DBMS LAB Week 3

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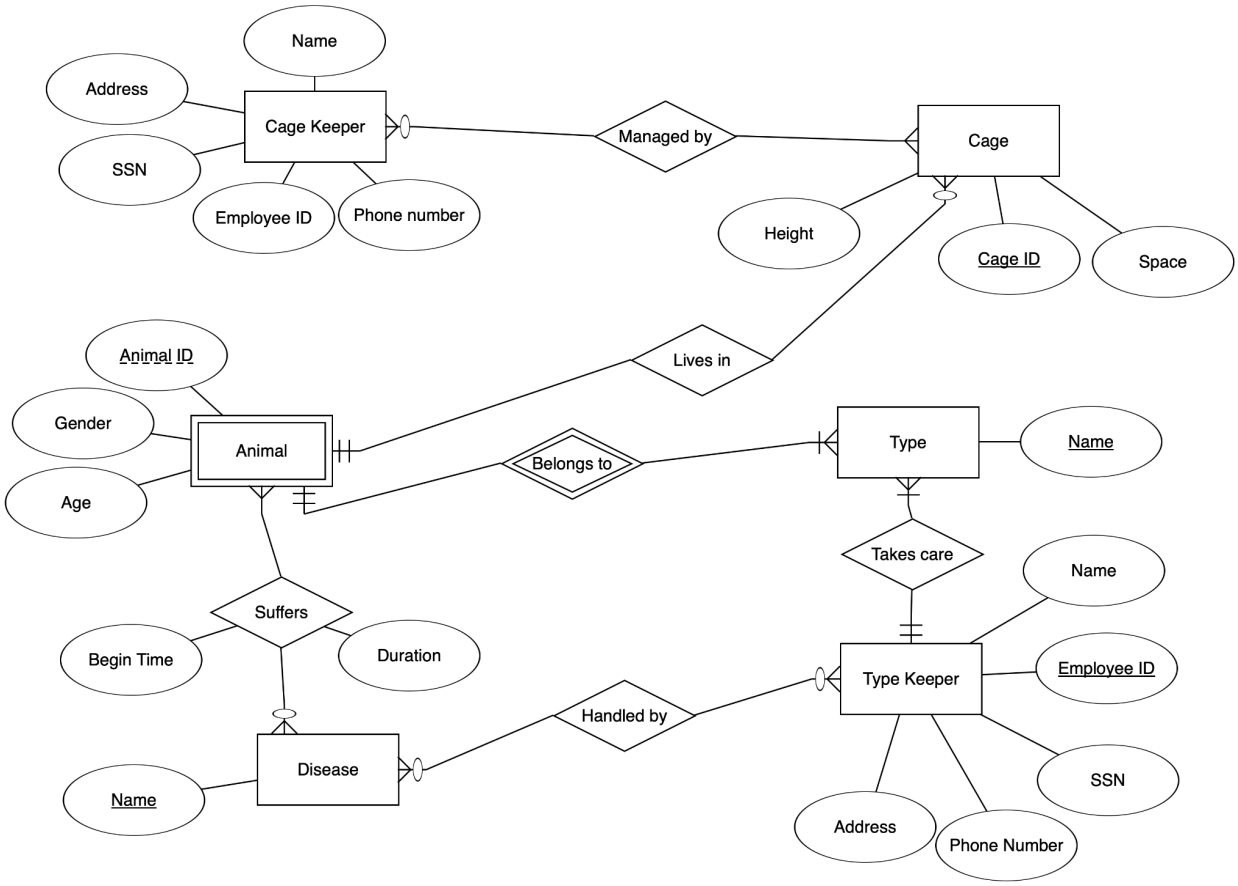
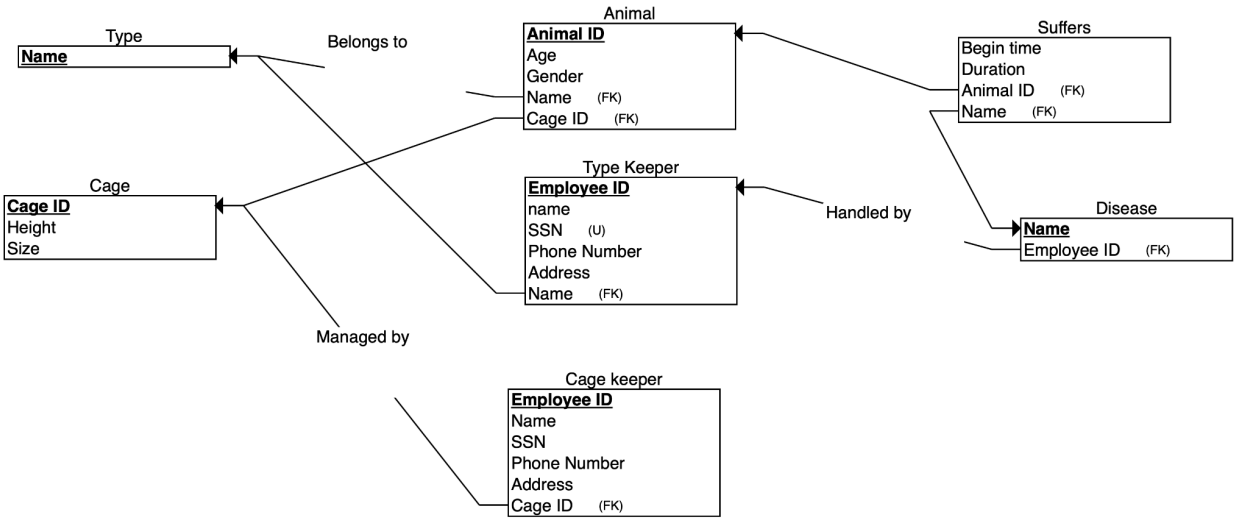
1. ER Diagram



2. Relational Table



3. Postgres

```
naren=# create database hospital;
CREATE DATABASE
naren=# \c hospital
You are now connected to database "hospital" as user "naren".
```

Creating Tables

Doctor

```
hospital=# create table Doctor(d_id integer not null,d_name varchar(30) not null
, d_phone integer not null, PRIMARY KEY(d_id));
CREATE TABLE
hospital=# \d doctor
                    Table "public.doctor"
 Column  |         Type          | Collation | Nullable | Default
---------+-----------------------+-----------+----------+---------
 d_id    | integer               |           | not null |
 d_name  | character varying(30) |           | not null |
 d_phone | integer               |           | not null |
Indexes:
    "doctor_pkey" PRIMARY KEY, btree (d_id)
```

Patient

```
DROP TABLE
hospital=# create table Patient(p_id integer not null,p_name varchar(30) not nul
l, diagnonsis varchar(50) ,age char(2) not null, PRIMARY KEY(p_id));
CREATE TABLE
hospital=# \d Patient
                     Table "public.patient"
   Column   |         Type          | Collation | Nullable | Default
------------+-----------------------+-----------+----------+---------
 p_id       | integer               |           | not null |
 p_name     | character varying(30) |           | not null |
 diagnonsis | character varying(50) |           |          |
 age        | character(2)          |           | not null |
Indexes:
    "patient_pkey" PRIMARY KEY, btree (p_id)
```

Medicine

```
hospital=# create table Medicine(med_id integer not null, med_name varchar(30) n
ot null, PRIMARY KEY(med_id));
CREATE TABLE
hospital=# \d Medicine
                    Table "public.medicine"
  Column  |         Type          | Collation | Nullable | Default
----------+-----------------------+-----------+----------+---------
 med_id   | integer               |           | not null |
 med_name | character varying(30) |           | not null |
Indexes:
    "medicine_pkey" PRIMARY KEY, btree (med_id)
```

Prescription

```
hospital=# create table Prescription(p_id integer not null,d_id integer not null
, med_id integer not null,PRIMARY KEY(p_id));
CREATE TABLE
hospital=# alter table Prescription add constraint fk foreign key(d_id) referenc
es doctor(d_id);
ALTER TABLE
hospital=# \d prescription
            Table "public.prescription"
 Column |  Type   | Collation | Nullable | Default
--------+---------+-----------+----------+---------
 p_id   | integer |           | not null |
 d_id   | integer |           | not null |
 med_id | integer |           | not null |
Indexes:
    "prescription_pkey" PRIMARY KEY, btree (p_id)
Foreign-key constraints:
    "fk" FOREIGN KEY (d_id) REFERENCES doctor(d_id)
```

Bed

```
hospital=# create table bed(b_id integer not null,ward_no char(2) not null);
CREATE TABLE
```

```
hospital=# alter table bed add constraint pk primary key(b_id);
ALTER TABLE
hospital=#
```

```
hospital=# \d bed
                  Table "public.bed"
 Column  |     Type     | Collation | Nullable | Default
---------+--------------+-----------+----------+---------
 b_id    | integer      |           | not null |
 ward_no | character(2) |           | not null |
Indexes:
    "pk" PRIMARY KEY, btree (b_id)
```

Bed_patient

```
hospital=# create table bed_patient(p_id integer not null,b_id integer not null
,in_date varchar(10) not null,out_date varchar(10) not null);
CREATE TABLE
hospital=# alter table bed_patient add constraint fk foreign key(b_id) reference
s bed(b_id);
ALTER TABLE
hospital=# alter table bed_patient add constraint fk foreign key(p_id) reference
s patient(p_id);
```

```
hospital=# alter table bed_patient add constraint fk1 foreign key(b_id) referenc
es bed(b_id);
ALTER TABLE
hospital=# \d bed_patient
                   Table "public.bed_patient"
  Column  |         Type          | Collation | Nullable | Default
----------+-----------------------+-----------+----------+---------
 p_id     | integer               |           | not null |
 b_id     | integer               |           | not null |
 in_date  | character varying(10) |           | not null |
 out_date | character varying(10) |           | not null |
Foreign-key constraints:
    "fk" FOREIGN KEY (b_id) REFERENCES bed(b_id)
    "fk1" FOREIGN KEY (b_id) REFERENCES bed(b_id)
```

Inserting into table

Doctor

```
hospital=# insert into doctor values(1,'Naren',9999999991);
ERROR:  integer out of range
hospital=# insert into doctor values(1,'Naren',999999991);
INSERT 0 1
hospital=# insert into doctor values(2,'Abhishek',999999992);
INSERT 0 1
hospital=# insert into doctor values(3,'Abdul',999999993);
INSERT 0 1
hospital=# insert into doctor values(4,'Alex',999999994);
INSERT 0 1
hospital=# insert into doctor values(5,'Advit',999999995);
INSERT 0 1
hospital=# select * from doctor
hospital-# ;
 d_id |  d_name  |  d_phone
------+----------+-----------
    1 | Naren    | 999999991
    2 | Abhishek | 999999992
    3 | Abdul    | 999999993
    4 | Alex     | 999999994
    5 | Advit    | 999999995
(5 rows)
```

Patient

```
hospital=# insert into patient values(1,'Leela','typhoid','34');
INSERT 0 1
hospital=# insert into patient values(2,'Vrinda','Cancer','40');
INSERT 0 1
hospital=# insert into patient values(3,'Basavaraj','Fever','44');
INSERT 0 1
hospital=# insert into patient values(4,'Veena','Fracture','50');
INSERT 0 1
hospital=# insert into patient values(5,'Sidhu','Memory lose','55');
INSERT 0 1
hospital=# select * from patient
hospital-# ;
 p_id |  p_name   | diagnonsis  | age
------+-----------+-------------+-----
    1 | Leela     | typhoid     | 34
    2 | Vrinda    | Cancer      | 40
    3 | Basavaraj | Fever       | 44
    4 | Veena     | Fracture    | 50
    5 | Sidhu     | Memory lose | 55
(5 rows)
```

Medicine

```
hospital=# insert into medicine values(1,'Dolo');
INSERT 0 1
hospital=# insert into medicine values(2,'Paracetamol');
INSERT 0 1
hospital=# insert into medicine values(3,'Crosin');
INSERT 0 1
hospital=# insert into medicine values(4,'Bruefin');
INSERT 0 1
hospital=# insert into medicine values(5,'Covaxxin');
INSERT 0 1
hospital=# select * from medicine
hospital-# ;
 med_id |  med_name
--------+-------------
      1 | Dolo
      2 | Paracetamol
      3 | Crosin
      4 | Bruefin
      5 | Covaxxin
(5 rows)
```

Prescription

```
hospital=# insert into prescription values(1,3,2);
INSERT 0 1
hospital=# insert into prescription values(2,2,5);
INSERT 0 1
hospital=# insert into prescription values(3,1,4);
INSERT 0 1
hospital=# insert into prescription values(4,5,1);
INSERT 0 1
hospital=# insert into prescription values(5,4,3);
INSERT 0 1
hospital=# select * from prescription
hospital-# ;
 p_id | d_id | med_id
------+------+--------
    1 |    3 |      2
    2 |    2 |      5
    3 |    1 |      4
    4 |    5 |      1
    5 |    4 |      3
(5 rows)
```

Bed

```
hospital=# insert into bed values(1,'1A');
INSERT 0 1
hospital=# insert into bed values(2,'1B');
INSERT 0 1
hospital=# insert into bed values(3,'2C');
INSERT 0 1
hospital=# insert into bed values(4,'2A');
INSERT 0 1
hospital=# insert into bed values(5,'3D');
INSERT 0 1
hospital=# select * from bed
hospital-# ;
 b_id | ward_no
------+---------
    1 | 1A
    2 | 1B
    3 | 2C
    4 | 2A
    5 | 3D
(5 rows)
```

Bed_patient

```
hospital=# insert into bed_patient values(1,3,'1-2-2024','2-2-2025');
INSERT 0 1
hospital=# insert into bed_patient values(2,2,'1-4-2023','2-5-2023');
INSERT 0 1
hospital=# insert into bed_patient values(3,1,'1-4-2021','2-1-2022');
INSERT 0 1
hospital=# insert into bed_patient values(4,5,'10-4-2022','2-5-2022');
INSERT 0 1
hospital=# insert into bed_patient values(5,4,'31-4-2021','1-5-2022');
INSERT 0 1
hospital=# select * from bed_patient
;
 p_id | b_id |  in_date   | out_date
------+------+------------+----------
    1 |    3 | 1-2-2024   | 2-2-2025
    2 |    2 | 1-4-2023   | 2-5-2023
    3 |    1 | 1-4-2021   | 2-1-2022
    4 |    5 | 10-4-2022  | 2-5-2022
    5 |    4 | 31-4-2021  | 1-5-2022
(5 rows)
```