Hostel Room Allotment System

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1. Introduction

The Hostel Room Allocation System will be used to aid in hostel room allocation. Within the Software is various web pages for the project.

1.1 Purpose

The purpose of the Software is to provide an interface to the students, caretakers and warden to interact with the database.

1.2 Objective

- To deal with Hostel Management System in an easy and an efficient manner.
- Create strong and secrete database that allows for any connection in a secret way, to prevent any outside or inside attacks.

1.3 Scope of the Project

- Hostel Management System is designed for Hostel (like schools, Universities)
- There will be predefined criteria for the Reservation to the hostels.
- He/She checks the attested application forms of the students obtained

from the internet and verify it with the student database.

- If the students are found eligible then they are allotted to the hostel

  Room

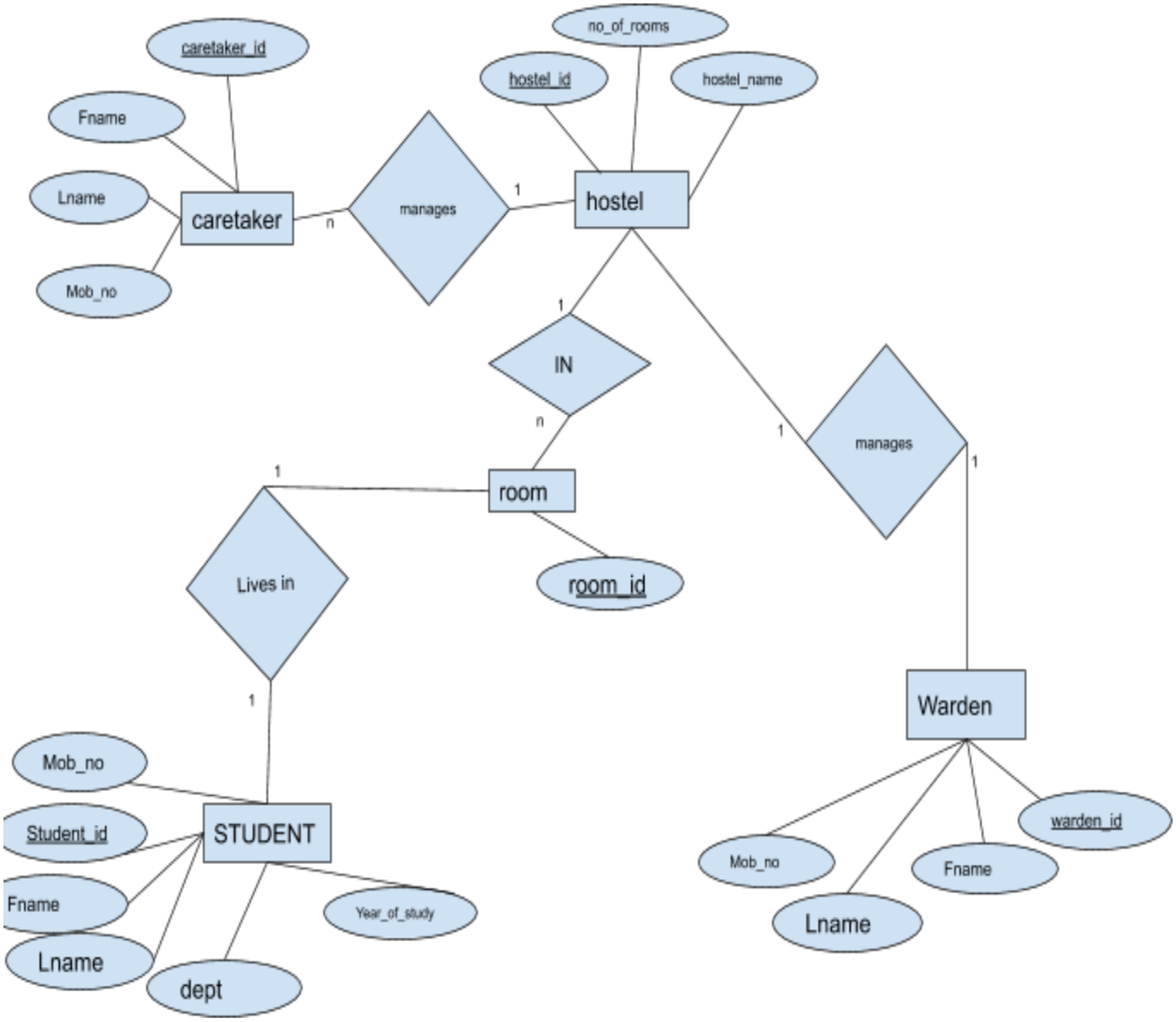
  .

1.4 Overview of Project

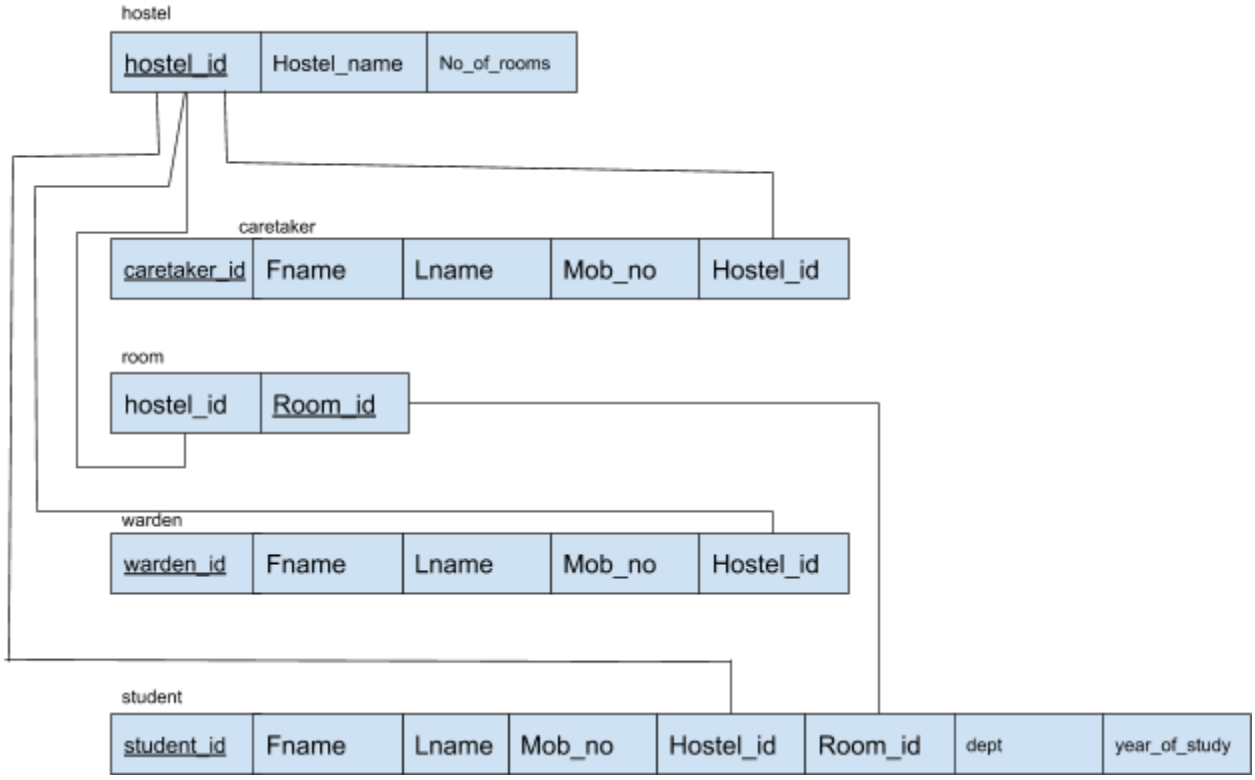
Hostel Room Allocation System is a web application which aims at computerization of the current procedure of allocating hostel rooms. Currently, the process involves students filling up the forms and submitting them in respective hostel which involves a lot of paperwork, hence less efficient.

2. Data Design

2.1 Entity Relationship Diagram



2.2 Conceptual Schema



3. Entities and Attributes

This section of the document explains the entities used in the project, their attributes and how they will work together.

Entitie
s

1. Hostel
2. Caretaker
3. Student
4. Room
5. Warden

3.1
Hostel

An Institution has many hostels and each hostel is represented using this ‘Hostel’ entity. Hostel model takes part in the following relationships.

1. Caretaker manages **Hostel**.
2. **Hostel** has Students.
3. **Hostel** has Rooms.

Attributes

Name	Data Type	Type
Hostel_ID	integer	Primary Key attribute
Hostel_name	string	Non_key attribute
No_of_rooms	integer	Non_key attribute

3.2 Caretaker

Every hostel has an administrator and is represented using the ‘caretaker’ entity. Caretaker entity takes part in following relationships.

1. **Caretaker** manages Hostel.

Attributes

Name	Data Type	Type

ID integer Primary Key attribute

Fname string Non_key attribute

Lname string Non_key attribute

Mob_No string Non_key attribute

Hostel_id integer Foreign Key attribute

3.3
Student

Every hostel has students and they are represented by the ‘student’ entity. Student entity participates in the following relationships.

1. Hostel has **Students**.
2. **Students** stay at room

Attributes

Name Data Type Type

Student_ID integer Primary Key attribute

Fname string Non_key attribute

Lname string Non_key attribute

Mob_No string Non_key attribute

Dept string Non_key attribute

Year_of_study integer Non_key attribute

Hostel_id integer Foreign Key attribute

Room_id integer Foreign Key attribute

3.4 Room

Every Hostel has rooms and they are represented using ‘room’ entity. Room entity participates in the following relationships.

1. Hostel has **Rooms**.
2. Student stays in **room**.

Attributes

Name	Data Type	Type
Hostel_ID	integer	Foreign Key attribute
Room_ID	integer	Partial Key attribute

3.5 Warden

Every hostel has warden and they are represented using ‘Warden’ entity. Warden entity participates in the following relationships.

1. Hostel has **warden**.

Attributes

Name	Data Type	Type

Warden_ID integer Primary Key attribute

Fname string Non_key attribute

Lname string Non_key attribute

Mob_No string Non_key attribute

Hostel_id integer Foreign Key attribute