Group Project: Animal Rescue Database

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Executive Summary

The Hometown Animal Rescue has a rich history of helping animals in our community. Committed to animal welfare, the Hometown Animal Rescue strives to provide all aspects of care to abandoned, neglected, and injured animals. The rescue works to reunite lost pets with their families or seek new families for them, educate the community on humane care and interactions with all animals with the goal of reducing pet overpopulation, and reinforce a standard of living for animals and prevent cruelty. Our open door policy makes every attempt to ensure that no animal is refused shelter.
This document describes a database project targeted to helping the Hometown Animal Rescue better track animals that are surrendered, fostered, medically treated, or adopted. It also provides a robust search capability for potential foster or adoptive parents to search for the best pet to fit into their home. Using the database, the Hometown Animal Rescue can now support the following:

- Perform robust searches so that prospective parents can find the best match for their family, regardless of whether looking to foster or adopt.
- Quickly identify the most frequent foster and adoptive parents, by location, when there is an influx of surrendered animals.
- Track the medical procedures per animal for record keeping. In addition, the rescue can determine if there are trends based on age, size, etc.
- Identify the most and least adoptable breeds of animals.
- Identify the most common sources of rescue animals.
- Track how many animal rescues by time of year as well as fees collected for each adoption.

Detail Project Description

Problem Statement

The Hometown Animal Rescue wants to increase their online presence to make it easier for potential adopters to fill out applications and submit them online. They also want rich search capabilities so that potential adopters can search to find animals that may be a good fit as part of their family. The Hometown Animal Rescue league previously used a paper filing system; however, they have realized that they need to have more information digitized so that it can be searchable. They also would like a better historical system so that they can track metrics annually on the number of adoptions, medical procedures, etc.

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Entities, Attributes, Relationships

The primary entities that need to be included in the Hometown Animal Rescue database include:

- Animals and their characteristics: Size, breed, age, behaviors, etc.
- Adoptive and foster parents and their information: Name, address, phone, whether they have children, etc.
- Sources of animals: Basic sources will be tracked, such as Surrender, Stray, etc.
- Medical procedures provided: Basic procedures will be tracked by Visit, such as spay/neuter, vaccinations, injury treatment, etc. It is important to track the procedures and prescriptions, rather than a lot of detail about where the treatment was provided. The rescue has relationships with several local medical providers.
- Prescriptions given to specific animals: Each prescription given to an animal should be tracked.

When considering the relationships amongst these entities, consider the following:

- Animals are fostered or adopted by Parents
- Sources surrender animals to the rescue
- One or more medical procedures may be performed on an animal
- One or more prescriptions may be prescribed to an animal

Functional Requirements

The database needs to serve as a backend to the Hometown Rescue website. Users should be able to search for animals that meet their preferred criteria, such as breed, age, gender, etc. The database also needs to provide metrics that can be tracked by the rescue, such as number of adoptions/year, most frequent adopters/fosters, most common breeds adopted, etc.

Assumptions

- It is assumed that the rescue does not need to track detailed information about medical providers. They are really only concerned with what medical procedures were provided and what prescriptions were prescribed.
- The rescue is more concerned about tracking the prescriptions prescribed to an animal rather than who prescribed them or what procedure and vet visit they are associated with.
- The rescue does not need to track detailed information about the source of an animal. Many are found as strays and do not have much historical information.
- Rather than determining if an animal's age should be tracked in years or months or weeks, it was decided to have an estimated birth date for each animal, and then the age can be calculated.

- It is assumed that potential adopters and fosters are reviewed by the rescue before they are added to the database.

Adoption Rules for Adopters

Information related to adopters is tracked, such as name, address, whether they have children, etc. Potential adopters must meet various criteria, such as having a fenced-in yard or having an acceptable veterinarian. These criteria are verified before they are entered into the database. Each adopter (whether a single person or part of a family) is assigned a unique ID. Adoption dates and fees must be tracked.

Animal Intake Rules

- One or more animals may be surrendered to the rescue. Each animal will be assigned a unique ID number. ID numbers are not reused for different animals.
- Where possible, information should be gathered about the animal in regards to breed, obedience training, medical history, temperament, appearance, and basic information.
- All animals must be assigned a type, size, and primary color. All animals must be associated with at least one breed, even if the breed is “Unknown.”
- Typically, little is known about an animal’s history. The rescue will only track the type of source for an animal, such as surrendered, stray, etc.

Adoption Rules for Animals

- All animals must be spayed or neutered. This may happen before or after the adoption.
- All animals must be up to date on shots and vaccinations before eligible for adoption.
- An animal must be a minimum age to be adopted.
- An animal returned by an adopter needs to be re-connected with its previous history by linking it to its original ID.

Rules for Foster Parents

Information related to foster parents is tracked, such as name, address, whether they have children, etc. Potential foster parents must meet various criteria, such as having a fenced-in yard or having an acceptable veterinarian. These criteria are verified before they are entered into the database.
Each foster parent (whether a single person or part of a family) is assigned a unique ID. Foster dates must be tracked.

Fees

- A fee will be charged for each adopted animal.
- Different fees will be charged to adopt different types of animals.

Medical Care

- Medical services are tracked as vaccinations, spay/neuter, injury treatment, etc.

Conceptual Database Design

Entities and Attributes

- Animal
  - Animal ID
  - Date of rescue
  - Animal name
  - Gender
  - Estimated birth date
  - Size ID
  - Animal Type ID
  - Primary Color ID
  - Coat Length ID
  - Source ID
  - Animal Type
  - Marking ID
  - Weight
  - Comments
- Source
  - Source ID
  - Source Type
- Parent
  - Parent ID
  - Animal ID
  - Transaction Date
  - Transaction Type
  - Fee
- Prescription Link
  - Prescription ID
  - Animal ID
- Procedure Type
  - Procedure ID
  - Description
- Parents
  - Parent ID
  - Last Name
  - First Name
  - Address 1
  - Address 2
  - City
- Good With Link
  - Animal ID
  - Good With ID
- Good With
  - Good With ID
  - Good With
- Behavior Link
  - Animal ID
  - Behavior ID
- Behavior
  - Behavior ID
  - Behavior
- Size
  - Size ID
  - Size
- Primary Color
  - Primary Color ID
  - Primary Color
- Coat Length
  - Coat Length ID
  - Coat Length
- Marking
  - Marking ID
  - Marking
- Dog Breed Link
  - Animal ID
  - Dog Breed ID
- Dog Breed
  - Dog Breed ID
  - Dog Breed
- Cat Breed Link
  - Animal ID
  - Cat Breed ID
- Cat Breed
  - Cat Breed ID
  - Cat Breed
- Visit Link
  - Visit ID
  - Animal ID
- Visit
  - Visit ID
  - Provider ID
  - Visit Date
  - Procedure ID
- Provider

○ State ○ Zip ○ Phone ○ Children • Animal Type ○ Animal Type ID ○ Animal Type	○ Medical Provider ID ○ Last Name ○ First Name ○ Practice Name • Prescription ○ Prescription ID ○ Prescription Name

Relationships

Entity	Relationship	Connectivity	Entity
Animals	Are	M:N	Good With (entities)
Good With (entities)	Are associated with one or more	N:M	Animals
Animals	Have one or more	M:N	Behaviors
Behaviors	Are associated with one or more	N:M	Animals
Animals	Have a	M:1	Size
Size	Is associated with one or more	1:M	Animals
Animals	Have a	M:1	Primary Color
Primary Color	Is associated with one or more	1:M	Animals
Animals	Have a	M:1	Coat Length
Coat Length	Is associated with one or more	1:M	Animals
Animals	Have a	M:1	Marking
Marking	Is associated with one or more	1:M	Animals
Animals	Are	M:N	Dog Breeds
Dog Breeds	Are associated with one or more	N:M	Animals
Animals	Are	M:N	Cat Breeds
Cat Breeds	Are associated with one or more	N:M	Animals
Animals	Are surrendered by a	M:1	Source
Source	Surrenders one or more	1:M	Animals
Parents	Adopt or foster one or more	M:N	Animals
Animals	Are Cared for by	N:M	Parents
Animals	Attend one or more	M:N	(Vet) Visits
(Vet) Visits	Provide care for one or more	N:M	Animals
(Vet) Visits	Occur at	1:M	Providers
Providers	Offer	M:1	(Vet) Visits
Animals	Are prescribed one or more	1:M	Prescriptions
Prescriptions	Are distributed for	M:1	Animals
(Vet) Visits	Provide care through	1:M	Procedures
Procedures	Performed at	M:1	(Vet) Visits
Animals	Are an	M:1	Animal Type
Animal Type	Is associated with one or more	1:M	Animals

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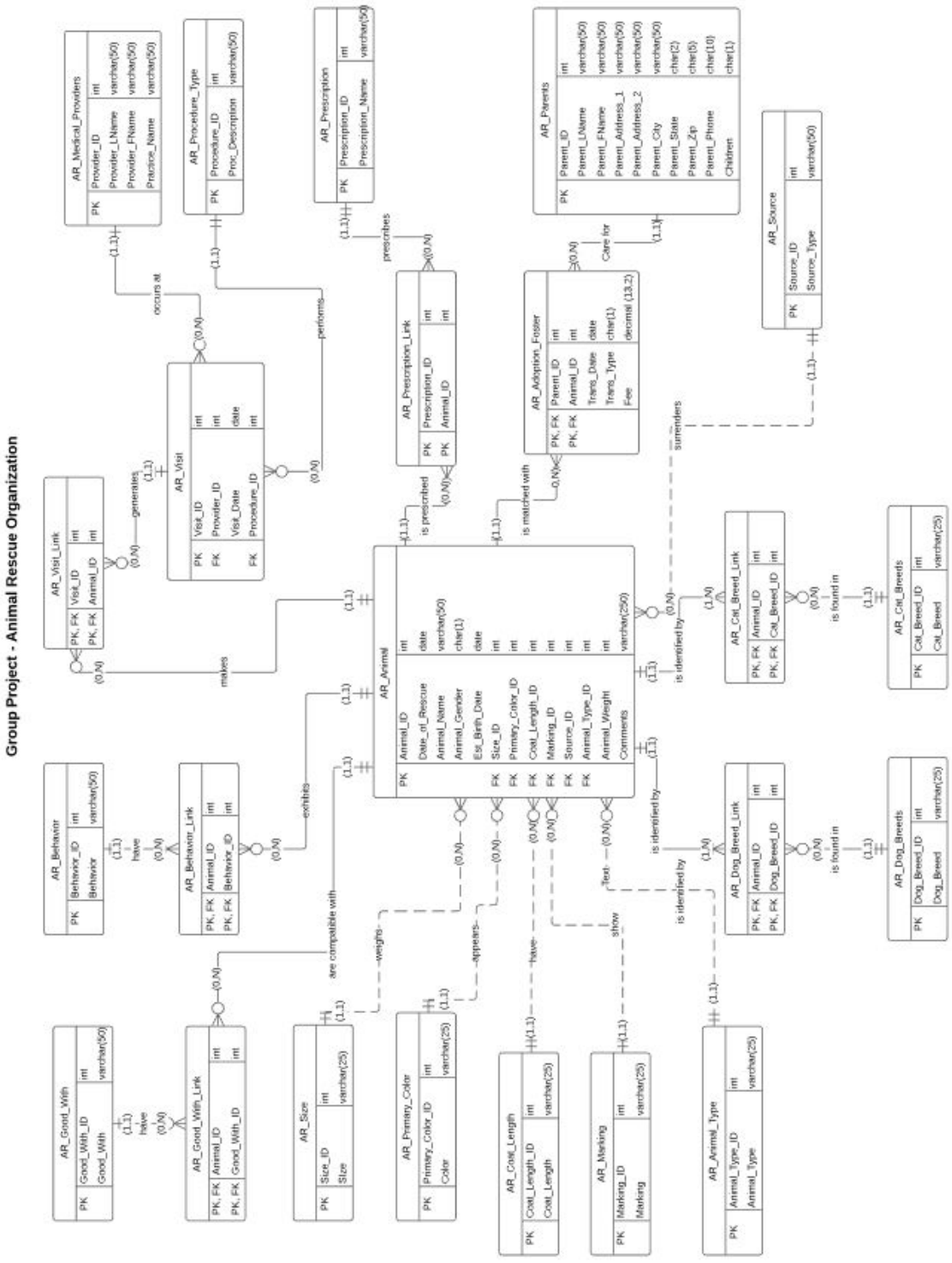
ER Diagram



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Normalization

1st Normal Form

The first step taken to tables in first normal form was to eliminate repeating groups. Originally, there was an Adopters table separate from the Fosters table. However, it was determined that this may lead to a lot of duplicate data, especially since fosters may choose to adopt and adopters may agree to also foster. So, these tables were combined into one table called Parents. The transaction table between Animals and Parents then identifies whether the transaction was an adoption or foster.
In addition, several of the animal characteristics were split out into separate entities to minimize duplicate data. For example, Size, Primary Color, Coat Length, Marking, Animal Type, and Source were all changed to IDs in the Animal table, then referencing individual entities to associate these characteristics.
Additionally, characteristics identified as N:M relationships with Animal were also spilt out. This included Good With, Behavior, Prescription, Visit, Dog Breed, and Cat Breed.

2nd Normal Form

Next, partial dependencies were evaluated to ensure the database was in 2NF. Even in our early database design discussions, there were few, if any, opportunities for partial dependencies because very few tables contained a composite primary key. No significant changes were necessary to meet 2NF.

3rd Normal Form

Finally, transitive dependencies were identified to ensure the database met 3NF. One transitive dependency that was identified is that the City and State can be identified from the Zip in the Parents table. This dependency was kept considering it would make searches more efficient to keep this information in one table.
The Prescription was originally in the Visit table; however, this could be seen as a transitive dependency of the Procedure. It was decided that it was best to associate Prescription to Animal since the rescue is more concerned about tracking the prescriptions taken by an animal than the procedure or visit where the prescription was prescribed.
The following entities and attributes were reflected in the final design:

Animal (**Animal ID**, Date of rescue, Name, Gender, Est Birth Date, Size ID, Animal Type ID, Primary Color ID, Marking ID, Source ID, Animal Type ID, Animal Weight, Comments)
Animal Type (**Animal Type ID**, Animal Type)
Source (**Source ID**, Source Type)
Parents (**Parent ID**, Last Name, First Name, Address 1, Address 2, City, State, Zip, Phone, Children)

Adoption/Foster **(Parent ID, Animal ID,** Transaction Date, Transaction Type, Fee)
Prescription Link (**Prescription ID, Animal ID**)
Prescription (**Prescription ID**, Name)
Procedure Type (**Procedure ID**, Description)
Good With Link (**Animal ID, Good With ID**)
Good With (**Good With ID**, Good With)
Behavior Link (**Behavior ID**, **Animal ID**)
Behavior (**Behavior ID**, Behavior)
Size (**Size ID**, Size)
Primary Color (**Primary Color ID**, Primary Color)
Coat Length (**Coat Length ID**, Coat Length)
Marking (**Marking ID**, Marking)
Dog Breed Link (**Animal ID, Dog Breed ID**)
Dog Breed (**Dog Breed ID**, Dog Breed)
Cat Breed Link (**Animal ID, Cat Breed ID**)
Cat Breed (**Cat Breed ID**, Cat Breed)
Visit Link (**Visit ID, Animal ID**)
Visit (**Visit ID**, Provider ID, Visit Date, Procedure ID, Prescription ID)
Medical Providers (**Provider ID**, Last Name, First Name, Practice Name)

Database Implementation

Database implementation will be provided in a separate SQL file. This section contains the instance charts and some of the database scripts.

Instance Charts

AR_Adoption_Foster (Parent_ID, Animal_ID, Trans_Date, Trans_Type, Fee)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Parent_ID	PK,FK	INT	9	AR_Parent
Animal_ID	PK,FK	INT	9	AR_Animal
Trans_Date		**DATE**		
Trans_Type		**CHAR**	1	
Fee		**DECIMAL**	13.2	

AR_Animal (Animal_ID, Size_ID, Primary_Color_ID, Coat_Length_ID, Marking_ID, Source_ID, Animal_Type_ID, Date_of_Rescure, Animal_Name, Animal_Gender, Est_Birth_Date, Animal_Weight, Comments)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Animal_ID	PK	INT	9	
Size_ID	FK	INT	9	AR_Size
Primary_Color_ID	FK	INT	9	AR_Primary_Color
Coat_Length_ID	FK	INT	9	AR_Coat_Length
Marking_ID	FK	INT	9	AR_Marking
Source_ID	FK	INT	9	AR_Source
Animal_Type_ID	FK	INT	9	AR_Animal_Type

Date_of_Rescure		CHAR	10	
Animal_Name		VARCHAR	50	
Animal_Gender		CHAR	1	
Est_Birth_Date		DATE		
Animal_Weight		INT	9	
Comments		VARCHAR	250	

AR_Animal_Type (Animal_Type_ID, Animal_Type)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Animal_Type_ID	PK	INT	9	
Animal_Type		VARCHAR	25	

AR_Behavior (Behavior_ID, Behavior)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Behavior_ID	PK	INT	9	
Behavior		VARCHAR	50	

AR_Behavior_Link (Animal_ID, Behavior_ID)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Animal_ID	PK,FK	INT	9	AR_Animal
Behavior_ID	PK,FK	INT	9	AR_Behavior

AR_Cat_Breed_Link (Animal_ID, Cat_Breed_ID)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Animal_ID	PK,FK	INT	9	AR_Animal
Cat_Breed_ID	PK,FK	INT	9	AR_Cat_Breeds

AR_Cat_Breeds (Cat_Breed_ID, Cat_Breed)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Cat_Breed_ID	PK	INT	9	
Cat_Breed		VARCHAR	25	

AR_Coat_Length (Coat_Length_ID, Coat_Length)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Coat_Length_ID	PK	INT	9	
Coat_Length		VARCHAR	25	

AR_Dog_Breed_Link (Animal_ID, Dog_Breed_ID)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Animal_ID	PK,FK	INT	9	AR_Animal
Dog_Breed_ID	PK,FK	INT	9	AR_Dog_Breeds

AR_Dog_Breeds (Dog_Breed_ID, Dog_Breed)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Dog_Breed_ID	PK	INT	9	
Dog_Breed		VARCHAR	25	

AR_Good_With (Good_With_ID, Good_With)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Good_With_ID	PK	INT	9	
Good_With		VARCHAR	50	

AR_Good_With_Link (Animal_ID, Good_With_ID)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Animal_ID	PK,FK	INT	9	AR_Animal
Good_With_ID	PK,FK	INT	9	AR_Good_With

AR_Marking (Marking_ID, Marking)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Marking_ID	PK	INT	9	
Marking		VARCHAR	25	

AR_Medical_Providers (Provider_ID, Provider_LName, Provider_FName, Practice_Name)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Provider_ID	PK	INT	9	
Provider_LName		VARCHAR	50	
Provider_FName		VARCHAR	50	
Practice_Name		VARCHAR	50	

AR_Parents (Parent_ID, Parent_LName, Parent_FName, Parent_Address_1, Parent_Address_2, Parent_City, Parent_State, Parent_Zip, Parent_Phone, Children)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Parent_ID	PK	INT	9	
Parent_LName		VARCHAR	50	
Parent_FName		VARCHAR	50	
Parent_Address_1		VARCHAR	50	
Parent_Address_2		VARCHAR	50	
Parent_City		VARCHAR	50	
Parent_State		CHAR	2	
Parent_Zip		CHAR	5	
Parent_Phone		CHAR	10	
Children		CHAR	1	

AR_Prescription (Precription_ID, Prescription_Name)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Precription_ID	PK	INT	9	
Prescription_Name		VARCHAR	50	

AR_Prescription_Link (Animal_ID, Prescription_ID)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Animal_ID	PK,FK	INT	9	AR_Animal
Prescription_ID	PK,FK	INT	9	AR_Prescription

AR_Primary_Color (Primary_Color_ID, Color)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Primary_Color_ID	PK	INT	9	
Color		VARCHAR	25	

AR_Procedure_Type (Procedure_ID, Proc_Description)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Procedure_ID	PK	INT	9	
Proc_Description		VARCHAR	50	

AR_Size (Size_ID, Size)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Size_ID	PK	INT	9	
Size		VARCHAR	25	

AR_Source (Source_ID, Source_Type)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Source_ID	PK	INT	9	
Source_Type		VARCHAR	50	

AR_Visit (Visit_ID, Provider_ID, Procedure_ID, Visit_Date)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Visit_ID	PK	INT	9	
Provider_ID	FK	INT	9	AR_Provider
Procedure_ID	FK	INT	9	AR_Procedure_Type
Visit_Date		DATE		

AR_Visit_Link (Animal_ID, Visit_ID)

Column Name	Key Type (FK / PK)	Data Type	Max Length	FK Reference Table
Animal_ID	PK.FK	INT	9	AR_Animal
Visit_ID	PK.FK	INT	9	AR_Visit

Create Database and Data Insert Scripts

```
CREATE TABLE `AR_Adoption_Foster` (
  `Parent_ID` int(9) NOT NULL,
  `Animal_ID` int(9) NOT NULL,
  `Trans_Date` date NOT NULL,
  `Trans_Type` char(1) NOT NULL,
  `Fee` decimal (13,2) ,
CONSTRAINT AR_Adoption_Foster_PK PRIMARY KEY (Parent_ID, Animal_ID),
CONSTRAINT AR_Adoption_Foster_FK1 FOREIGN KEY (Parent_ID) REFERENCES AR_Parents
(Parent_ID),
CONSTRAINT AR_Adoption_Foster_FK2 FOREIGN KEY (Animal_ID) REFERENCES AR_Animal
(Animal_ID));

INSERT INTO `ar_adoption_foster` (`Parent_ID`, `Animal_ID`, `Trans_Date`,
`Trans_Type`, `Fee`) VALUES
(26802, 419068, '2018-12-01', 'A', 480.00),
(27014, 441980, '2018-09-18', 'F', 268.00),
(27133, 446661, '2019-02-01', 'A', 487.00),
(27173, 445931, '2019-02-10', 'F', 446.00),
(27243, 418803, '2019-02-03', 'A', 432.00),
```

```
(26845, 435005, '2019-04-28', 'A', 355.00),
(27058, 447480, '2019-04-06', 'A', 397.00),
(27109, 443525, '2018-12-01', 'A', 223.00),
(27157, 412349, '2018-09-07', 'F', 336.00),
(27246, 435335, '2019-04-18', 'F', 247.00),
(26896, 363388, '2019-03-05', 'A', 372.00),
(26965, 444780, '2019-01-16', 'A', 139.00),
(27047, 409223, '2019-03-01', 'A', 444.00),
(27214, 448103, '2019-04-22', 'F', 119.00),
(27031, 414800, '2018-11-28', 'A', 468.00),
(27240, 434478, '2018-02-16', 'A', 436.00),
(26888, 443865, '2018-12-18', 'A', 476.00),
(26983, 429298, '2018-12-23', 'F', 357.00),
(26986, 446044, '2019-02-06', 'F', 381.00),
(27009, 442836, '2018-11-20', 'A', 355.00),
(27092, 446855, '2019-02-07', 'F', 120.00),
(26806, 441099, '2018-09-05', 'F', 323.00),
(26878, 447055, '2019-04-06', 'A', 136.00),
(26952, 443866, '2018-11-30', 'A', 426.00),
(27011, 363389, '2019-02-24', 'A', 108.00),
(27077, 431177, '2018-09-05', 'F', 322.00),
(27122, 447197, '2019-02-10', 'A', 344.00),
(27181, 443666, '2018-11-26', 'A', 391.00),
(27230, 446350, '2019-04-23', 'A', 377.00),
(26979, 447917, '2019-03-23', 'A', 411.00);

CREATE TABLE `AR_Animal` (
  `Animal_ID` int(9) NOT NULL UNIQUE,
  `Date_of_Rescue` date NOT NULL,
  `Animal_Name` varchar(50) NOT NULL,
  `Animal_Gender` char(1),
  `Est_Birth_Date` date,
  `Size_ID` int(9),
  `Animal_Type_ID` int(9),
  `Primary_Color_ID` int(9),
  `Coat_Length_ID` int(9),
  `Marking_ID` int(9),
  `Source_ID` int(9),
  `Animal_Weight` int(9),
  `Comments` varchar(250),
CONSTRAINT AR_Animal_PK PRIMARY KEY (Animal_ID),
CONSTRAINT AR_Animal_FK1 FOREIGN KEY (Size_ID) REFERENCES AR_Size (Size_ID),
CONSTRAINT AR_Animal_FK2 FOREIGN KEY (Animal_Type_ID) REFERENCES AR_Animal_Type
(Animal_Type_ID),
CONSTRAINT AR_Animal_FK3 FOREIGN KEY (Primary_Color_ID) REFERENCES
AR_Primary_Color (Primary_Color_ID),
CONSTRAINT AR_Animal_FK4 FOREIGN KEY (Coat_Length_ID) REFERENCES AR_Coat_Length
(Coat_Length_ID),
CONSTRAINT AR_Animal_FK5 FOREIGN KEY (Marking_ID) REFERENCES AR_Marking
(Marking_ID),
```

```
CONSTRAINT AR_Animal_FK6 FOREIGN KEY (Source_ID) REFERENCES AR_Source
(Source_ID));

INSERT INTO `ar_animal` (`Animal_ID`, `Date_of_Rescue`, `Animal_Name`,
`Animal_Gender`, `Est_Birth_Date`, `Size_ID`, `Animal_Type_ID`,
`Primary_Color_ID`, `Coat_Length_ID`, `Marking_ID`, `Source_ID`,
`Animal_Weight`, `Comments`) VALUES
(371753, '2019-02-04', 'ATHENA', 'S', '2011-08-03', 3, 1, 6, 4, 2, 4, 47, 'Text
Goes here'),
(436548, '2018-04-09', 'BABY', 'S', '2015-08-21', 3, 1, 5, 1, 5, 1, 52, 'Text
Goes here'),
(435137, '2019-02-27', 'BAMBAM', 'N', '2012-10-14', 2, 1, 36, 1, 3, 2, 21,
'Text Goes here'),
(420630, '2019-02-24', 'BEAR', 'N', '2013-03-14', 2, 1, 30, 4, 6, 2, 23, 'Text
Goes here'),
(447727, '2019-02-22', 'BERRY', 'N', '2011-11-06', 2, 1, 40, 2, 4, 2, 12, 'Text
Goes here'),
(419068, '2018-11-03', 'BRODY', 'N', '2013-09-09', 2, 1, 14, 2, 3, 2, 14, 'Text
Goes here'),
(441980, '2018-08-24', 'CANELO', 'N', '2016-05-01', 3, 1, 14, 3, 1, 2, 50,
'Text Goes here'),
(446661, '2019-01-15', 'CARDIE', 'S', '2016-08-02', 2, 1, 22, 1, 2, 2, 25,
'Text Goes here'),
(445931, '2018-12-19', 'CHINA', 'S', '2015-01-12', 3, 1, 30, 1, 3, 4, 48, 'Text
Goes here'),
(418803, '2019-01-18', 'CINNAMON', 'S', '2013-01-24', 1, 2, 24, 2, 6, 2, 8,
'Text Goes here'),
(435005, '2019-03-07', 'DAISY', 'S', '2016-02-09', 1, 1, 43, 1, 3, 2, 3, 'Text
Goes here'),
(447480, '2019-02-14', 'DOLLY', 'S', '2019-05-25', 2, 1, 23, 3, 4, 6, 22, 'Text
Goes here'),
(443525, '2018-10-02', 'FACE', 'N', '2013-01-14', 3, 1, 26, 2, 1, 1, 52, 'Text
Goes here'),
(412349, '2018-06-29', 'KASSI', 'S', '2015-08-22', 2, 2, 28, 4, 2, 2, 17, 'Text
Goes here'),
(435335, '2019-02-15', 'KING', 'N', '2016-07-27', 3, 1, 18, 4, 5, 2, 37, 'Text
Goes here'),
(363388, '2019-02-04', 'LADY', 'S', '2014-06-23', 2, 1, 16, 1, 6, 4, 15, 'Text
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(444780, '2018-11-05', 'LUNA', 'S', '2012-10-10', 2, 1, 9, 2, 4, 2, 13, 'Text
Goes here'),
(409223, '2018-12-23', 'MAXTRILLION', 'N', '2016-04-05', 3, 1, 5, 2, 3, 2, 49,
'Text Goes here'),
(448103, '2019-03-07', 'MURPHY', 'S', '2016-12-13', 2, 2, 2, 4, 6, 2, 14, 'Text
Goes here'),
(414800, '2018-11-10', 'MYKA', 'S', '2010-03-03', 2, 2, 42, 1, 5, 2, 22, 'Text
Goes here'),
(434478, '2018-02-01', 'NICO', 'N', '2012-11-13', 3, 1, 6, 4, 3, 2, 45, 'Text
Goes here'),
```

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(443865, '2018-10-11', 'ONYX', 'N', '2014-06-16', 2, 2, 2, 1, 2, 2, 12, 'Text
Goes here'),
(429298, '2018-10-31', 'OSCAR', 'N', '2016-10-26', 2, 2, 2, 3, 1, 2, 14, 'Text
Goes here'),
(446044, '2018-12-22', 'PENNY', 'S', '2011-04-28', 2, 1, 11, 2, 3, 2, 16, 'Text
Goes here'),
(442836, '2018-09-15', 'PEPPER', 'S', '2014-01-20', 2, 1, 2, 3, 6, 2, 22, 'Text
Goes here'),
(446855, '2019-01-23', 'POMPEY', 'N', '2019-11-29', 1, 1, 12, 1, 1, 2, 7, 'Text
Goes here'),
(441099, '2018-07-14', 'PSYCHE', 'S', '2014-05-28', 2, 2, 41, 3, 2, 2, 11,
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(447055, '2019-01-30', 'PUTT PUTT', 'N', '2018-05-28', 3, 1, 3, 1, 4, 1, 41,
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(443866, '2018-10-11', 'PYRAMID', 'S', '2015-11-28', 2, 2, 10, 2, 3, 2, 13,
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(363389, '2019-02-04', 'REESIE', 'S', '2014-04-16', 2, 1, 17, 3, 1, 4, 21,
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(431177, '2018-08-19', 'ROCKY', 'N', '2016-04-16', 3, 1, 16, 2, 5, 5, 42, 'Text
Goes here'),
(447197, '2019-02-03', 'ROXY', 'S', '2016-01-29', 1, 1, 11, 3, 4, 2, 1, 'Text
Goes here'),
(443666, '2018-10-05', 'SASHA', 'S', '2013-06-28', 1, 2, 15, 4, 6, 2, 10, 'Text
Goes here'),
(446350, '2019-03-05', 'TALISMAN', 'S', '2019-02-20', 2, 2, 33, 2, 6, 3, 19,
'Text Goes here'),
(447917, '2019-02-28', 'WINSTON', 'N', '2015-11-10', 1, 2, 2, 1, 6, 2, 8, 'Text
Goes here'),
(440331, '2018-07-14', 'CHILI', 'N', '2010-01-10', 1, 2, 25, 2, 5, 2, 2, 'Text
Goes here'),
(440309, '2018-07-14', 'MERINGUE', 'S', '2017-02-05', 1, 2, 25, 3, 5, 2, 5,
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(440632, '2018-07-20', 'LAURA', 'S', '2017-11-18', 2, 2, 27, 3, 2, 2, 22, 'Text
Goes here'),
(440923, '2018-07-27', 'SKIPPER', 'S', '2010-06-07', 2, 2, 26, 4, 5, 4, 16,
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(444008, '2018-10-15', 'PAT', 'N', '2011-07-29', 1, 2, 24, 1, 6, 1, 10, 'Text
Goes here'),
(445838, '2018-12-16', 'BETHY', 'S', '2017-07-27', 1, 2, 8, 2, 1, 1, 4, 'Text
Goes here'),
(446987, '2019-01-28', 'ROLY', 'N', '2012-08-29', 3, 2, 31, 3, 5, 2, 32, 'Text
Goes here'),
(446988, '2019-01-28', 'MEGA', 'S', '2013-01-07', 2, 2, 2, 1, 2, 2, 22, 'Text
Goes here'),
(447171, '2019-02-02', 'LAYMAN', 'N', '2011-08-26', 2, 2, 15, 4, 1, 2, 14,
'Text Goes here'),
(447281, '2019-02-06', 'JIGGLES', 'S', '2010-07-08', 1, 2, 20, 4, 5, 1, 1,
'Text Goes here'),
(446152, '2019-02-17', 'NATASHA', 'S', '2017-01-18', 2, 2, 20, 2, 4, 5, 21,
'Text Goes here'),
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(446153, '2019-02-17', 'BORIS', 'N', '2010-10-09', 2, 2, 20, 3, 5, 5, 24, 'Text
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(447809, '2019-02-25', 'GILBERT', 'N', '2011-01-13', 2, 2, 29, 1, 2, 1, 16,
'Text Goes here'),
(447910, '2019-02-28', 'ANGEL', 'N', '2016-01-28', 1, 2, 15, 3, 3, 1, 6, 'Text
Goes here'),
(437083, '2019-03-09', 'SAN ANTONIO', 'N', '2017-03-18', 1, 2, 20, 2, 4, 2, 7,
'Text Goes here'),
(448194, '2019-03-10', 'GLEN', 'N', '2013-01-28', 3, 2, 24, 3, 2, 1, 31, 'Text
Goes here'),
(433407, '2017-12-26', 'SCOOBY', 'N', '2010-12-25', 3, 1, 4, 2, 1, 1, 40, 'Text
Goes here'),
(438599, '2018-06-02', 'RAVI', 'S', '2016-02-29', 2, 1, 1, 3, 1, 1, 22, 'Text
Goes here'),
(443453, '2018-09-30', 'SNOW GOOSE', 'S', '2014-03-01', 2, 1, 19, 3, 3, 1, 15,
'Text Goes here'),
(444698, '2018-11-02', 'PHILLIP', 'N', '2010-11-02', 2, 1, 18, 3, 1, 1, 15,
'Text Goes here'),
(444815, '2018-11-06', 'FIGURO', 'N', '2017-03-02', 3, 1, 7, 3, 3, 1, 39, 'Text
Goes here'),
(444914, '2018-11-10', 'SPAGHETTI', 'S', '2014-05-28', 2, 1, 2, 2, 2, 1, 24,
'Text Goes here'),
(445367, '2018-11-28', 'SKY', 'S', '2014-07-21', 3, 1, 3, 1, 2, 1, 37, 'Text
Goes here'),
(446185, '2018-12-28', 'GORDON', 'N', '2016-11-09', 2, 1, 21, 3, 2, 1, 13,
'Text Goes here'),
(446732, '2019-01-18', 'WINGNUT', 'N', '2019-04-25', 2, 1, 11, 3, 3, 1, 19,
'Text Goes here'),
(446969, '2019-01-27', 'BAILEY', 'N', '2013-05-06', 2, 1, 2, 3, 2, 1, 18, 'Text
Goes here'),
(443766, '2019-02-07', 'GATOR', 'N', '2019-01-23', 4, 1, 13, 1, 4, 3, 74, 'Text
Goes here'),
(447326, '2019-02-08', 'TWIST', 'N', '2017-12-26', 3, 1, 3, 2, 3, 1, 47, 'Text
Goes here'),
(447544, '2019-02-15', 'NICKITO', 'N', '2018-09-12', 2, 1, 13, 4, 2, 1, 20,
'Text Goes here'),
(448030, '2019-03-04', 'REGINA', 'S', '2013-12-28', 2, 1, 32, 1, 6, 1, 19,
'Text Goes here'),
(446898, '2019-03-16', 'FLASH', 'N', '2017-05-13', 3, 1, 3, 2, 6, 5, 43, 'Text
Goes here');

CREATE TABLE `AR_Animal_Type` (
  `Animal_Type_ID` int(9) NOT NULL,
  `Animal_Type` varchar(25) NOT NULL,
CONSTRAINT AR_Animal_Type_PK PRIMARY KEY (Animal_Type_ID));

INSERT INTO `ar_animal_type` (`Animal_Type_ID`, `Animal_Type`) VALUES
(1, 'Cat'),
(2, 'Dog'),
(3, 'Other');
```

```
CREATE TABLE `AR_Behavior` (
  `Behavior_ID` int(9) NOT NULL,
  `Behavior` varchar(50) NOT NULL,
CONSTRAINT AR_Behavior_PK PRIMARY KEY (Behavior_ID));

INSERT INTO `ar_behavior` (`Behavior_ID`, `Behavior`) VALUES
(1, 'Confident'),
(2, 'Extremely Trainable'),
(3, 'Great Companion'),
(4, 'Dominant'),
(5, 'Energetic'),
(6, 'Nervous'),
(8, 'Friendly'),
(9, 'Calm'),
(10, 'Protective'),
(11, 'Loyal'),
(12, 'Cuddly'),
(13, 'Shy'),
(14, 'Family Friendly'),
(15, 'Aggressive'),
(16, 'Playful'),
(17, 'Vocal'),
(18, 'Aloof');

CREATE TABLE `AR_Behavior_Link` (
  `Animal_ID` int(9) NOT NULL,
  `Behavior_ID` int(9) NOT NULL,
CONSTRAINT AR_Behavior_Link_PK PRIMARY KEY (Animal_ID, Behavior_ID),
CONSTRAINT AR_Behavior_Link_FK1 FOREIGN KEY (Animal_ID) REFERENCES AR_Animal
(Animal_ID),
CONSTRAINT AR_Behavior_Link_FK2 FOREIGN KEY (Behavior_ID) REFERENCES
AR_Behavior (Behavior_ID));

INSERT INTO `ar_behavior_link` (`Animal_ID`, `Behavior_ID`) VALUES
(412349, 1),
(414800, 3),
(418803, 7),
(429298, 5),
(431177, 4),
(433407, 4),
(434478, 4),
(436548, 5),
(437083, 4),
(438599, 4),
(440309, 3),
(440331, 2),
(440632, 2),
(440923, 5),
(441099, 4),
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(441980, 8),
(442836, 4),
(443666, 6),
(443865, 2),
(443866, 6),
(444008, 4),
(445838, 6),
(446152, 8),
(446153, 2),
(446350, 6),
(446855, 7),
(446987, 5),
(446988, 4),
(447171, 6),
(447281, 8),
(447809, 7),
(447910, 3),
(447917, 2),
(448103, 2),
(448194, 3);

CREATE TABLE `AR_Cat_Breeds` (
  `Cat_Breed_ID` int(9) NOT NULL,
  `Cat_Breed` varchar(25) NOT NULL,
CONSTRAINT AR_Cat_Breeds_PK PRIMARY KEY (Cat_Breed_ID));

INSERT INTO `ar_cat_breeds` (`Cat_Breed_ID`, `Cat_Breed`) VALUES
(1, 'DOMESTIC SH'),
(2, 'SIAMESE'),
(3, 'DOMESTIC LH');

CREATE TABLE `AR_Cat_Breed_Link` (
  `Animal_ID` int(9),
  `Cat_Breed_ID` int(9),
CONSTRAINT AR_Cat_Breed_Link_PK PRIMARY KEY (Animal_ID, Cat_Breed_ID),
CONSTRAINT AR_Cat_Breed_Link_FK1 FOREIGN KEY (Animal_ID) REFERENCES AR_Animal
(Animal_ID),
CONSTRAINT AR_Cat_Breed_Link_FK2 FOREIGN KEY (Cat_Breed_ID) REFERENCES
AR_Cat_Breeds (Cat_Breed_ID));

INSERT INTO `ar_cat_breed_link` (`Animal_ID`, `Cat_Breed_ID`) VALUES
(412349, 1),
(414800, 1),
(418803, 1),
(429298, 1),
(437083, 1),
(440309, 2),
(440331, 2),
(440632, 2),
(440923, 2),
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(441099, 2),
(443666, 1),
(443865, 1),
(443866, 1),
(444008, 1),
(445838, 1),
(446152, 1),
(446153, 1),
(446350, 1),
(446855, 1),
(446987, 1),
(446988, 1),
(447171, 1),
(447281, 1),
(447809, 1),
(447910, 1),
(447917, 1),
(448103, 3),
(448194, 3);

CREATE TABLE `AR_Coat_Length` (
  `Coat_Length_ID` int(9) NOT NULL,
  `Coat_Length` varchar(25) NOT NULL,
CONSTRAINT AR_Coat_Length_PK PRIMARY KEY (Coat_Length_ID));

INSERT INTO `ar_coat_length` (`Coat_Length_ID`, `Coat_Length`) VALUES
(1, 'Short'),
(2, 'Medium'),
(3, 'Long'),
(4, 'Undetermined');

CREATE TABLE `AR_Dog_Breeds` (
  `Dog_Breed_ID` int(9) NOT NULL,
  `Dog_Breed` varchar(25) NOT NULL,
CONSTRAINT AR_Dog_Breeds_PK PRIMARY KEY (Dog_Breed_ID));

INSERT INTO `ar_dog_breeds` (`Dog_Breed_ID`, `Dog_Breed`) VALUES
(4, 'AM PIT BULL TER'),
(5, 'MASTIFF'),
(6, 'BOXER'),
(7, 'BOXER / MIX'),
(8, 'LABRADOR RETR / MIX'),
(9, 'BOXER / POINTER'),
(10, 'AM PIT BULL TER / WEIMARA'),
(11, 'DOGO ARGENTINO'),
(12, 'BULLMASTIFF / MIX'),
(13, 'AMERICAN STAFF'),
(14, 'AM PIT BULL TER / MIX'),
(15, 'DOBERMAN PINSCH / LABRADO'),
(16, 'ROTTWEILER'),
```

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(17, 'CHOW CHOW'),
(18, 'LABRADOR RETR'),
(19, 'AMER BULLDOG'),
(20, 'AMER BULLDOG / ROTTWEILER'),
(21, 'CATAHOULA'),
(22, 'SHIH TZU / MIX'),
(23, 'POINTER / BOXER');

CREATE TABLE `AR_Dog_Breed_Link` (
  `Animal_ID` int(9),
  `Dog_Breed_ID` int(9),
CONSTRAINT AR_Dog_Breed_Link_PK PRIMARY KEY (Animal_ID, Dog_Breed_ID),
CONSTRAINT AR_Dog_Breed_Link_FK1 FOREIGN KEY (Animal_ID) REFERENCES AR_Animal
(Animal_ID),
CONSTRAINT AR_Dog_Breed_Link_FK2 FOREIGN KEY (Dog_Breed_ID) REFERENCES
AR_Dog_Breeds (Dog_Breed_ID));

INSERT INTO `ar_dog_breed_link` (`Animal_ID`, `Dog_Breed_ID`) VALUES
(363388, 15),
(363389, 15),
(371753, 15),
(409223, 12),
(419068, 7),
(420630, 19),
(431177, 4),
(433407, 4),
(434478, 4),
(435137, 20),
(435335, 14),
(436548, 5),
(438599, 4),
(441980, 4),
(442836, 4),
(443453, 4),
(443525, 4),
(443766, 16),
(444698, 6),
(444780, 8),
(444815, 4),
(444914, 9),
(445367, 10),
(445931, 11),
(446044, 4),
(446185, 4),
(446661, 4),
(446732, 13),
(446969, 14),
(447055, 13),
(447197, 4),
(447326, 6),
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(447480, 14),
(447544, 17),
(447727, 18);

CREATE TABLE `AR_Good_With` (
  `Good_With_ID` int(9) NOT NULL,
  `Good_With` varchar(50) NOT NULL,
CONSTRAINT AR_Good_With_PK PRIMARY KEY (Good_With_ID));

INSERT INTO `ar_good_with` (`Good_With_ID`, `Good_With`) VALUES
(1, 'Children'),
(2, 'Seniors'),
(3, 'Adults'),
(4, 'Other Pets');

CREATE TABLE `AR_Good_With_Link` (
  `Animal_ID` int(9),
  `Good_With_ID` int(9),
CONSTRAINT AR_Good_With_Link_PK PRIMARY KEY (Animal_ID, Good_With_ID),
CONSTRAINT AR_Good_With_Link_FK1 FOREIGN KEY (Animal_ID) REFERENCES AR_Animal
(Animal_ID),
CONSTRAINT AR_Good_With_Link_FK2 FOREIGN KEY (Good_With_ID) REFERENCES
AR_Good_With (Good_With_ID));

INSERT INTO `ar_good_with_link` (`Animal_ID`, `Good_With_ID`) VALUES
(363388, 3),
(363389, 4),
(371753, 3),
(409223, 2),
(412349, 4),
(414800, 4),
(418803, 4),
(419068, 5),
(420630, 3),
(429298, 4),
(431177, 3),
(433407, 1),
(434478, 4),
(435005, 4),
(435137, 2),
(435335, 2),
(436548, 5),
(437083, 2),
(438599, 1),
(440309, 3),
(440331, 4),
(440632, 4),
(440923, 4),
(441099, 2),
(441980, 1),
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(442836, 4),
(443453, 2),
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(443865, 2),
(443866, 1),
(444008, 3),
(444698, 1),
(444780, 4),
(444815, 1),
(444914, 5),
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(446044, 3),
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(446153, 4),
(446185, 2),
(446350, 1),
(446661, 5),
(446732, 4),
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(446898, 1),
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(447055, 4),
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(447727, 5),
(447809, 1),
(447910, 2),
(447917, 4),
(448030, 4),
(448103, 4),
(448194, 5);

CREATE TABLE `AR_Marking` (
  `Marking_ID` int(9) NOT NULL,
  `Marking` varchar(25) NOT NULL,
CONSTRAINT AR_Marking_PK PRIMARY KEY (Marking_ID));

INSERT INTO `ar_marking` (`Marking_ID`, `Marking`) VALUES
(1, 'Face'),
(2, 'Front Paws'),
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(3, 'Back Paws'),
(4, 'Coat'),
(5, 'Tail'),
(6, 'Ears'),
(7, 'Calico'),
(8, 'Tabby'),
(9, 'Spots'),
(10, 'Stripes'),
(11, 'Tortishell');

CREATE TABLE `AR_Medical_Providers` (
  `Provider_ID` int(9) NOT NULL,
  `Provider_LName` varchar(50) NOT NULL,
  `Provider_FName` varchar(50),
  `Practice_Name` varchar(50),
CONSTRAINT AR_Medical_Providers_PK PRIMARY KEY (Provider_ID));

INSERT INTO `ar_medical_providers` (`Provider_ID`, `Provider_LName`,
`Provider_FName`, `Practice_Name`) VALUES
(1, 'Mortenson', 'Ron', 'Animal Housecalls'),
(2, 'McGregor', 'Karen', 'Vet to Pet Mobile Pet Services'),
(3, 'Johnson', 'Stuart', 'Mountain View Animal Hospital'),
(4, 'Andrews', 'Gary', 'Valley Animal Hospital'),
(5, 'Clark', 'James', 'Southwoods Veterinary Services'),
(6, 'Kennedy', 'Susan', 'Banfield Pet Hospital'),
(7, 'Sturgis', 'Alison', 'Thrive Animal Clinic'),
(8, 'Shuford', 'Scott', 'Garden Creek Pet Clinic'),
(9, 'Burnett', 'Kendra', 'Downtown Veterinary Specialists'),
(10, 'Blackwell', 'Megan', 'All Paws Pet Hospital');

CREATE TABLE `AR_Parents` (
  `Parent_ID` int(9) NOT NULL UNIQUE,
  `Parent_LName` varchar(50) NOT NULL,
  `Parent_FName` varchar(50),
  `Parent_Address_1` varchar(50),
  `Parent_Address_2` varchar(50),
  `Parent_City` varchar(50),
  `Parent_State` char(2),
  `Parent_Zip` char(5),
  `Parent_Phone` char(10),
  `Children` char(1),
CONSTRAINT AR_Parents_PK PRIMARY KEY (Parent_ID));

INSERT INTO `ar_parents` (`Parent_ID`, `Parent_LName`, `Parent_FName`,
`Parent_Address_1`, `Parent_Address_2`, `Parent_City`, `Parent_State`,
`Parent_Zip`, `Parent_Phone`, `Children`) VALUES
(27230, 'Palaia', 'Alpha', '43496 Commercial Dr ', 'Appt # 29', 'Cherry Hill',
'NJ', '8003', '856-312-26', '4'),
(27181, 'Husser', 'Selma', '9 State Highway 57 ', 'Appt # 22', 'Jersey City',
'NJ', '7306', '201-991-83', '2'),
```

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(27122, 'Louissant', 'Sheron', '97 E 3rd St ', 'Appt # 9', 'Long Island City',
'NY', '11101', '718-976-86', '1'),
(27077, 'Nabours', 'Adelina', '80 Pittsford Victor Rd ', 'Appt # 9',
'Cleveland', 'OH', '44103', '216-230-48', '1'),
(27011, 'Fillingim', 'Skye', '25 Minters Chapel Rd ', 'Appt # 9',
'Minneapolis', 'MN', '55401', '612-508-26', '2'),
(26952, 'Toyama', 'Barrett', '4252 N Washington Ave ', 'Appt # 9', 'Kennedale',
'TX', '76060', '817-765-57', '0'),
(26878, 'Riopelle', 'Talia', '1 N Harlem Ave ', 'Appt # 9', 'Orange', 'NJ',
'7050', '973-245-21', '4'),
(26806, 'Klonowski', 'Karl', '76 Brooks St ', 'Appt # 9', 'Flemington', 'NJ',
'8822', '908-877-61', '4'),
(27092, 'Stuer', 'Lashawnda', '7422 Martin Ave ', 'Appt # 8', 'Toledo', 'OH',
'43607', '419-588-87', '2'),
(27009, 'Duenas', 'Kimberlie', '8100 Jacksonville Rd ', 'Appt # 7', 'Hays',
'KS', '67601', '785-629-85', '0'),
(26986, 'Karpel', 'Salena', '1 Garfield Ave ', 'Appt # 7', 'Canton', 'OH',
'44707', '330-791-85', '4'),
(26983, 'Saulter', 'Eladia', '3958 S Dupont Hwy ', 'Appt # 7', 'Ramsey', 'NJ',
'7446', '201-474-49', '4'),
(26888, 'Maybury', 'Marti', '4 Warehouse Point Rd ', 'Appt # 7', 'Chicago',
'IL', '60638', '773-775-45', '4'),
(27240, 'Tillotson', 'Catalina', '3338 A Lockport Pl ', 'Appt # 6', 'Margate
City', 'NJ', '8402', '609-373-33', '1'),
(27031, 'Keetch', 'Garry', '5 Green Pond Rd ', 'Appt # 4', 'Southampton', 'PA',
'18966', '215-979-87', '0'),
(27214, 'Dewar', 'Izetta', '2 W Scyene Rd ', 'Appt # 3', 'Baltimore', 'MD',
'21217', '410-473-17', '3'),
(27047, 'Aquas', 'Judy', '8977 Connecticut Ave Nw ', 'Appt # 3', 'Niles', 'MI',
'49120', '269-756-72', '3'),
(26965, 'Gesick', 'Rebecka', '2026 N Plankinton Ave ', 'Appt # 3', 'Austin',
'TX', '78754', '512-213-85', '0'),
(26896, 'Weirather', 'Daren', '9 N College Ave ', 'Appt # 3', 'Milwaukee',
'WI', '53216', '414-959-25', '4'),
(27246, 'Harabedian', 'Lai', '1933 Packer Ave ', 'Appt # 2', 'Novato', 'CA',
'94945', '415-423-32', '2'),
(27157, 'Walthall', 'Hubert', '95 Main Ave ', 'Appt # 2', 'Barberton', 'OH',
'44203', '330-903-13', '3'),
(27109, 'Zepp', 'Vincenza', '395 S 6th St ', 'Appt # 2', 'El Cajon', 'CA',
'92020', '619-603-51', '0'),
(27058, 'Schirpke', 'Goldie', '34 Saint George Ave ', 'Appt # 2', 'Bangor',
'ME', '4401', '207-295-75', '0'),
(26802, 'Bolognia', 'Brock', '4486 W O St ', 'Appt # 1', 'New York', 'NY',
'10003', '212-402-92', '3'),
(27014, 'Acey', 'Geoffrey', '7 West Ave ', 'Appt # 1', 'Palatine', 'IL',
'60067', '847-222-17', '1'),
(27133, 'Drymon', 'Jennie', '63728 Poway Rd ', 'Appt # 1', 'Scranton', 'PA',
'18509', '570-218-48', '2'),
(27173, 'Kiel', 'Virgie', '76598 Rd  I 95 ', 'Appt # 1', 'Denver', 'CO',
'80216', '303-776-75', '2'),
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(27243, 'Ankeny', 'Thaddeus', '5 Washington St ', 'Appt # 1', 'Roseville',
'CA', '95678', '916-920-35', '2'),
(26845, 'Giguere', 'Wilda', '1747 Calle Amanecer ', 'Appt # 2', 'Anchorage',
'AK', '99501', '907-870-55', '4');

CREATE TABLE `AR_Prescription` (
  `Prescription_ID` int(9) NOT NULL,
  `Prescription_Name` varchar(50) NOT NULL,
CONSTRAINT AR_Prescription_PK PRIMARY KEY (Prescription_ID));

INSERT INTO `ar_prescription` (`Prescription_ID`, `Prescription_Name`) VALUES
(1, 'doxcycline'),
(2, 'ivermectin'),
(3, 'prednisone'),
(4, 'tramadol'),
(5, 'diazepam'),
(6, 'insulin'),
(7, 'drontal feline'),
(8, 'capilex');

CREATE TABLE `AR_Prescription_Link` (
  `Prescription_ID` int(9),
  `Animal_ID` int(9),
CONSTRAINT AR_Prescription_Link_PK PRIMARY KEY (Animal_ID, Prescription_ID),
CONSTRAINT AR_Prescription_Link_FK1 FOREIGN KEY (Prescription_ID) REFERENCES
AR_Prescription (Prescription_ID),
CONSTRAINT AR_Prescription_Link_FK2 FOREIGN KEY (Animal_ID) REFERENCES
AR_Animal (Animal_ID));

INSERT INTO `ar_prescription_link` (`Prescription_ID`, `Animal_ID`) VALUES
(1, 433407),
(1, 441980),
(1, 444698),
(2, 363388),
(2, 444780),
(2, 445367),
(3, 371753),
(3, 420630),
(3, 443453),
(3, 443866),
(3, 446044),
(3, 446153),
(4, 434478),
(4, 435335),
(4, 441099),
(4, 443766),
(4, 447281),
(5, 431177),
(5, 436548),
(5, 440309),
```

```
(5, 445931),
(5, 447171),
(6, 418803),
(6, 442836),
(6, 445838),
(6, 447910),
(7, 414800),
(7, 437083),
(7, 443666),
(7, 444008),
(7, 446350),
(7, 446855),
(7, 446987),
(7, 447809),
(8, 440923),
(8, 446152),
(8, 446988),
(8, 447917);

CREATE TABLE `AR_Primary_Color` (
  `Primary_Color_ID` int(9) NOT NULL,
  `Color` varchar(25) NOT NULL,
CONSTRAINT AR_Primary_Color_PK PRIMARY KEY (Primary_Color_ID));

INSERT INTO `ar_primary_color` (`Primary_Color_ID`, `Color`) VALUES
(1, 'WHITE / BROWN'),
(2, 'BLACK / WHITE'),
(3, 'TAN / WHITE'),
(4, 'BEIGE'),
(5, 'BRINDLE'),
(6, 'TAN'),
(7, 'FAWN'),
(8, 'CALICO'),
(9, 'BLACK'),
(10, 'TORTIE / WHITE'),
(11, 'BLUE'),
(12, 'GRAY TAB'),
(13, 'BLACK / BROWN'),
(14, 'BROWN'),
(15, 'BRN TABBY'),
(16, 'BROWN / WHITE'),
(17, 'BROWN / TAN'),
(18, 'BRINDLE / WHITE'),
(19, 'BROWN / GRAY'),
(20, 'BRN TABBY / WHITE'),
(21, 'BLUE / WHITE'),
(22, 'BLUE / BRINDLE'),
(23, 'WHITE / BLACK'),
(24, 'ORANGE'),
(25, 'FLAME PT'),
```

```
(26, 'GRAY'),
(27, 'BROWN / SILVER'),
(28, 'BRN TORBI / WHITE'),
(29, 'SLVR TABBY / WHITE'),
(30, 'WHITE'),
(31, 'GRAY TAB / WHITE'),
(32, 'BLUE MERLE / BROWN'),
(33, 'TAB CALICO / WHITE'),
(34, 'GRAY / WHITE'),
(35, 'TRICOLOR');

CREATE TABLE `AR_Procedure_Type` (
  `Procedure_ID` int(9) NOT NULL,
  `Proc_Description` varchar(50) NOT NULL,
CONSTRAINT AR_Procedure_Type_PK PRIMARY KEY (Procedure_ID));

INSERT INTO `ar_procedure_type` (`Procedure_ID`, `Proc_Description`) VALUES
(1, 'spay'),
(2, 'neuter'),
(3, 'rabies vaccination'),
(4, 'deworming'),
(5, 'heartworm test'),
(6, 'booster'),
(7, 'feline leukemia vaccination'),
(8, 'kennel cough vaccination'),
(9, 'injury'),
(10, 'infection');

CREATE TABLE `AR_Size` (
  `Size_ID` int(9) NOT NULL,
  `SIze` varchar(25) NOT NULL,
CONSTRAINT AR_Size_PK PRIMARY KEY (Size_ID));

INSERT INTO `ar_size` (`Size_ID`, `SIze`) VALUES
(1, 'SMALL'),
(2, 'MED'),
(3, 'LARGE'),
(4, 'X-LRG');

CREATE TABLE `AR_Source` (
  `Source_ID` int(9) NOT NULL,
  `Source_Type` varchar(50) NOT NULL,
CONSTRAINT AR_Source_PK PRIMARY KEY (Source_ID));

INSERT INTO `ar_source` (`Source_ID`, `Source_Type`) VALUES
(1, 'STRAY'),
(2, 'OWNER SUR'),
(3, 'FOSTER'),
(4, 'CONFISCATE'),
(5, 'RETURN'),
```

```
(6, 'TRANSFER');

CREATE TABLE `AR_Visit` (
  `Visit_ID` int(9),
  `Provider_ID` int(9),
  `Visit_Date` date,
  `Procedure_ID` int(9),
CONSTRAINT AR_Visit_PK PRIMARY KEY (Visit_ID),
CONSTRAINT AR_Visit_FK1 FOREIGN KEY (Provider_ID) REFERENCES
AR_Medical_Providers (Provider_ID),
CONSTRAINT AR_Visit_FK2 FOREIGN KEY (Procedure_ID) REFERENCES AR_Procedure_Type
(Procedure_ID));

INSERT INTO `ar_visit` (`Visit_ID`, `Provider_ID`, `Visit_Date`,
`Procedure_ID`) VALUES
(1, 6, '2019-02-27', 2),
(2, 8, '2018-12-05', 3),
(3, 4, '2019-03-16', 4),
(4, 10, '2019-03-17', 5),
(5, 9, '2019-01-15', 3),
(6, 1, '2019-02-01', 2),
(7, 2, '2019-02-25', 6),
(8, 4, '2019-02-16', 4),
(9, 3, '2019-02-28', 3),
(10, 7, '2019-03-25', 2),
(11, 8, '2018-10-18', 5),
(12, 9, '2018-09-13', 4),
(13, 4, '2018-11-02', 3),
(14, 7, '2019-02-24', 10),
(15, 5, '2018-11-08', 3),
(16, 2, '2018-11-22', 2),
(17, 9, '2018-12-12', 4),
(18, 5, '2019-01-17', 3),
(19, 9, '2019-03-14', 5),
(20, 7, '2019-01-24', 2),
(21, 6, '2019-03-09', 4),
(22, 5, '2019-02-22', 9),
(23, 7, '2019-03-22', 2),
(24, 6, '2019-02-18', 3),
(25, 8, '2019-02-15', 6),
(26, 2, '2019-03-03', 1),
(27, 10, '2019-02-27', 6),
(28, 9, '2019-03-13', 1),
(29, 10, '2018-08-16', 3),
(30, 7, '2018-12-27', 3),
(31, 9, '2019-02-19', 6),
(32, 8, '2018-10-26', 3),
(33, 1, '2018-07-17', 6),
(34, 2, '2018-07-18', 1),
(35, 4, '2018-09-13', 4),
```

```
(36, 5, '2018-08-16', 3),
(37, 7, '2018-09-13', 5),
(38, 2, '2018-08-06', 1),
(39, 9, '2018-10-31', 6),
(40, 10, '2018-11-15', 4),
(41, 8, '2018-12-06', 5),
(42, 7, '2019-01-09', 1),
(43, 6, '2019-01-17', 3),
(45, 3, '2019-01-22', 4),
(46, 5, '2018-12-21', 1),
(47, 2, '2019-01-11', 9),
(48, 8, '2019-02-14', 3),
(49, 9, '2019-01-31', 10),
(50, 1, '2019-03-07', 9),
(51, 4, '2019-03-19', 1);

CREATE TABLE `AR_Visit_Link` (
  `Visit_ID` int(9),
  `Animal_ID` int(9),
CONSTRAINT AR_Visit_Link_PK PRIMARY KEY (Visit_ID, Animal_ID),
CONSTRAINT AR_Visit_Link_FK1 FOREIGN KEY (Visit_ID) REFERENCES AR_Visit
(Visit_ID),
CONSTRAINT AR_Visit_Link_FK2 FOREIGN KEY (Animal_ID) REFERENCES AR_Animal
(Animal_ID));

INSERT INTO `ar_visit_link` (`Visit_ID`, `Animal_ID`) VALUES
(1, 409223),
(2, 419068),
(3, 420630),
(4, 429298),
(5, 431177),
(6, 433407),
(7, 434478),
(8, 435137),
(9, 435335),
(10, 437083),
(11, 440331),
(12, 441980),
(13, 443525),
(14, 443766),
(15, 443865),
(16, 444008),
(17, 444698),
(18, 444815),
(19, 446153),
(20, 446185),
(21, 446732),
(22, 446855),
(23, 446898),
(24, 446969),
```

```
(25, 446987),
(26, 363388),
(27, 363389),
(28, 371753),
(29, 412349),
(30, 414800),
(31, 418803),
(32, 435005),
(33, 436548),
(34, 438599),
(35, 440309),
(36, 440632),
(37, 440923),
(38, 441099),
(39, 442836),
(40, 443453),
(41, 443666),
(42, 443866),
(43, 444780),
(45, 444914),
(46, 445367),
(47, 445838),
(48, 445931),
(49, 446044),
(50, 446152),
(51, 446350);
```

Delete Database Scripts

The following script was used to delete the database. Database name should be changed to match user's unique database (ex. ism67102s….).

```
DROP VIEW AR_Cat_View;
DROP VIEW AR_Dog_View;
SET @tables = NULL;
SELECT GROUP_CONCAT('`', table_schema, '`.`', table_name,'`') INTO @tables FROM
information_schema.tables
  WHERE table_schema = 'ism67102s1924' AND table_name LIKE BINARY 'ar_%';

SET @tables = CONCAT('DROP TABLE ', @tables);
PREPARE stmt1 FROM @tables;
EXECUTE stmt1;
DEALLOCATE PREPARE stmt1;
```

Leslie McKay
Mark McSwain
Jeanne Reppert

Database Queries

Query 1

List medical providers and procedures for animals whose visit date occurred 2019. Show animal id, name, procedure date and procedure along with provider first and last name and the name of the practice. Order by medical practice name.

```
SELECT ar_animal.animal_id as "Animal ID", ar_animal.Animal_Name AS "Name",
ar_medical_providers.Practice_Name AS "Practice",
ar_medical_providers.Provider_LName AS "Last Name",
ar_medical_providers.Provider_FName AS "First Name",
ar_procedure_type.Proc_Description AS "Procedure"
FROM ar_animal JOIN ar_visit_link USING (animal_id)
JOIN ar_visit USING (visit_id)
JOIN ar_medical_providers USING (provider_id)
JOIN ar_procedure_type USING (procedure_id)
WHERE visit_date > "12/31/2018"
GROUP BY ar_medical_providers.Practice_Name
ORDER BY ar_medical_providers.Practice_Name;
```

Animal ID	Name	Practice	Last Name	First Name	Procedure
429298	OSCAR	All Paws Pet Hospital	Blackwell	Megan	heartworm test
433407	SCOOBY	Animal Housecalls	Mortenson	Ron	neuter
409223	MAXTRILLION	Banfield Pet Hospital	Kennedy	Susan	neuter
431177	ROCKY	Downtown Veterinary Specialists	Burnett	Kendra	rabies vaccination
419068	BRODY	Garden Creek Pet Clinic	Shuford	Scott	rabies vaccination
435335	KING	Mountain View Animal Hospital	Johnson	Stuart	rabies vaccination
443865	ONYX	Southwoods Veterinary Services	Clark	James	rabies vaccination
437083	SAN ANTONIO	Thrive Animal Clinic	Sturgis	Alison	neuter
420630	BEAR	Valley Animal Hospital	Andrews	Gary	deworming
434478	NICO	Vet to Pet Mobile Pet Services	McGregor	Karen	booster

Query 2

List animal id, animal name, breed and fee paid for all adopted dogs. Order by date adopted.

```
SELECT ar_animal.Animal_ID AS "Animal", ar_animal.Animal_Name AS "Animal Name",
ar_adoption_foster.Trans_Date AS "Adoption Date", ar_adoption_foster.Fee AS
"Fee Paid", ar_dog_breeds.Dog_Breed AS "Breed"
FROM ar_animal JOIN ar_adoption_foster USING (Animal_ID)
JOIN ar_dog_breed_link USING (Animal_ID)
JOIN ar_dog_breeds USING (dog_breed_id)
WHERE ar_adoption_foster.Trans_Type="A"
GROUP BY Animal_Name
ORDER BY Trans_Date, animal_name;
```

Animal	Animal Name	Adoption Date	Fee Paid	Breed
434478	NICO	2018-02-16	436.00	AM PIT BULL TER
442836	PEPPER	2018-11-20	355.00	AM PIT BULL TER
419068	BRODY	2018-12-01	480.00	BOXER / MIX
443525	FACE	2018-12-01	223.00	AM PIT BULL TER
444780	LUNA	2019-01-16	139.00	LABRADOR RETR / MIX
446661	CARDIE	2019-02-01	487.00	AM PIT BULL TER
447197	ROXY	2019-02-10	344.00	AM PIT BULL TER
363389	REESIE	2019-02-24	108.00	DOBERMAN PINSCH / LABRADO
409223	MAXTRILLION	2019-03-01	444.00	BULLMASTIFF / MIX
363388	LADY	2019-03-05	372.00	DOBERMAN PINSCH / LABRADO
447480	DOLLY	2019-04-06	397.00	AM PIT BULL TER / MIX
447055	PUTT PUTT	2019-04-06	136.00	AMERICAN STAFF

Query 3

Find an adoptable animal (cat in foster care) that is a domestic short hair, is partially white and is good with other animals.

```
SELECT ar_animal.Animal_ID AS "Animal ID", ar_animal.Animal_Name AS "Animal
Name", ar_cat_breeds.Cat_Breed AS "Breed", ar_primary_color.Color AS "Color",
ar_good_with.Good_With AS "Good With"
FROM ar_animal JOIN ar_cat_breed_link USING (animal_id)
JOIN ar_cat_breeds USING (Cat_Breed_ID)
JOIN ar_adoption_foster USING (Animal_ID)
JOIN ar_good_with_link using (animal_id)
JOIN ar_good_with using (good_with_ID)
JOIN ar_primary_color using (primary_color_id)
WHERE ar_cat_breeds.Cat_Breed="Domestic SH" AND
Trans_Type="F" AND
Color LIKE "%White"
AND good_with="Other Pets"
GROUP BY ar_animal.Animal_ID;
```

Animal ID	Animal Name	Breed	Color	Good With
412349	KASSI	DOMESTIC SH	BRN TORBI / WHITE	Other Pets
429298	OSCAR	DOMESTIC SH	BLACK / WHITE	Other Pets

Query 4

Create a table that compares the frequency of various animal sources.

```
SELECT Source_Type AS "Source", count(ar_animal.Animal_ID) AS "Frequency"
FROM ar_source JOIN ar_animal USING (Source_ID)
GROUP BY Source_Type;
```

Source	Frequency
CONFISCATE	5
FOSTER	2
OWNER SUR	32
RETURN	4
STRAY	22
TRANSFER	1

Query 5

Find the total number of animals rescued in each month for all years. In addition compare the amount of cats and dogs rescued in each month.

Step 1:

```
CREATE VIEW AR_Cat_View AS
SELECT monthname(Date_of_Rescue) AS "Month", COUNT(ar_animal_type.Animal_Type)
AS "Cats"
FROM ar_animal JOIN ar_animal_type USING (Animal_Type_ID)
WHERE ar_animal_type.Animal_Type="Cat"
GROUP BY monthname(Date_of_Rescue);
```

Step 2:

```
CREATE VIEW AR_Dog_View AS
SELECT monthname(Date_of_Rescue) AS "Month", COUNT(ar_animal_type.Animal_Type)
AS "Dogs"
FROM ar_animal JOIN ar_animal_type USING (Animal_Type_ID)
WHERE ar_animal_type.Animal_Type="Dog"
GROUP BY monthname(Date_of_Rescue);
```

Step 3:

```
SELECT m.month AS "Month Rescued", IFNULL(C.Cats, 0) AS "Cats Rescued",
IFNULL(D.Dogs, 0) AS "Dogs Rescued", IFNULL(C.Cats+D.Dogs, 0) AS "Total
Rescued"
FROM (
SELECT 'January' AS
MONTH
UNION SELECT 'February' AS
MONTH
UNION SELECT 'March' AS
MONTH
UNION SELECT 'April' AS
MONTH
UNION SELECT 'May' AS
MONTH
UNION SELECT 'June' AS
MONTH
UNION SELECT 'July' AS
MONTH
UNION SELECT 'August' AS
MONTH
```

```
UNION SELECT 'September' AS
MONTH
UNION SELECT 'October' AS
MONTH
UNION SELECT 'November' AS
MONTH
UNION SELECT 'December' AS
MONTH) AS m
LEFT JOIN ar_cat_view C ON m.month = C.month
LEFT JOIN ar_dog_view D on c.month = D.month;
```

Month Rescued	Cats Rescued	Dogs Rescued	Total Rescued
January	4	4	8
February	13	7	20
March	3	4	7
April	1	0	0
May	0	0	0
June	1	1	2
July	0	0	0
August	2	0	0
September	2	0	0
October	1	5	6
November	6	1	7
December	5	1	6

References (Data Sources)

Animals: https://catalog.data.gov/dataset?tags=animals
People: https://www.briandunning.com/sample-data/