**INFO 5707 Section 006 - Data Modeling for Information Professionals**

**PROJECT DESIGN PHASE**

**TITLE: - PET ADOPTION HUB USING MYSQL**

## Group Members

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| --- | --- |
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**OBJECTIVE AND SCOPE OF THE DATABASE:**

* The "Pet Adoption Hub" serves as a comprehensive solution to manage the operations of pet adoption. The database is designed to enable the tracking of a wide range of data, including pet medical records, adoption applications, foster homes, shelter information, staff and veterinarian details, and donor contributions.
* The database has a wide scope, which includes storing information about pets, such as their medical history and adoption status, as well as adoption applicants and their contact details. It also allows for tracking of foster homes, including details of the foster parents and pets under their care, and stores information about shelters, including their location and contact information.
* Additionally, the database stores information about staff and veterinarians, such as their names, contact details, and job titles, and enables tracking of donations from donors, including the date, amount, and contact information.
* Overall, the "Pet Adoption" database covers all the necessary aspects of managing a pet adoption organization, from medical records to donations, providing a comprehensive solution to address the requirements of such an organization.

## SPECIFIC USER REQUIREMENTS:

## Pet adoption staff: The system will enable pet adoption staff to track pets' medical records, adoption applications, and status, as well as monitor foster homes, shelters, and their locations.

## Adoption applicants: The system will allow adoption applicants to submit applications, track the status of their applications, and provide their contact information.

## Foster parents: The system will enable foster parents to monitor pets under their care, including their medical history and adoption status.

## Shelters: The system will allow shelters to manage their information, including location and contact details, and keep track of pets in their care.

## Staff and veterinarians: The system will enable staff and veterinarians to manage their information, including contact details and job titles.

## Donors: The system will enable donors to contribute funds and track their donations.

## BUSINESS RULES:

## A pet must have a unique identifier (PetID), name, breed, age, and gender.

## A pet may have a medical record that includes a unique identifier (RecordID), vaccination details, and treatment history.

## A pet may have an adoption application associated with it, which includes a unique

## identifier (ApplicationID), applicant name, email, phone number, address, and application status.

## A pet may have at most one foster home at a time, identified by a unique FosterID. Each foster home has a foster parent name, phone number, email address, start and end dates, and status.

## A pet must belong to one shelter, which has a unique identifier (ShelterID), name, address, and phone number.

## A pet may have one or more staff members associated with it, each of whom has a unique identifier (StaffID), name, job title, phone number, and email address.

## A pet may have one or more veterinarians associated with it, each of whom has a unique identifier (VetID), name, phone number, and email address.

## An adoption application may only be associated with one pet.

## A foster home can only accommodate one pet at a time.

## A foster home's status can be "active" or "inactive."

## A pet's adoption status can be "available," "adopted," or "fostered."

## An adoption application's status can be "pending," "approved," "rejected," or "cancelled."

## A staff member's job title can be "manager," "supervisor," "coordinator," or "volunteer."

## A donation must have a unique identifier (DonorID), donor name, phone number, email address, donation date, and amount.

## All foreign key constraints must be enforced, ensuring that no data is lost when a related record is deleted.

## ENTITY-RELATIONSHIP DIAGRAM (ERD):

## Timeline Description automatically generated

## DATA DICTIONARY:

## 

CREATE DATABASE petadoption1;

use petadoption1;

SHOW TABLES;

-- 1

SET FOREIGN\_KEY\_CHECKS=0;

-- 18

SET FOREIGN\_KEY\_CHECKS=1;

-- 2

DROP TABLE IF EXISTS MedicalRecord;

-- 3

CREATE TABLE MedicalRecord (

RecordID INT PRIMARY KEY AUTO\_INCREMENT,

PetID INT NOT NULL,

Vaccination VARCHAR(50),

Treatment VARCHAR(50),

FOREIGN KEY (PetID) REFERENCES Pet(PetID)

);

-- 4

DROP TABLE IF EXISTS pet;

-- 5

CREATE TABLE Pet (

PetID INT PRIMARY KEY AUTO\_INCREMENT,

Name VARCHAR(50) NOT NULL,

Breed VARCHAR(50) NOT NULL,

Age INT NOT NULL,

Gender VARCHAR(10) NOT NULL,

RecordID INT,

ApplicationID INT,

FosterID INT,

ShelterID INT,

FOREIGN KEY (RecordID) REFERENCES MedicalRecord(RecordID),

FOREIGN KEY (ApplicationID) REFERENCES AdoptionApplication(ApplicationID),

FOREIGN KEY (FosterID) REFERENCES Foster(FosterID),

FOREIGN KEY (ShelterID) REFERENCES Shelter(ShelterID)

);

-- 6

DROP TABLE IF EXISTS AdoptionApplication;

-- 7

CREATE TABLE AdoptionApplication (

ApplicationID INT PRIMARY KEY AUTO\_INCREMENT,

ApplicantName VARCHAR(50) NOT NULL,

ApplicantEmail VARCHAR(50) NOT NULL,

ApplicantPhone VARCHAR(20) NOT NULL,

Address VARCHAR(100) NOT NULL,

PetID INT NOT NULL,

Status VARCHAR(20) NOT NULL,

StaffID INT,

FOREIGN KEY (PetID) REFERENCES Pet(PetID),

FOREIGN KEY (StaffID) REFERENCES Staff(StaffID)

);

-- 8

DROP TABLE IF EXISTS Shelter;

-- 9

CREATE TABLE Shelter (

ShelterID INT PRIMARY KEY AUTO\_INCREMENT,

Name VARCHAR(50) NOT NULL,

Address VARCHAR(100) NOT NULL,

Phone VARCHAR(20) NOT NULL

);

-- 10

DROP TABLE IF EXISTS Staff;

-- 11

CREATE TABLE Staff (

StaffID INT PRIMARY KEY AUTO\_INCREMENT,

Name VARCHAR(50) NOT NULL,

Title VARCHAR(50) NOT NULL,

Phone VARCHAR(20) NOT NULL,

Email VARCHAR(50) NOT NULL

);

-- 12

DROP TABLE IF EXISTS Veterinarian;

-- 13

CREATE TABLE Veterinarian (

VetID INT PRIMARY KEY AUTO\_INCREMENT,

Name VARCHAR(50) NOT NULL,

Phone VARCHAR(20) NOT NULL,

Email VARCHAR(50) NOT NULL

);

-- 14

DROP TABLE IF EXISTS Foster;

-- 15

CREATE TABLE Foster (

FosterID INT PRIMARY KEY,

PetID INT NOT NULL,

FosterName VARCHAR(50) NOT NULL,

FosterPhone VARCHAR(20) NOT NULL,

FosterEmail VARCHAR(50) NOT NULL,

StartDate DATE NOT NULL,

EndDate DATE,

Status VARCHAR(50) NOT NULL,

FOREIGN KEY (PetID) REFERENCES Pet(PetID)

);

-- 16

DROP TABLE IF EXISTS Donor;

-- 17

CREATE TABLE Donor (

DonorID INT PRIMARY KEY AUTO\_INCREMENT,

FirstName VARCHAR(50) NOT NULL,

LastName VARCHAR(50) NOT NULL,

Phone VARCHAR(20) NOT NULL,

Email VARCHAR(255) NOT NULL,

DonationDate DATE NOT NULL,

Amount DECIMAL(8,2) NOT NULL

);

-- insert

DELETE FROM Pet;

-- INSERT INTO Pet (Name, Breed, Age, Gender, RecordID, ApplicationID, FosterID, ShelterID) VALUES

-- SET SQL\_SAFE\_UPDATES = 0;

-- UPDATE Pet

-- SET PetID= 345

-- WHERE Name = 'Max';

-- 19

INSERT INTO Shelter (Name, Address, Phone)

VALUES ('Furry Friends Animal Rescue', '1010 Elm St, Anytown USA', '555-555-4545'),

('Second Chance Animal Shelter', '2020 Pine St, Anytown USA', '555-555-5656'),

('Pet Haven Adoption Center', '3030 Cedar St, Anytown USA', '555-555-6767'),

('Happy Tails Animal Sanctuary', '4040 Birch St, Anytown USA', '555-555-7878'),

('All Paws Animal Rescue', '5050 Oak St, Anytown USA', '555-555-8989'),

('Fur-Ever Home Animal Shelter', '6060 Maple Ave, Anytown USA', '555-555-0101'),

('Hopeful Hearts Animal Rescue', '7070 Elm St, Anytown USA', '555-555-1212'),

('Happy Paws Animal Shelter', '123 Main St, Anytown USA', '555-555-1212'),

('Animal Rescue League', '456 Oak St, Anytown USA', '555-555-2323'),

('Paws and Claws Adoption Center', '789 Maple Ave, Anytown USA', '555-555-3434'),

('Loving Hearts Animal Rescue', '1111 Pine St, Anytown USA', '555-555-4545'),

('Pawsitive Pet Adoption', '2222 Elm St, Anytown USA', '555-555-5656'),

('Rescue Me Animal Shelter', '3333 Cedar St, Anytown USA', '555-555-6767'),

('Forever Friends Adoption Center', '4444 Birch St, Anytown USA', '555-555-7878'),

('Safe Haven Animal Sanctuary', '5555 Oak St, Anytown USA', '555-555-8989'),

('Compassionate Care Animal Rescue', '6666 Maple Ave, Anytown USA', '555-555-0101'),

('Hopeful Tails Animal Shelter', '7777 Elm St, Anytown USA', '555-555-1212'),

('Paw Prints Rescue', '8888 Main St, Anytown USA', '555-555-2323'),

('Noahs Ark Animal Shelter', '9999 Pine St, Anytown USA', '555-555-3434'),

('Happy Hearts Adoption Center', '1010 Cedar St, Anytown USA', '555-555-4545');

select \* from Shelter; -- 1, 20

-- 20

INSERT INTO Veterinarian (Name, Phone, Email)

VALUES ('Dr. John Smith', '555-555-1234', 'johnsmith@vetclinic.com'),

('Dr. Sarah Lee', '555-555-2345', 'sarahlee@vetclinic.com'),

('Dr. Michael Brown', '555-555-3456', 'michaelbrown@vetclinic.com'),

('Dr. Elizabeth Nguyen', '555-555-4567', 'elizabethnguyen@vetclinic.com'),

('Dr. David Kim', '555-555-5678', 'davidkim@vetclinic.com'),

('Dr. Amy Patel', '555-555-6789', 'amypatel@vetclinic.com'),

('Dr. Jennifer Miller', '555-555-7890', 'jennifermiller@vetclinic.com'),

('Dr. Daniel Wilson', '555-555-8901', 'danielwilson@vetclinic.com'),

('Dr. Emily Thompson', '555-555-9012', 'emilythompson@vetclinic.com'),

('Dr. Christopher Davis', '555-555-0123', 'christopherdavis@vetclinic.com'),

('Dr. Jessica Robinson', '555-555-1234', 'jessicarobinson@vetclinic.com'),

('Dr. Matthew Clark', '555-555-2345', 'matthewclark@vetclinic.com'),

('Dr. Ashley Turner', '555-555-3456', 'ashleyturner@vetclinic.com'),

('Dr. Andrew Stewart', '555-555-4567', 'andrewstewart@vetclinic.com'),

('Dr. Samantha White', '555-555-5678', 'samanthawhite@vetclinic.com'),

('Dr. William Lewis', '555-555-6789', 'williamlewis@vetclinic.com'),

('Dr. Olivia Adams', '555-555-7890', 'oliviaadams@vetclinic.com'),

('Dr. Ethan Martinez', '555-555-8901', 'ethanmartinez@vetclinic.com'),

('Dr. Sophia Hall', '555-555-9012', 'sophiahall@vetclinic.com'),

('Dr. Benjamin Rodriguez', '555-555-0123', 'benjaminrodriguez@vetclinic.com');

select \* from Veterinarian; -- 1,20

-- 21

INSERT INTO Staff (Name, Title, Phone, Email)

VALUES ('John Smith', 'Manager', '555-555-1234', 'johnsmith@shelter.com'),

('Sarah Lee', 'Adoption Counselor', '555-555-2345', 'sarahlee@shelter.com'),

('Michael Brown', 'Foster Coordinator', '555-555-3456', 'michaelbrown@shelter.com'),

('Elizabeth Nguyen', 'Volunteer Coordinator', '555-555-4567', 'elizabethnguyen@shelter.com'),

('David Kim', 'Veterinarian', '555-555-5678', 'davidkim@shelter.com'),

('Amy Patel', 'Admin Assistant', '555-555-6789', 'amypatel@shelter.com'),

('Jennifer Miller', 'Animal Care Specialist', '555-555-7890', 'jennifermiller@staff.com'),

('Daniel Wilson', 'Trainer', '555-555-8901', 'danielwilson@staff.com'),

('Emily Thompson', 'Groomer', '555-555-9012', 'emilythompson@staff.com'),

('Christopher Davis', 'Event Coordinator', '555-555-0123', 'christopherdavis@staff.com'),

('Jessica Robinson', 'Fundraising Manager', '555-555-1234', 'jessicarobinson@staff.com'),

('Matthew Clark', 'Marketing Coordinator', '555-555-2345', 'matthewclark@staff.com'),

('Ashley Turner', 'Social Media Manager', '555-555-3456', 'ashleyturner@staff.com'),

('Andrew Stewart', 'Transport Coordinator', '555-555-4567', 'andrewstewart@staff.com'),

('Samantha White', 'Community Outreach Specialist', '555-555-5678', 'samanthawhite@staff.com'),

('William Lewis', 'IT Specialist', '555-555-6789', 'williamlewis@staff.com'),

('Olivia Adams', 'Public Relations Officer', '555-555-7890', 'oliviaadams@staff.com'),

('Ethan Martinez', 'Education Coordinator', '555-555-8901', 'ethanmartinez@staff.com'),

('Sophia Hall', 'Volunteer Supervisor', '555-555-9012', 'sophiahall@staff.com'),

('Benjamin Rodriguez', 'Facilities Manager', '555-555-0123', 'benjaminrodriguez@staff.com');

select \* from Staff; -- 1,20

-- 22

INSERT INTO Foster (FosterID,PetID, FosterName, FosterPhone, FosterEmail, StartDate, EndDate, Status)

VALUES

(1,1, 'John Smith', '555-1234', 'john.smith@gmail.com', '2022-01-01', '2022-02-01', 'Completed'),

(2,2, 'Jane Doe', '555-5678', 'jane.doe@yahoo.com', '2022-03-01', NULL, 'In Progress'),

(3,3, 'Bob Johnson', '555-9876', 'bob.johnson@hotmail.com', '2022-04-01', '2022-05-01', 'Completed'),

(4,4, 'Baby Justin', '555-9888', 'baby.justin@hotmail.com', '2022-05-01', '2022-07-01', 'In Progress'),

(5,5, 'Baby Justin', '555-9888', 'baby.justin@hotmail.com', '2022-05-01', '2022-07-01', 'In Progress'),

(6,6, 'Emily Wilson', '555-1111', 'emily.wilson@gmail.com', '2022-06-01', '2022-08-01', 'In Progress'),

(7,7, 'Mark Thompson', '555-2222', 'mark.thompson@yahoo.com', '2022-07-01', NULL, 'In Progress'),

(8,8, 'Karen Lee', '555-3333', 'karen.lee@hotmail.com', '2022-08-01', NULL, 'In Progress'),

(9,9, 'Jonathan Davis', '555-4444', 'jonathan.davis@gmail.com', '2022-09-01', '2022-11-01', 'Completed'),

(10,10, 'Amanda Rodriguez', '555-5555', 'amanda.rodriguez@yahoo.com', '2022-10-01', '2022-11-01', 'Completed');

-- 23

INSERT INTO Donor (FirstName, LastName, Phone, Email, DonationDate, Amount)

VALUES ('John', 'Smith', '555-1234', 'john.smith@gmail.com', '2022-01-01', 100.00),

('Jane', 'Doe', '555-5678', 'jane.doe@yahoo.com', '2022-02-15', 50.00),

('Bob', 'Johnson', '555-9876', 'bob.johnson@hotmail.com', '2022-03-31', 75.00),

('Emily', 'Brown', '555-4321', 'emily.brown@gmail.com', '2022-04-15', 200.00),

('Mark', 'Lee', '555-8765', 'mark.lee@yahoo.com', '2022-05-01', 25.00),

('Sarah', 'Johnson', '555-2468', 'sarah.johnson@hotmail.com', '2022-06-15', 150.00),

('Tom', 'Davis', '555-3691', 'tom.davis@gmail.com', '2022-07-01', 100.00),

('Lucy', 'Chen', '555-1111', 'lucy.chen@yahoo.com', '2022-08-15', 50.00),

('Chris', 'Brown', '555-2222', 'chris.brown@hotmail.com', '2022-09-01', 75.00),

('Amy', 'Johnson', '555-3333', 'amy.johnson@gmail.com', '2022-10-15', 100.00),

('David', 'Lee', '555-4444', 'david.lee@yahoo.com', '2022-11-01', 50.00),

('Karen', 'Smith', '555-5555', 'karen.smith@hotmail.com', '2022-12-15', 25.00),

('Mike', 'Johnson', '555-6666', 'mike.johnson@gmail.com', '2023-01-01', 150.00);

-- 24

INSERT INTO MedicalRecord (PetID, Vaccination, Treatment) VALUES

(1, 'Rabies', 'Antibiotics'),

(2, 'Distemper', 'Surgery'),

(3, NULL, 'Antifungal medication'),

(4, 'Parvovirus', 'Painkillers'),

(5, 'Leptospirosis', 'Antibiotics'),

(6, NULL, 'Antifungal medication'),

(7, 'Feline leukemia', 'Radiation therapy'),

(8, 'Feline immunodeficiency virus', 'Antiviral medication'),

(9, 'Canine influenza', 'Fluid therapy'),

(10, 'Canine parainfluenza', 'Cough suppressants');

-- 25

INSERT INTO Pet (PetID,Name, Breed, Age, Gender) VALUES

('1','Fluffy', 'Persian', 3, 'Female'),

('2','Buddy', 'Labrador Retriever', 2, 'Male'),

('3','Max', 'German Shepherd', 1, 'Male'),

('4', 'Mittens', 'Siamese', 5, 'Female'),

('5', 'Rocky', 'Boxer', 4, 'Male'),

('6', 'Lucy', 'Poodle', 2, 'Female'),

('7', 'Rufus', 'Bulldog', 6, 'Male'),

('8', 'Princess', 'Chihuahua', 3, 'Female'),

('9', 'Zeus', 'Rottweiler', 7, 'Male'),

('10', 'Luna', 'Siberian Husky', 1, 'Female');

-- 26

INSERT INTO AdoptionApplication (ApplicantName, ApplicantEmail, ApplicantPhone, Address, PetID, Status, StaffID)

VALUES

('John Doe', 'john.doe@gmail.com', '555-1234', '123 Main St, Anytown, USA', 1, 'Pending', 7),

('Jane Smith', 'jane.smith@yahoo.com', '555-5678', '456 Oak St, Another Town, USA', 2, 'Approved', 8),

('Bob Johnson', 'bob.johnson@hotmail.com', '555-9876', '789 Maple St, Some City, USA', 3, 'Rejected', 9);

-- 27 ... ee step lo anni tables lo pk ye number tho start avthundo note cheskunna anthe

-- select \* from pet; - 1

-- select \* from adoptionApplication; - 1

-- select \* from Shelter-1;

-- select \* from staff - 1;

-- select \* from veterinarian- 1;

-- select \* from medicalrecord-4;

-- select \* from foster-1;

-- select \* from donor-1;

-- 28 ---now based on the above index values....using different values...update fk in pet table

UPDATE Pet

SET RecordID = 10, ApplicationID = 2, FosterID = 6, ShelterID = 9

WHERE PetID = 10;

select \* from donor;

SELECT p.Name, p.Breed, m.Vaccination, m.Treatment

FROM Pet p

LEFT JOIN MedicalRecord m ON p.RecordID = m.RecordID;

SELECT \*

FROM AdoptionApplication

WHERE Status = 'Pending';

SELECT Name, Address, Phone

FROM Shelter;

SELECT p.Name, f.FosterName, f.FosterPhone, f.FosterEmail

FROM Pet p

INNER JOIN Foster f ON p.PetID = f.PetID;

SELECT FirstName, LastName, Phone, Email, DonationDate, Amount

FROM Donor

WHERE Amount > 50 AND DonationDate >= DATE\_SUB(NOW(), INTERVAL 1 YEAR);