



PES UNIVERSITY
(Established under Karnataka Act No.16 of 2013)
100-ft Ring Road, BSK III Stage, Bangalore – 560 085 **Department
of CSE**
Semester : 5 Section H

DBMS MINI PROJECT REVIEW – 1
HOSTEL MANAGEMENT SYSTEM
ER DIAGRAM

Member – 1 NAME: Praneet V M

Member – 1 SRN: PES1UG23CS440

Member – 2 NAME: Raghavendra N

Member – 2 Name: PES1UG23CS461

USER SPECIFICATION

Entities and Their Attributes

1. Student (Strong Entity)

Attributes:

- **s_id (Primary Key)**
- **name (Composite → f_name, m_name, l_name)**
- **p_no (Phone Number)**

2. Local Guardian (Weak Entity – depends on

Student).

Attributes:

- **name**
- **p_no (Primary Key with partial key dependency)**.

Relationship:

- **has → Every student has exactly one local guardian (1:1).**

3. Room (Entity).

Attributes:

- **r_no (Primary Key)**
- **no_of_people**

4. Fees (Entity).

Attributes:

- **p_id (Primary Key)**
- **p_date**
- **p_method**

5. Laundry (Entity) .

Attributes:

- **l_no (Primary Key)**
- **days_of_laundry**

6. Mess (Entity) .

Attributes:

- **m_no (Primary Key)**
- **m_name**

7. Warden (Entity) . Attributes:

- **name**
- **p_no**
- **w_id(Primary Key)**

Relationships

1. Student – Local Guardian . Relationship: has . Cardinality: 1

student ↔ 1 local guardian (1:1)

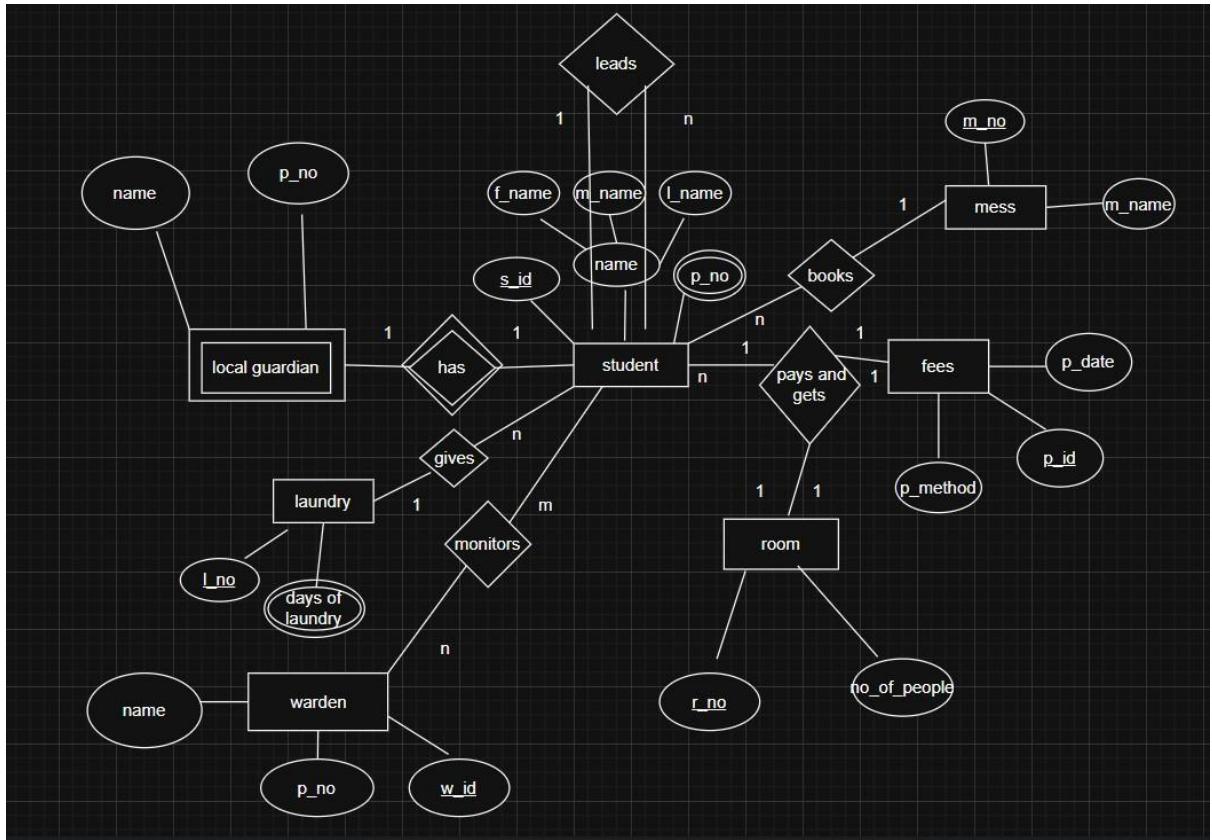
2. Student – Room – Fees (Ternary Relationship) .

Relationships:

- **choose** → A student chooses a room. (N:1)
- **based on** → Room assignment can depend on fees. (1:1)
- **pays** → A student pays fees. (1:1)

3. **Student – Mess** Relationship: books Cardinality: A student can book exactly one mess (N:1).
4. **Student – Laundry** Relationship: gives Cardinality: A student gives laundry (N:1).
5. **Warden – Student** Relationship: monitors Cardinality: different warden monitors many student(m:n)
6. **Student – Student (Recursive Relationship)** Relationship: leads Cardinality: One student can lead many students, but a student is led by only one leader.

ER DIAGRAM



SCHEMA

Student

