Cats Protection is a charitable organisation who promote the welfare of cats and have shelters across the country from which people are able to visit and adopt cats. People are able to browse local shelters as well as those further afield, select a preference on male or female cats, and the age of a cat. This database is of cat adoptions containing information on where the cat was adopted from, where and by whom.

The main entities are User, Cat, Shelter and Adoption and have the following relationships:

A picture containing screenshot

Description automatically generated

DROP TABLE IF EXISTS Adoption;

DROP TABLE IF EXISTS Cat;

DROP TABLE IF EXISTS Shelter;

DROP TABLE IF EXISTS User;

CREATE TABLE User (

username VARCHAR(100) PRIMARY KEY,

name VARCHAR(100),

address VARCHAR(1000),

postcode VARCHAR(100),

email VARCHAR (100),

region VARCHAR(100)

);

CREATE TABLE Shelter(

name VARCHAR (100) PRIMARY KEY,

address VARCHAR (1000),

region VARCHAR (100),

phone INTEGER,

email VARCHAR(100),

capacity INTEGER

);

CREATE TABLE Cat(

catid INTEGER PRIMARY KEY,

name VARCHAR(100),

dateOfEntry DATE,

age INT,

sex BOOLEAN

);

CREATE TABLE Adoption(

user VARCHAR (100),

catid INTEGER,

adoptionDate DATE,

shelter VARCHAR (100),

FOREIGN KEY (user) REFERENCES User(username),

FOREIGN KEY (catid) REFERENCES Cat(catid),

FOREIGN KEY (shelter) REFERENCES Shelter(name),

PRIMARY KEY (user, catid)

);

Our use cases are:

1. An example of a user browsing which shelters in the South West region had female[[1]](#footnote-1) cats over the age of 3 that have been adopted:

SELECT Shelter.name AS shelter FROM Shelter

INNER JOIN Adoption ON Shelter.name = Adoption.shelter

INNER JOIN Cat ON Adoption.catid = Cat.catid

WHERE Shelter.region = 'South West' AND Cat.age > 3 AND Cat.sex = 1;

1. An example of a query by admin in the charity, searching to see which shelters have seen over 5000 cats adopted.

WITH AdoptsOver5000 AS(

SELECT COUNT(Adoption.shelter) AS num, Shelter.name AS shelter FROM Adoption

INNER JOIN Shelter ON Shelter.name = Adoption.shelter

)

SELECT shelter FROM AdoptsOver5000

WHERE num > 5000;

1. As with the 2011 census in part three, the sex of the cats are 0 for male and 1 for female. [↑](#footnote-ref-1)