

## **1) A brief summary of our project:**

Our DBMS centers around an adoption shelter for animals. We model various information related to the shelter, such as the different animals, workers, events hosted, and the animals' health information. Thus, our domain for this application is animal shelter management and logistics.

## **2) ER diagram**

We did not have any written feedback provided from the TA, so we did not make any changes for constraints or the entities. However, we changed some of the attribute names and added the following new attributes to some of our entities to perform normalization. The new and changed attributes are:

Animal:

- We removed "Photo" attribute because we thought that it was not useful for our database.

Shelter:

- We changed the name attribute to shelterName and location attribute to shelterLocation.

Adopters:

- attribute added: email, nationalID, streetName, houseNumber, city, province, postalCode

Volunteer:

- attribute added: regularVolunteer? boolean

Vet:

- We changed 'location' to 'vetLocation'

ShelterManager:

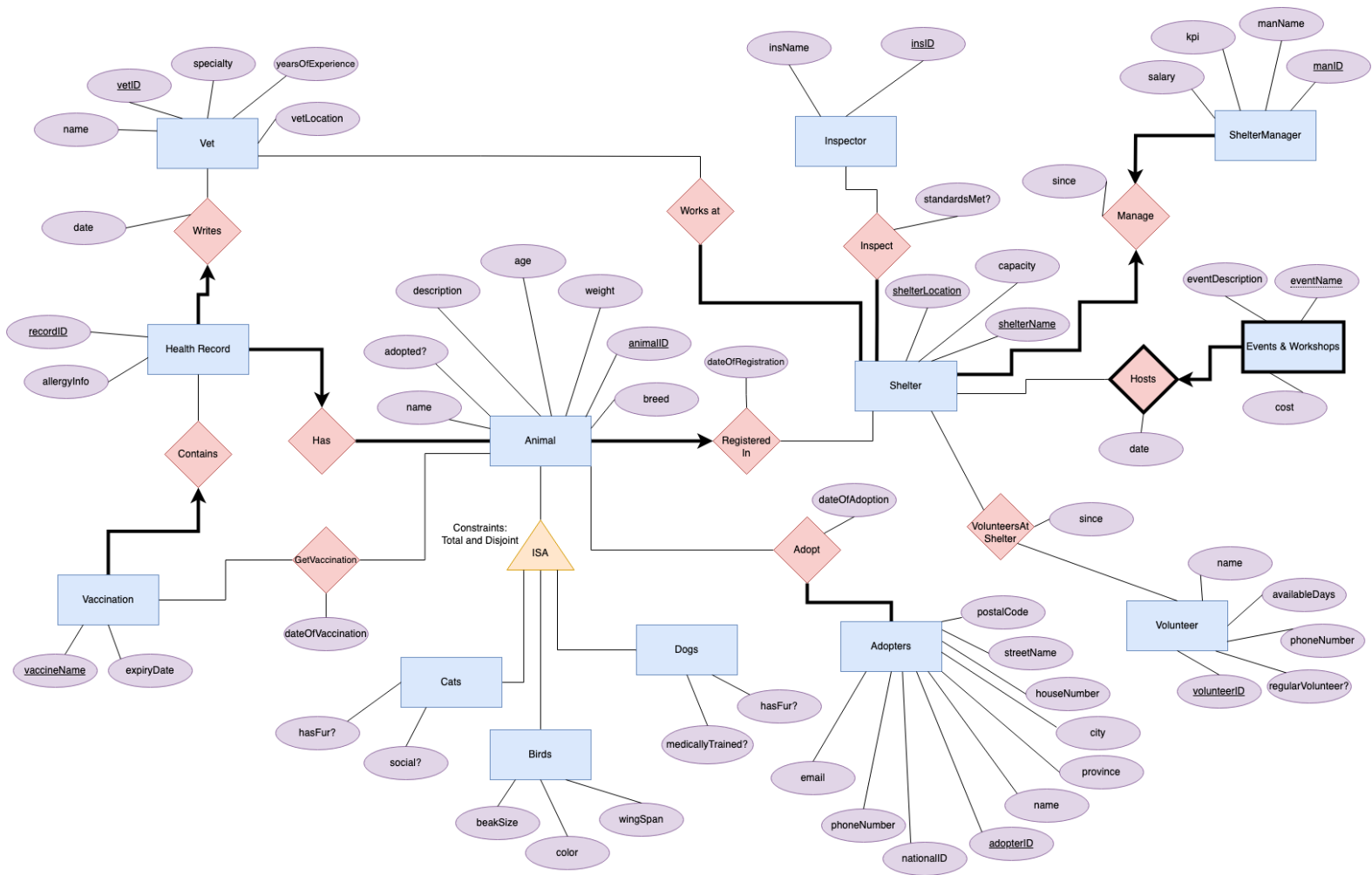
- Simplified generalShelterManager to shelterManager
- Simplify managerID and managerName to manID and manName
- attribute added: kpi, salary

Inspector:

- Change Name to insName and InspectorID to insID

Event:

- Simplify Admission Cost to Cost



### 3) Schema

#### NOTES:

- We plan to use mysql
- IN VOLUNTEER: Available days represents 7 days of week. We have true or false in order Sunday-Saturday (example: TFFTFFF = only available on Sundays and Wednesdays per week).
- VolunteerType is either "regular" or "not regular". A volunteer is not regular if their available days are FFFFFFFF
- To check participation constraints for our many-to-many relationship, we will be using assertions, so it is not modeled below.

**LEGEND:** PK, **FK**, *CK*

- We combined Animal and RegisteredIn.

RegisteredAnimal (animalID: char[4], name: varchar, adopted?: boolean, description: varchar, age: int, weight: int, breed: varchar, **shelterLocation**: varchar NOT NULL, **shelterName**: varchar NOT NULL )

*CK*: animalID

Cats (animalID: char [4], hasFur?: boolean, social?: boolean)

*CK*: animalID

Dogs (animalID: char [4], medicallyTrained?: boolean, hasFur?: boolean)

*CK*: animalID

Birds(animalID: char [4], beakSize: int, wingSpan: integer, color: varchar)

*CK*: animalID

Adopters(adopterID: char[4], *nationalID*: char[10] UNIQUE, name: varchar, phoneNumber: int, *email*: varchar UNIQUE, streetName: varchar, houseNumber: varchar, city: varchar, province: varchar, postalCode: varchar)

- *CK*: adopterID
- *CK*: nationalID
- *CK*: email
- **UNIQUE**: nationalID and email

GetVaccination(animalID: char [4], **vaccinationName**: varchar, dateOfVaccination: date)

*CK*: animalID and vaccinationName

Adopt(adopterID: char [4], animalID: char [4], dateOfAdoption: date)

*CK*: adopterID and animalID

- This is a many to many relationship. We will use assertions to check many to many constraints.

Volunteer (volunteerID: char(4), name: varchar NOT NULL, availableDays: char(7), phoneNumber: int, regularVolunteer?: boolean)

*CK*:volunteerID (PK)

VolunteersAtShelter (volunteerID: char(4), **shelterLocation**: varchar, **shelterName**: varchar, since: date)

*CK*:volunteerID and shelterLocation and shelterName (PK)

Vet (vetID char(4), name: varchar NOT NULL, specialty: varchar, yearsOfExperience: int DEFAULT 0, vetLocation: varchar)

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CK:vetID (PK)

VetWorksAtShelter (**vetID**: char(4), **shelterLocation**: varchar, **shelterName**: varchar)

CK:vetID and shelterLocation and shelterName (PK)

- combined vaccination and contains

Vaccination (**vaccineName**: varchar, expiryDate: date NOT NULL, **recordID**: char(4) NOT NULL)

CK:vaccineName (PK)

- combined health record, has, and writes

HealthRecord (**recordID**: char(4), allergyInfo: varchar, **vetID**: char(4) NOT NULL, **animalID**: char(4) NOT NULL)

CK:recordID (PK)

Inspector(insName: varchar,**insID**: char[4])

CK:insID

Shelter(**shelterLocation**:varchar,capacity:int,**shelterName**:varchar)

CK:shelterLocation and shelterName

Inspect(**insID**:char[4],**shelterLocation**:varchar,**shelterName**:varchar,standardsMet?: boolean)

CK:insID and shelterLocation and shelterName

We need assertions to check the many-to-many constraints later in the course.

Events\_hosted(eventName:varchar,eventDescription:varchar,cost:varchar, date:DATE,**shelterLocation**:varchar,**shelterName**:varchar)

CK:eventName and shelterLocation and shelterName

ShelterManager(manName:varchar,**manID**:char[4],since;DATE,kpi:varchar, salary:varchar,**shelterLocation**:varchar,**shelterName**:varchar)

CK:manID

CK:shelterLocation and shelterName

### Note:

Kpi is a quantifiable measure of performance,here we use Animal Adoption Rate as a measurement

We combined the Manage relationship set with the GeneralShelterManager Entity set.

UNIQUE Constraint should be maintained for the one-to-one relationship

NOT-NULL Constraint should be maintained for the participation constraint

## 5. Functional Dependencies

Note: We bolded the attribute names below to make the grading easier for the TA. It does not mean anything else.

**RegisteredAnimal:** animalID -> name, adopted?, description, age, weight, breed, shelterLocation, shelterName

**Cats:** animalID-> hasFur?, social?

**Dogs:** animalID-> medicallyTrained?, hasFur?

**Birds:** animalID-> wingSpan, beakSize, color

**Adopters:** adopterID-> nationalID, name, phoneNumber, email, streetName, houseNumber, city, province, postalCode

nationalID-> adopterID, name, phoneNumber, email, streetName, houseNumber, city, province, postalCode

email -> adopterID, nationalID, name, phoneNumber, streetName,houseNumber  
province, postalCode

postalCode -> city, streetName, province

**GetVaccination:** animalID, vaccinationName -> dateOfVaccination

**Adopt:** adopterID, animalID -> dateOfAdoption

**Volunteer:** volunteerID -> name, availableDays, phoneNumber  
availableDays -> regularVolunteer?

**VolunteersAtShelter:** volunteerId, shelterLocation, shelterName -> since

**Vet:** vetID -> name, specialty, yearsOfExperience, vetLocation

**VetWorksAtShelter:** no non-trivial FD. All are PK.

**Vaccination:** vaccineName -> expiryDate, recordID

**HealthRecord:** recordID -> allergyInfo, vetID, animalID

**Inspector:**insID -> insName

**Inspect:**(insID,shelterLocation,shelterName) -> standardsMet?

**Shelter:**(shelterLocation,shelterName) -> capacity,manName,manID, since,kpi,salary

**ShelterManager:**

kpi -> salary

manID -> manName,since,shelterLocation,kpi,salary,capacity,shelterName

**Events\_hosted:**

(eventName,shelterName,shelterLocation)->eventDescription,admissionCost,date

## 6a. NORMALIZATION

**NOTE:** all tables not normalized below do NOT violate BCNF. This is because for each  $X \rightarrow b$ , the  $X$  is a superkey.

1.

First, we will decompose Adopters(adopterID, nationalID, name, phoneNumber, email, streetName, houseNumber, city, province, postalCode) since the functional dependency postalCode -> city, streetName, province violates BCNF.

PostalCode<sup>+</sup> = {PostalCode, City, StreetName, Province}

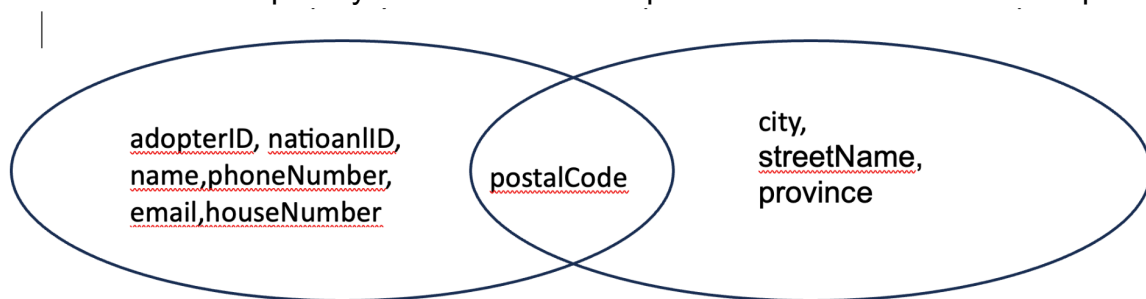
We have the following non-trivial implicit FDs:

PostalCode -> City

PostalCode -> StreetName

PostalCode -> Province

PostalCode is not a superkey for the relation Adopters. Therefore we will decompose.



Now we have:

AdoptersInfo(adopterID, nationalID, name, phoneNumber, email, **postalCode**, houseNumber). This is in BCNF.

AdoptersLocation(postalCode, city, streetName, province). This is in BCNF.

2.

In Volunteer, availableDays  $\rightarrow$  regularVolunteer? violates BCNF.

availableDays<sup>+</sup> = {availableDays, regularVolunteer? }

So it is not a superkey, therefore it violates BCNF

So, we split volunteer into two relations:

Volunteer (volunteerID: char(4), name: varchar NOT NULL, **availableDays**: char(7),  
phoneNumber: int)

AvailableDaysRegularVolunteer(availableDays: char(7), regularVolunteer?: boolean)

3.

For ShelterManager(manName:varchar,manID:char[4],since;DATE,kpi:varchar,  
salary:varchar,**shelterLocation**:varchar,**shelterName**:varchar)

Since (kpi)<sup>+</sup> = {kip, salary}, kpi is not a superkey of sheltermanager, and therefore violate BCNF.

We decompose on kpi  $\rightarrow$  salary

ShelterManagerPerformance = (kpi:varchar,salary:varchar)

ShelterManagerInfo

=(manName:varchar,manID:char[4],since;DATE,kpi:varchar,**shelterLocation**:varchar,**shelterName**:  
varchar)

Since all two attributes relations are in BCNF,ShelterManagerPerformance is in BCNF.  
Since no functional dependency in the FDs in part5 violate BCNF in ShelterManagerInfo,it is also in BCNF.

## 6b. Full List of Tables after Normalization

RegisteredAnimal (animalID: char[4], name: varchar, adopted?: boolean, description: varchar, age: int, weight: int, breed: varchar, **shelterLocation**: varchar NOT NULL, **shelterName**: varchar NOT NULL )

CK: animalID

Cats (animalID: char [4], hasFur?: boolean, social?: boolean)

CK: animalID

Dogs (animalID: char [4], medicallyTrained?: boolean, hasFur?: boolean)

CK: animalID

Birds(animalID: char [4], beakSize: int, wingSpan: integer, color: varchar)

CK: animalID

AdoptersInfo(adopterID:char[4], *nationalID*: char[10] UNIQUE, name: varchar, phoneNumber: int, *email*:varchar UNIQUE, **postalCode**: varchar, houseNumber: varchar)

- CK: adopterID
- CK: nationalID
- CK: email
- UNIQUE: nationalID and email

AdoptersLocation(postalCode:varchar, city: varchar, streetName: varchar, province: varchar)

CK: postalCode

GetVaccination(animalID: char [4], **vaccinationName**: varchar, dateOfVaccination: date)

CK: animalID and vaccinationName

Adopt(adopterID: char [4], animalID: char [4] , dateOfAdoption: date)

CK: adopterID and animalID

- This is a many to many relationship. We will use assertions to check many to many constraints.

Volunteer (volunteerID: char(4), name: varchar NOT NULL, **availableDays**: char(7), phoneNumber: int)

CK:volunteerID (PK)

AvailableDaysRegularVolunteer(availableDays: char[7], regularVolunteer?: boolean)

CK:availableDays (PK)



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VolunteersAtShelter (**volunteerID**: char(4), **shelterLocation**: varchar, **shelterName**: varchar, since: date)

CK: **volunteerID** and **shelterLocation** and **shelterName** (PK)

Vet (**vetID**: char(4), name: varchar NOT NULL, specialty: varchar, yearsOfExperience: int DEFAULT 0, vetLocation: varchar)

CK: **vetID** (PK)

VetWorksAtShelter (**vetID**: char(4), **shelterLocation**: varchar, **shelterName**: varchar)

CK: **vetID** and **shelterLocation** and **shelterName** (PK)

Vaccination (**vaccineName**: varchar, expiryDate: date NOT NULL, **recordID**: char(4) NOT NULL)

CK: **vaccineName** (PK)

HealthRecord (**recordID**: char(4), allergyInfo: varchar, **vetID**: char(4) NOT NULL, **animalID**: char(4) NOT NULL)

CK: **recordID** (PK)

ShelterManagerPerformance = (**kpi**: varchar, salary: varchar)

CK: **kpi**

ShelterManagerInfo=(manName:varchar,**manID**:char[4],since;DATE,kpi:varchar, **shelterLocation**:varchar,**shelterName**:varchar)

CK: **manID**

CK: **shelterLocation** and **shelterName**

Inspector(insName: varchar,**insID**: char[4])

CK: **insID**

Shelter(**shelterLocation**:varchar,capacity:INTEGER,**shelterName**:varchar)

CK: **shelterLocation** and **shelterName**

Inspect(**insID**:char[4],**shelterLocation**:varchar,**shelterName**:varchar,standardsMet?: boolean)

CK: **insID** and **shelterLocation** and **shelterName**

Events\_hosted(eventName:varchar,eventDescription:varchar,cost:varchar, date:DATE,**shelterLocation**:varchar,**shelterName**:varchar)

CK: **eventName** and **shelterLocation** and **shelterName**

## 7. DDL STATEMENTS

```
CREATE TABLE RegisteredAnimal (  
    animalID CHAR[4],  
    name VARCHAR,  
    adopted? BOOLEAN,  
    description VARCHAR,  
    age INTEGER,  
    weight INTEGER,  
    breed VARCHAR,  
    shelterLocation VARCHAR NOT NULL,  
    shelterName VARCHAR NOT NULL,  
    PRIMARY KEY (animalID),  
    FOREIGN KEY (Shelter)  
        REFERENCES Shelter(shelterLocation, shelterName)  
        ON UPDATE CASCADE  
        ON DELETE NO ACTION  
);
```

```
CREATE TABLE Cats (  
    animalID CHAR[4],  
    hasFur? BOOLEAN,  
    social? BOOLEAN,  
    PRIMARY KEY(animalID),  
    FOREIGN KEY (animalID)  
        REFERENCES RegisteredAnimal(animalID)  
        ON UPDATE CASCADE  
        ON DELETE CASCADE  
);
```

```
CREATE TABLE Dogs (  
    animalID CHAR[4],  
    medicallyTrained? BOOLEAN,  
    hasFur? BOOLEAN,  
    PRIMARY KEY(animalID),  
    FOREIGN KEY (animalID)  
        REFERENCES RegisteredAnimal(animalID)  
        ON UPDATE CASCADE  
        ON DELETE CASCADE  
);
```

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```
CREATE TABLE Birds (  
    animalID CHAR[4],  
    beakSize INTEGER,  
    wingSpan INTEGER,  
    color VARCHAR,  
    PRIMARY KEY(animalID),  
    FOREIGN KEY (animalID)  
        REFERENCES RegisteredAnimal(animalID)  
        ON UPDATE CASCADE  
        ON DELETE CASCADE  
);
```

```
CREATE TABLE AdoptersInfo (  
    adopterID CHAR[4],  
    nationalID CHAR[10] UNIQUE,  
    name VARCHAR,  
    phoneNumber INTEGER,  
    email VARCHAR UNIQUE,  
    postalCode VARCHAR,  
    houseNumber VARCHAR,  
    PRIMARY KEY (adopterID),  
    FOREIGN KEY (postalCode)  
        REFERENCES AdoptersLocation(postalCode)  
        ON UPDATE CASCADE  
        ON DELETE SET NULL  
);
```

```
CREATE TABLE AdoptersLocation(  
    postalCode VARCHAR,  
    city VARCHAR,  
    streetName VARCHAR,  
    province VARCHAR,  
    PRIMARY KEY (postalCode)  
);
```

```
CREATE TABLE GetVaccination (  
    animalID CHAR[4],  
    vaccinationName VARCHAR,  
    dateOfVaccination DATE,  
    PRIMARY KEY (animalID, vaccinationName),  
    FOREIGN KEY (animalID)  
        REFERENCES RegisteredAnimal(animalID),  
    FOREIGN KEY (vaccinationName)  
        REFERENCES Vaccination(vaccinationName)  
        ON UPDATE CASCADE  
);
```

```
CREATE TABLE Adopt (  
    animalID INTEGER,  
    adopterID INTEGER,  
    dateOfAdoption DATE,  
    PRIMARY KEY (animalID, adopterID),  
    FOREIGN KEY (animalID)  
        REFERENCES RegisterdAnimal(animalID),  
    FOREIGN KEY(AdopterID)  
        REFERENCES Adopters(adopterID)  
);
```

```
CREATE TABLE Vet (  
    vetID char(4) PRIMARY KEY,  
    name varchar NOT NULL,  
    specialty varchar,  
    yearsOfExperience int DEFAULT 0,  
    vetLocation varchar  
);
```

```
CREATE TABLE VetWorksAtShelter (  
    vetID char(4),  
    shelterLocation varchar,  
    shelterName varchar,  
    PRIMARY KEY (vetID, shelterLocation , shelterName),  
    FOREIGN KEY (vetID) REFERENCES Vet(vetID),  
    FOREIGN KEY (shelterName, shelterLocation) REFERENCES  
Shelter(shelterName, shelterLocation)  
    ON UPDATE CASCADE  
);
```

```
CREATE TABLE Vaccination (  
    vaccineName varchar PRIMARY KEY,  
    expiryDate date NOT NULL,  
    recordID char(4) NOT NULL,  
    FOREIGN KEY (recordID) REFERENCES HealthRecord(recordID)  
);
```

```
CREATE TABLE HealthRecord (  
    recordID char(4) PRIMARY KEY,  
    allergyInfo varchar,  
    vetID char(4) NOT NULL,  
    animalID char(4) NOT NULL,  
    FOREIGN KEY (vetID) REFERENCES Vet(vetID),  
    FOREIGN KEY (animalID) REFERENCES RegisteredAnimal(animalID)  
);
```

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```
CREATE TABLE Volunteer (  
    volunteerID char(4) PRIMARY KEY,  
    name varchar NOT NULL,  
    availableDays char(7),  
    phoneNumber int,  
    FOREIGN KEY (availableDays) REFERENCES  
AvailableDaysRegularVolunteer  
        ON UPDATE CASCADE  
);
```

```
CREATE TABLE AvailableDaysRegularVolunteer(  
    availableDays char(7) PRIMARY KEY,  
    regularVolunteer? boolean  
);
```

```
CREATE TABLE VolunteersAtShelter(  
    volunteerID char(4),  
    shelterLocation varchar,  
    shelterName varchar,  
    since date,  
    PRIMARY KEY (volunteerID, shelterLocation, shelterName),  
    FOREIGN KEY (volunteerID) REFERENCES volunteerID(volunteerID),  
    FOREIGN KEY (shelterName, shelterLocation) REFERENCES  
Shelter(shelterName, shelterLocation)  
        ON UPDATE CASCADE  
);
```

```
CREATE TABLE Inspector(  
    insName: VARCHAR,  
    insID: CHAR(4),  
    PRIMARY KEY (insID)  
);
```

```
CREATE TABLE Shelter(  
    shelterLocation:VARCHAR,  
    capacity:INTEGER,  
    shelterName: VARCHAR,  
    PRIMARY KEY (shelterLocation,shelterName)  
);
```

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```
CREATE TABLE Inspect(  
  insID: CHAR(4),  
  shelterLocation: VARCHAR,  
  shelterName: VARCHAR,  
  standardsMet?: BOOLEAN,  
  PRIMARY KEY (insID,location,shelterName),  
  FOREIGN KEY insID REFERENCES Inspector(insID),  
  FOREIGN KEY (shelterLocation,shelterName) REFERENCES  
  Shelter(shelterLocation,shelterName)  
    ON UPDATE CASCADE  
);
```

```
CREATE TABLE ShelterManagerPerformance(  
  kpi: VARCHAR,  
  salary: VARCHAR,  
  PRIMARY KEY kpi  
);
```

```
CREATE TABLE ShelterManagerInfo(  
  kpi: VARCHAR,  
  manName: VARCHAR,  
  manID: CHAR(4),  
  since: DATE,  
  shelterLocation: VARCHAR UNIQUE NOT NULL,  
  shelterName: VARCHAR UNIQUE NOT NULL,  
  PRIMARY KEY (manID),  
  FOREIGN KEY (shelterLocation,shelterName) REFERENCES Shelter  
    ON UPDATE CASCADE  
);
```

```
CREATE TABLE Events_hosted(  
  eventName: VARCHAR,  
  eventDescription: VARCHAR,  
  cost: VARCHAR,  
  date: DATE,  
  shelterLocation: VARCHAR,  
  shelterName: VARCHAR,  
  PRIMARY KEY (eventName,shelterLocation,shelterName),  
  FOREIGN KEY (shelterLocation,shelterName) REFERENCES Shelter  
    ON UPDATE CASCADE  
);
```

## 8. INSERT STATEMENTS

INSERT

INTO RegisteredAnimal (animalID, name, adopted?, description, age, weight, breed, shelterLocation, shelterName )

VALUES ('C000', 'Smokey', FALSE, 'A very cute cat. Loves to be pet.', 3, 8, 'British Shorthair', '270 Gerrard St E, Toronto, Ontario', 'Lovely Pet Home' ),  
('C001', 'Pinky', FALSE, 'Not a playful cat.', 3, 20, 'Siamese', '270 Gerrard St E, Toronto, Ontario', 'Lovely Pet Home' ),  
('C002', 'Bonbon', TRUE, 'Loves to cuddle and eat.', 3, 15, 'Bengal', '322 Dundas St W, Toronto, Ontario', 'Loving Care Animal Shelter'),  
('C003', 'Bambi', FALSE, 'Bambi loves to be pet.', 1, 8, 'Calico', '10776 King George Boulevard, Surrey, British Columbia', 'Paws and Claws Animal Shelter'),  
('C004', 'Daisy', TRUE, 'Loves to eat. Always hungry', 4, 15, 'Ragdoll', '4455 110 Avenue SE, Calgary, Alberta', 'The Animal Haven' ),  
(D000, 'Spots', TRUE, 'A good boy, lots of energy.', 1, 15, 'Dalmatian', '270 Gerrard St E, Toronto, Ontario', 'Lovely Pet Home' ),  
('D001', 'Jamie', FALSE, 'Playful dog and loves to cuddle', 5, 20, 'Labrador', '270 Gerrard St E, Toronto, Ontario', 'Lovely Pet Home' ),  
('D002', 'Wolfie', FALSE, 'Loves to cuddle.', 3, 15, 'Golden Retriever', '322 Dundas St W, Toronto, Ontario', 'Loving Care Animal Shelter'),  
('D003', 'Luna', FALSE, 'Luna loves when you pet her.', 1, 8, 'Chinese Crested Dog', '10776 King George Boulevard, Surrey, British Columbia', 'Paws and Claws Animal Shelter'),  
('D004', 'Bear', TRUE, 'Loves to eat.', 1, 3, 'Husky', '4455 110 Avenue SE, Calgary, Alberta', 'The Animal Haven' ),  
('B000', 'Coco', FALSE, 'Peaceful bird.', 3, 8, 'Finch', '270 Gerrard St E, Toronto, Ontario', 'Lovely Pet Home' ),  
('B001', 'Bluey', FALSE, 'Speaks a lot. So cute.', 5, 20, 'Macaw', '270 Gerrard St E, Toronto, Ontario', 'Lovely Pet Home' ),  
('B002', 'Jay', FALSE, 'Loves to speak', 3, 15, 'Parrot', '322 Dundas St W, Toronto, Ontario', 'Loving Care Animal Shelter'),  
('B003', 'Raven', FALSE, 'Angry bird', 1, 8, 'Grey parrot', '10776 King George Boulevard, Surrey, British Columbia', 'Paws and Claws Animal Shelter'),  
('B004', 'Kiwi', FALSE, 'Loves to eat. Always hungry', 1, 3, 'Dove', '4455 110 Avenue SE, Calgary, Alberta', 'The Animal Haven' );

INSERT

INTO Cats (animalID, hasFur?, social?)

VALUES ('C000', TRUE, TRUE),  
('C001', TRUE, FALSE),  
('C002', TRUE, TRUE),  
('C003', TRUE, TRUE),  
('C004', TRUE, FALSE);

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```
INSERT
INTO Dogs (animalID, medicallyTrained?, hasFur?: boolean)
VALUES      ('D000', TRUE, TRUE),
            ('D001', FALSE, TRUE),
            ('D002', TRUE, TRUE),
            ('D003', FALSE, FALSE),
            ('D004', FALSE, TRUE);
```

```
INSERT
INTO Birds (animalID, beakSize, wingSpan, color)
VALUES      ('B000', 4, 25, 'White'),
            ('B001', 7, 30, 'Blue'),
            ('B002', 9, 20, 'Green'),
            ('B003', 12, 25, 'Blue'),
            ('B004', 5, 12, 'Grey');
```

```
INSERT
INTO AdoptersInfo (adopterID, nationalID, name, phoneNumber, email, postalCode,
houseNumber)
VALUES      ('A000', '7290920930', 'Jane Smith', '778-123-4567',
            'jane98smith@gmail.com', '123456', 12),
            ('A001', '7599921838', 'Joe Johnson', '644-982-6543',
            'joe.johnson@gmail.com', '123765', 17),
            (2, '7145980938', 'Clark Brown', '235-567-8912',
            'clark.brown456@outlook.com', 'V7TDZ4', 13),
            ('A002', '7899234932', 'Natalia Davis', '522-342-6189',
            'nattyisb32.davis@gmail.com', '34FS67', 912),
            ('A003', '7899980938', 'Jason Ng', '567-123-1212', 'jas65.ng@gmail.com',
            '45A67S8', 789);
```

```
INSERT
INTO AdoptersLocaton(postalCode, city, streetName, province)
VALUES      ('M5J 0A8', 'Toronto', '120 Bremner Blvd', 'Ontario'),
            ('M5J 2N8', 'Toronto', '20 Bay Street', 'Ontario'),
            ('L4W 4Y6', 'Mississauga', '2375 Skymark Avenue', 'Ontario'),
            ('V6T 12T', 'Vancouver', 'Commercial Dr', 'British Columbia'),
            ('N3H 4R7', 'Cambridge', '705 Fountain Street N.', 'Ontario');
```

```
INSERT
INTO Adopt(adopterID, animalID, dateOfAdoption)
VALUES      ('A000', 'C002', '2023-08-23' ),
            ('A001', 'D001', '2023-09-02' ),
            ('A002', 'B002', '2023-10-03' ),
            ('A003', 'B000', '2023-10-11' ),
            ('A004', 'C003', '2023-10-22' );
```



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INSERT

INTO Volunteer (volunteerID, name, availableDays, phoneNumber)

VALUES ('V123', 'Sam Smith', TTTT TTT, 1231231234),  
('V124', 'Clara Yang', TTTT TTT, 1231239999),  
('V125', 'Anna Smith', TTTTFFF, 7781111111),  
('V126', 'Chase Jones', TTTTFFF, 1231231234),  
('V127', 'Larry Miller', FFFFFFFF, 2220004444);

INSERT

INTO AvailableDaysRegularVolunteer (availableDays, regularVolunteer?)

VALUES (TTTTTTT, TRUE),  
(TTTTTTF, TRUE),  
(TTTTFFF, TRUE),  
(TTFFFFFF, TRUE),  
(FFFFFFF, FALSE);

INSERT

INTO VolunteersAtShelter (volunteerID, shelterLocation, shelterName, since)

VALUES ('V123', '270 Gerrard St E, Toronto, Ontario', 'Lovely Pet Home', '2023-11-11'),  
('V124', '322 Dundas St W, Toronto, Ontario', 'Loving Care Animal Shelter',  
'2023-10-27'),  
('V125', '101 Oak Street, Evacuationville, USA', 'Lovely Pet Home',  
'2023-11-11'),  
('V126', '10776 King George Boulevard, Surrey, British Columbia',  
'Paws and Claws Animal Shelter', '2007-01-01'),  
('V127', '4455 110 Avenue SE, Calgary, Alberta', 'The Animal Haven',  
'2010-08-04');

INSERT

INTO Vet (vetID, name, specialty, yearsOfExperience, location)

VALUES ('Ve11', 'Clark Foster', 'Dentistry', 0, 'BC, Canada'),  
('Ve12', 'Clare Lopez', 'Radiology', 0, 'Ontario, Canada'),  
('Ve13', 'Sara Murphey', 'Pathology', 5, 'Texas, USA'),  
('Ve14', 'Karen Morgan', 'Cardiology', 11, 'Florida, USA'),  
('Ve15', 'John Wright', 'Dermatology', 5, 'Alberta, Canada');

INSERT

INTO VetWorksAtShelter(vetID, shelterLocation, shelterName)

VALUES ('Ve11', '270 Gerrard St E, Toronto, Ontario', 'Lovely Pet Home'),  
('Ve12', '322 Dundas St W, Toronto, Ontario', 'Loving Care Animal  
Shelter'),  
('Ve13', '101 Oak Street, Evacuationville, USA', 'Lovely Pet Home'),  
('Ve14', '10776 King George Boulevard, Surrey, British Columbia',  
'Paws and Claws Animal Shelter'),  
('Ve15', '4455 110 Avenue SE, Calgary, Alberta', 'The Animal Haven');

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```
INSERT
INTO Vaccination (vaccineName, expiryDate, recordID)
VALUES      ('Rabies Vaccine', '2045-02-22', 'R123'),
            ('Bordetella Vaccine', '2024-02-10', 'R111'),
            ('Canine Parvovirus Vaccine', '2030-06-06', 'R222'),
            ('Feline Distemper Vaccine', '2034-02-09', 'R333'),
            ('Avian Influenza Vaccine', '2029-09-02', 'R444');
```

```
INSERT
INTO GetVaccination(AnimalID, vaccineName, dateOfVaccination)
VALUES      ('C000', 'Rabies Vaccine', '2022-01-20'),
            ('D001', 'Bordetella Vaccine', '2021-02-04'),
            ('D002', 'Bordetella Vaccine', '2022-09-09'),
            ('D002', 'Feline Distemper Vaccine', '2023-02-09'),
            ('C002', 'Avian Influenza Vaccine', '2023-09-17');
```

```
INSERT
INTO HealthRecord (recordID, allergyInfo, vetID, animalID)
VALUES      ('R123', 'Dairy', Ve11, 'C001'),
            ('R111', 'Pollen', Ve12, 'D002'),
            ('R222', 'Fish', Ve13, 'C002'),
            ('R333', 'Fish', Ve14, 'C003'),
            ('R444', 'Chicken', Ve15, 'D004');
```

```
INSERT
INTO Inspector(insName,insID)
VALUES      ('Selina', 'I001'),
            ('Ece', 'I002'),
            ('Sogand', 'I003'),
            ('Tony', 'I004'),
            ('Zed', 'I005');
```

```
INSERT
INTO Shelter(shelterLocation,capacity,shelterName)
VALUES      ('270 Gerrard St E, Toronto, Ontario', '200', 'Lovely Pet Home'),
            ('322 Dundas St W, Toronto,Ontario', '150', 'Loving Care Animal Shelter'),
            ('101 Oak Street, Evacuationville, USA', '500', 'Lovely Pet Home'),
            ('10776 King George Boulevard, Surrey, British Columbia', '100', 'Paws
and Claws Animal Shelter'),
            ('4455 110 Avenue SE, Calgary, Alberta', '300', 'The Animal Haven'),
            ('234 Willow Lane, Supportville, USA', '500', 'The Animal Haven');
```

```
INSERT
INTO Inspect(insID,shelterLocation,shelterName,standardsMet?)
VALUES      ('I001', '234 Willow Lane, Supportville, USA', 'Lovely Pet Home', TRUE),
            ('I002', '234 Willow Lane, Supportville, USA', 'Lovely Pet Home', TRUE),
```

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```
('I002', '101 Oak Street, Evacuationville, USA', 'The Animal Haven', TRUE),
('I003', '10776 King George Boulevard, Surrey, British Columbia', 'Paws and
Claws Animal Shelter', TRUE),
('I004', '270 Gerrard St E, Toronto, Ontario', 'Lovely Pet Home', TRUE),
('I004', '322 Dundas St W, Toronto, Ontario', 'Loving Care Animal Shelter',
FALSE);
```

```
INSERT
INTO ShelterManagerPerformance(kpi,salary)
VALUES ('AnimalAdoptionRate : 70%', '5000/month'),
       ('AnimalAdoptionRate : 75%', '5500/month'),
       ('AnimalAdoptionRate : 60%', '4000/month'),
       ('AnimalAdoptionRate : 50%', '4000/month'),
       ('AnimalAdoptionRate : 80%', '6000/month');
```

```
INSERT
INTO ShelterManagerInfo(kpi, manName,manID,since,location,shelterName)
VALUES ('AnimalAdoptionRate : 80%', 'Anna' , 'M123', '2023-01-05', '270 Gerrard St
E, Toronto, Ontario','Lovely Pet Home'),
       ('AnimalAdoptionRate : 75%', 'Daniel','M945', '2022-09-27' , '322 Dundas St
W, Toronto, Ontario','Loving Care Animal Shelter'),
       ('AnimalAdoptionRate : 80%', 'Julia' , 'M894', '2022-08-15' , '4455 110 Avenue
SE, Calgary, Alberta','The Animal Haven'),
       ('AnimalAdoptionRate : 50%', 'Dora' , 'M179', '2021-12-27' , '101 Oak Street,
Evacuationville, USA', 'Lovely Pet Home'),
       ('AnimalAdoptionRate:70%', 'Jason', 'M978', '2021-03-05' , '10776 King George
Boulevard, Surrey, British Columbia', 'Paws and Claws Animal Shelter');
```

```
INSERT
INTO Events_hosted(eventName,eventDescription,cost, date,shelterLocation,
shelterName)
VALUES(
'Adoption Party',
'A fun event where you can meet and adopt adorable shelter pets',
'$20 per person',
'2022-05-20'
'10776 King George Boulevard, Surrey, British Columbia',
'Paws and Claws Animal Shelter'),
(
'Pet Play Day',
'Playtime for pets and people with games and activities',
'$10 per person'
'2022-12-24',
'10776 King George Boulevard, Surrey, British Columbia',
'Paws and Claws Animal Shelter'),
(
```

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'Pet Care Workshop',

'Learn how to take good care of your pets, like what to feed them and how to keep them healthy',

'Free',

'2023-03-15'

'101 Oak Street, Evacuationville, USA',

'Lovely Pet Home'),

(

'Happy Reunion Day',

'A special day for families to come back and show off the pets they adopted from the shelter',

'Free for adopters, \$10 per person for others',

'2023-06-30',

'322 Dundas St W, Toronto, Ontario',

'Loving Care Animal Shelter'),

(

'Doggy Costume Contest',

'A fun event where pet owners and their dogs can dress up in creative costumes and compete in a friendly contest'

'\$10 per person',

'2022-10-31',

'4455 110 Avenue SE, Calgary, Alberta',

'The Animal Haven');