each full-time student includes the matriculation number, name (first and last name), home address (street, city), and sex. The student information stored relates to those currently renting a room and those on the waiting list. Students may rent a room in a University owned hall of residence or student flat. When a student joins the University he or she is assigned to a member of staff who acts as his or her Advisor of Studies. The Advisor of Studies is responsible for monitoring the student's welfare and academic progress. The data held on a student's advisor includes their full name, position, name of department, internal telephone number, and room number.
 2. Each residence hall has a name, address, telephone number, and a hall manager who supervises the operation of the hall. The halls provide only single rooms, which have a room number, place number, and monthly rent rate. The place number uniquely identifies each room in all the halls controlled by the Dorm Office and is used when renting a room to a student.
 3. The Dorm Office also offers student flats. These flats are fully furnished and provide single room Dorm for groups of 3, 4, or 5 students. The information held on student flats includes a flat number and the number of single bedrooms available in each flat. The flat number uniquely identifies each flat. Each bedroom in a flat has a monthly rent rate, a room number, and a place number. The place number uniquely identifies each room available in all student flats and is used when renting a room to a student.
 4. A student may rent a room in a hall or student flat for various periods of time. New lease agreements are negotiated at the start of each. Each individual lease agreement between a student and the Dorm Office is uniquely identified using a lease number. The data stored on each lease includes the lease number, duration of the lease (given as semesters), name, and matriculation number of the student, place number, room number.
 5. Residence halls are inspected by staff on a regular basis to ensure that the dorm is well maintained. The information recorded for each inspection is the name of the member of staff who carried out the inspection, the date of inspection, an indication of whether the property was found to be in a satisfactory condition (yes or no), and any additional comments.

6. Some information is also held on members of staff of the Dorm Office and includes the staff number, name (first and last name), home address (street, city/town, postcode), date of birth, position (for example, Hall Manager, Administrative Assistant, Cleaner), and location (for example, Dorm Office or Hall).
7. Whenever possible, information on a student's next-of-kin is stored and includes the individual's name, relationship to the student, address (street, city/town, postcode), and contact telephone number.



Assumptions

1. A student may have different leases for each semester
2. A student may be without a lease if they are on the waiting list

Project I solution

CIS 317

Phase 2 Due Date: July 24th

