DBMS PROJECT REPORT 2

TITLE: Apartment management system

Team members: Section 'A'

SRN	NAME
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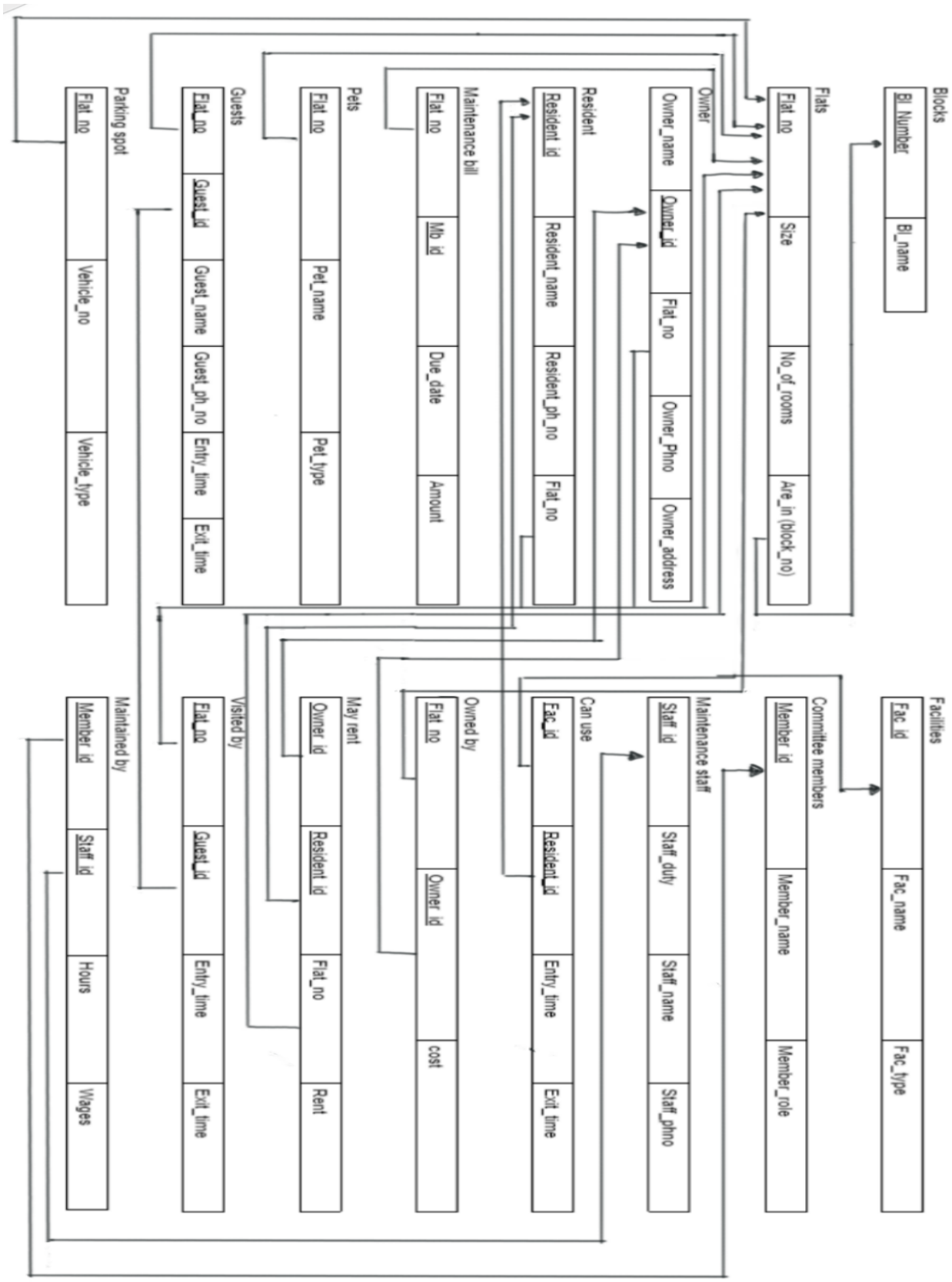
RELATIONAL TABLE



Choice of DBMS : postgreSQL
Reasons for this choice:

1. Open source DBMS.
2. Easy commands.
3. Data model. (it isn't just relational but object relational)
4. It can handle huge amounts of data.
5. Highly stable.

createtable.sql

```
DROP DATABASE 15_57_59;

CREATE DATABASE 15_57_59;

\c 15_57_59

CREATE TYPE addr AS(addrl1 varchar(25),addrl2 varchar(25), pincode INT, state varchar(25));

CREATE TABLE MAINTENANCE_STAFF(staff_id int, staff_name varchar(25), staff_duty
varchar(25), staff_phno CHAR(10),PRIMARY KEY(staff_id));

CREATE TABLE BLOCKS(bl_name varchar(15), bl_number INT, PRIMARY KEY(bl_number));

CREATE TABLE FLATS(size INT, no_of_rooms INT , flat_no varchar(25),bl_no references
BLOCKS(bl_number), PRIMARY KEY(flat_no));

CREATE TABLE OWNER(owner_id INT NOT NULL,  owner_name varchar(30),owner_ph_no
char(10) not null ,owner_addr addr , PRIMARY KEY(owner_id), fl_no  references
flats(flat_no));

CREATE TABLE OWNED_BY(owner_id INT references OWNER(owner_id), flat_no references
FLATS(flat_no), cost int, PRIMARY KEY(owner_id, flat_no));

CREATE TABLE RESIDENT(resident_id INT, resident_name varchar(25), r_phno char(10), fl_no
references flats(flat_no),PRIMARY KEY(resident_id,flat_no));

CREATE TABLE MAY_RENT(owner_id INT references OWNER(owner_id), flat_no references
FLATS(flat_no), resident_id int references RESIDENT(resident_id), rent int, PRIMARY
KEY(owner_id, resident_id));

CREATE TABLE MAINTENANCE(mb_id INT , due_date DATE , amount DECIMAL(5,2), flat_no
varchar(25) references flats(flat_no),PRIMARY KEY(mb_id,flat_no) );
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```
CREATE TABLE FACILITIES(fac_id INT, fac_name varchar(25), type varchar(25),PRIMARY KEY(fac_id));

CREATE TABLE CAN_USE(fac_id int references FACILITIES(fac_id), resident_id int references RESIDENT(resident_id), entry_time timestamp,exit_time timestamp, PRIMARY KEY(fac_id, resident_id));

CREATE TABLE PETS(pet_name varchar(25), pet_type varchar(25), flat_no references resident(flat_no) , PRIMARY KEY(pet_name,flat_no));

CREATE TABLE GUESTS(guest_id INT, guest_name varchar(25), guest_phno char(10),fl_no references flats(flat_no),PRIMARY KEY(fl_no,guest_id));

CREATE TABLE VISITED_BY(flat_no references resident(flat_no),guest_id int references GUESTS(guest_id), entry_time timestamp,exit_time timestamp, PRIMARY KEY(fac_id, guest_id));


CREATE TABLE PARKING_SPOT(veh_no varchar(10),fl_no  references flats(flat_no), veh_type varchar(25), PRIMARY KEY(veh_no, fl_no));


CREATE TABLE COMM_MEM(mem_name varchar(25), mem_role varchar(25), mem_id INT references resident(resident_id), PRIMARY KEY(mem_id));

CREATE TABLE MAINTAINED_BY(hours DECIMAL(2,2),wage DECIMAL(5,2), staff_id references MAINTENANCE_STAFF(staff_id), mem_id references COMM_MEM(mem_id),PRIMARY KEY(mem_id,staff_id));
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insertvalues.sql

```
INSERT INTO MAINTENANCE_STAFF(staff_id, staff_name , staff_duty, staff_phno)
VALUES
(1,'Simran','housekeeping','9999999999'),
(2,'Ritu','housekeeping','7234567890'),
(3,'Raju','gardener','8245783691'),
(4,'Sooraj','security','8456123789'),
(5,'Narendar','security','9856321475'),
(6,'Nisha','electrician','7412583695'),
(7,'Sandeep','plumber','9856321473'),
(8,'Amarjeeth','garbage collector','8456123790'),
(9,'Rithika','security','7412583692'),
(10,'Prathap','housekeeping','7481592635');

INSERT INTO BLOCKS(bl_name, bl_number)
VALUES
('A',1),
('B',2),
('C',3),
('D',4);

INSERT INTO FLATS(size,no_of_rooms,flat_no,bl_no)
VALUES
(1500,3,'AG05',1),
(1200,2,'AS05',1),
(1000,2,'AS03',1),
(1250,1,'BT03',2),
(1450,4,'BG04',2),
(900,1,'BF03',2),
(1500,3,'CS07',3),
(1400,2,'CF06',3),
(1000,2,'CG10',3),
(950,2,'DG15',4);

INSERT INTO OWNER(owner_id,  owner_name ,owner_ph_no ,owner_addr addr , fl_no)
VALUES
(1,'Pitambar','888888888','('s1','s2',560012,'Karnataka')','AG05'),
(2, 'Ranj', '7777777777','('s2','s3',560082,'Karnataka')','AS05'),
(3,'Kesari','8787878787','('s4','s5',560014,'Karnataka')','AS03'),
(4,'Shiv','7575757575','('s6','s7',560042,'Karnataka')','BT03'),
(5,'Sunil','7373737373','('s8','s2',560089,'Karnataka')','BG04'),
(6,'Narayani','7473727171','('s4','s7',560022,'Karnataka')','BF03'),
(7,'Trishna','6234578123','('s6','s2',560098,'Karnataka')','CF07'),
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(8,’Neelima’,’8484848484’,’(‘s11’,’s2’,560016,’Karnataka’)’,’CF06’),
(9,’Prabhu’,’7172737475’,’(‘s1201’,’s122’,560052,’Karnataka’)’,’CG10’),
(10,’Susheel’,’7475767879’,’(‘s14,’s75’,560075,’Karnataka’)’,’DG15’) ;

INSERT INTO OWNED_BY(owner_id,flat_no,cost)
VALUES
(1,’AG05’,8000000),
(2,’AS05’,7000000),
(3,’AS03’,6000000),
(4,’BT03’,7200000),
(5,’BG04’,7900000),
(6,’BF03’,5000000),
(7,’CF07’,8000000),
(8,’CF06’,7500000),
(9,’CG10’,6000000),
(10,’DG15’,5500000);

INSERT INTO RESIDENT(resident_id, resident_name, r_phno, fl_no)
VALUES
(1,’Pitambar’,’888888888’,’AG05’),
(2, ‘Ranj’, ‘7777777777’,’AS05’),
(3,’Kesari’,’8787878787’,’AS03’),
(4,’Shiv’,’7575757575’,’BT03’),
(5,’Sunil’,’7373737373’,’BG04’),
(6,’Narayani’,’7473727171’,’BF03’),
(7,’Trishna’,’6234578123’,’CF07’),
(8,’Yamuna’,’7574767172’,’CF06’),
(9,’Maya’,’8485868789’,’CG10’),
(10,’Dilip’,’98979695’,’DG15’);

INSERT INTO MAY_RENT(owner_id, flat_no, resident_id, rent)
VALUES
(8, ‘CF06’, 8, 30000),
(9, ‘CG10’, 9, 20000),
(10, ‘DG15’, 10, 15000);

INSERT INTO MAINTENANCE(mb_id, due_date, amount , flat_no)
(1,’2021-10-12’,4500,’AG05’),
(2,’2021-10-12’,’3600’,’AS05’),
(3,’2021-10-12’,3000,’AS03’),
(4,’2021-10-12’,3750,’BT03’),
(5,’2021-10-12’,4350,’BG04’),
(6,’2021-10-12’,2700,’BF03’),
(7,’2021-10-12’,4500,’CF07’),

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(8,'2021-10-12',4200,'CF06'),
(9,'2021-10-12',3000,'CG10'),
(10,'2021-10-12',2870,'DG15');

INSERT INTO FACILITIES(fac_id, fac_name, type)
VALUES
(1, 'Swimming Pool','Outdoor'),
(2, 'Club House','Indoor'),
(3, 'Play Ground', 'Outdoor'),
(4, 'Play Ground', 'Indoor'),
(5, 'Gym', 'Outdoor'),
(6, 'Gym', 'Indoor'),
(7, 'Badminton Court' , 'Outdoor'),
(8, 'Football Ground', 'Outdoor'),
(9, 'Tennis Court', 'Indoor'),
(10, 'Squash Court','Indoor');

INSERT INTO CAN_USE(fac_id, resident_id, entry_time, exit_time)
VALUES
(1, 4, '2021-10-05 14:00:00', '2021-10-05 14:47:00'),
(2, 5, '2021-10-05 11:00:00', '2021-10-05 14:00:00'),
(3, 7, '2021-10-05 14:00:00', '2021-10-05 14:00:00'),
(4, 9, '2021-10-05 16:00:00', '2021-10-05 18:00:00'),
(6, 8, '2021-10-05 16:00:00', '2021-10-05 18:00:00'),
(6, 2, '2021-10-05 16:00:00', '2021-10-05 18:00:00'),
(10, 1, '2021-10-05 19:00:00', '2021-10-05 19:45:00'),
(10, 9, '2021-10-05 19:00:00', '2021-10-05 19:45:00'),
(7, 7, '2021-10-05 18:00:00', '2021-10-05 20:00:00'),
(7, 3, '2021-10-05 18:00:00', '2021-10-05 20:00:00');

INSERT INTO PETS(pet_name, pet_type, flat_no)
VALUES
('jojo','dog','AG05'),
('mars','dog','AG05'),
('krystal','cat','BF03'),
('bruno','hamster','BF03'),
('crimson','dog','CF06'),
('cody','cat','DG15');

INSERT INTO GUESTS(guest_id, guest_name, guest_phno, flat_no)
VALUES
(1, 'Jeevan', 9438342412, 'AG05'),
(2, 'Krishna', 8675546534, 'BF03'),
(3, 'Jnana' , 8643513421, 'CG10');
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```
INSERT INTO VISITED_BY(flat_no, resident_id, entry_time,exit_time)
('AG05','Jeevan','2021-10-05 11:00:00', '2021-10-05 14:00:00'),
('BF03','Krishna','2021-10-05 10:00:00', '2021-10-05 12:00:00'),
('CG10','Jnana','2021-10-05 07:00:00', '2021-10-05 19:00:00');

INSERT INTO PARKING_SPOT(veh_no, fl_no, veh_type)
VALUES
('KA05MA1234',AG05,'Car'),
('KA32PL4342',BT03,'Scooter'),
('KA15MW6798',CS07,'Car'),
('KA12AB1314',DG15,'Scooter'),
('KA01KN9890',BF03,'Car');

INSERT INTO COMM_MEM(mem_name, mem_role, mem_id)
VALUES
('Pitambar','housekeeping head',1),
('Kesari','security head',3),
('Sunil','utilities head',5),
('Maya','chairperson',9);

INSERT INTO MAINTAINED_BY(staff_id,mem_id,hours,wage)
VALUES
(1,1,120,20000),
(2,1,120,20000),
(3,5,60,20000),
(4,3,240,20000),
(5,3,240,20000),
(6,5,25,16000),
(7,5,45,12000),
(8,5,25,10000),
(9,3,240,20000),
(10,1,120,20000);
```

LIST OF ALL TABLES:

Blocks

Bl_Number	Bl_name

Flats

Flat_no	Size	No_of_rooms	Are_in (block_no)

Owner

Owner_name	Owner_id	Flat_no	Owner_Phno	Owner_address

Resident

Resident_id	Resident_name	Resident_ph_no	Flat_no

Maintenance bill

Flat_no	Mb_id	Due_date	Amount

Pets

Flat_no	Pet_name	Pet_type

Guests

Flat_no	Guest_id	Guest_name	Guest_ph_no	Entry_time	Exit_time

Parking spot

Flat_no	Vehicle_no	Vehicle_type

Facilities

Fac_id	Fac_name	Fac_type

Committee members

Member_id	Member_name	Member_role

Maintenance staff

Staff_id	Staff_duty	Staff_name	Staff_phno

Can use

Fac_id	Resident_id	Entry_time	Exit_time

Owned by

Flat_no	Owner_id	cost

May rent

Owner_id	Resident_id	Flat_no	Rent

Visited by

Flat_no	Guest_id	Entry_time	Exit_time

Maintained by

Member_id	Staff_id	Hours	Wages

CONTRIBUTIONS:

Total time spent : 6 hours

NAME	CONTRIBUTIONS
Abhijnya Bhat	Relational table,corrections from Assignment 1
Anagha H M	Code for create table ,½ of insert table code
Anchal Sharma	List of all tables ,½ of insert table code