

# Hostel Management System.

## Entities and Attributes

| Serial Number | Entity Name                        | Primary key       | Foreign key  | Non key attributes  |
|---------------|------------------------------------|-------------------|--|---|
| 1             | Hall                               | Hall_id integer   |  | Name varchar(20)<br>no_of_employees integer<br>no_of_hostels integer  |
| 2             | Hostel                             | hostel_id integer |  | Name varchar(20)<br>capacity integer<br>no_of_rooms integer<br>no_of_employees integer<br>mess_contractor varchar(2)<br>mess_capacity |
| 3             | Student                            | Sid integer       |  | Name varchar(20)<br>phone integer<br>city varchar(20)<br>state varchar(20)<br>course varchar(10)<br>dept varchar(20)<br>year integer  |
| 4             | Employee                           | Eid integer       |  | Name varchar(20)<br>designation varchar(20)<br>salary float   |
| 5             | Visitors                           |                   |  | Name varchar(20)<br>entry_time date<br>exit_time date   |
| 6             | managed_by<br>(employee-hall)      |                   | Eid integer<br>hid integer                           |   |
| 7             | belongs_to<br>(hostel-hall)        |                   | Hid integer<br>hall_id integer                       |   |
| 8             | Resides_in<br>(student-hostel)     |                   | Sid integer<br>hid integer                           | room_no integer   |
| 9             | controlled_by<br>(employee-hostel) |                   | Eid integer,<br>hid integer                          |   |
| 10            | Visits<br>(visitor-student)        |                   | v_name varchar(20)<br>entry_time date<br>sid integer |   |
| 11            | Authorization                      |                   |  | Uname unique varchar(20)<br>passwd varchar(20)<br>level integer<br>hoset/hall id integer  |

# Users and Privileges

## Level 1:

- View the entire top level information of database(all tables)
- Modify the present account
- Create halls and hall level users
- Modify hall information
- Delete hall level users
- Reset hall level user password

## Level 2:

- View entire top level information that come under selected hall
- Modify the present account
- Create Hostels and hostel level users
- Delete hostel level users
- Reset hostel level user level password
- Modify hostel information
- Add and modify student information except room number

## Level 3:

- View entire top level information that come under selected hostel
- Modify present account
- Add room number allocated to students
- Visitor information entry