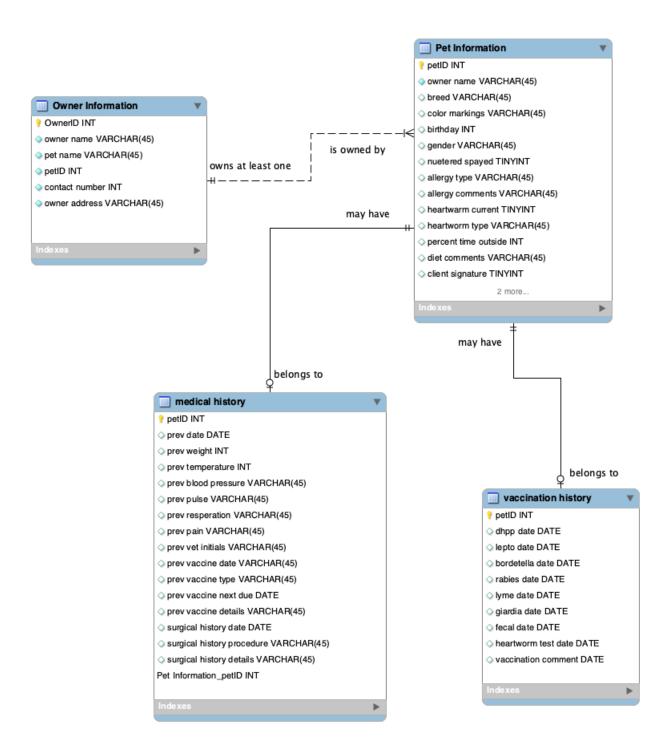Sean McEachern
CSCI - 3287
HW2 - Data Modeling

Assumptions:
1. ownerID and petID are generated to be unique identifiers
2. owner address added to owner information table
3. one owner can have many pets. but one pet can only have one owner
4. a pet may not have any medical or vaccine history

Data Model Graphic - pg.2

DDL - pg. 3

Owner Information

- 🔑 OwnerID INT
- ◇ owner name VARCHAR(45)
- ◇ pet name VARCHAR(45)
- ◇ petID INT
- ◇ contact number INT
- ◇ owner address VARCHAR(45)

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Pet Information

- 🔑 petID INT
- ◇ owner name VARCHAR(45)
- ◇ breed VARCHAR(45)
- ◇ color markings VARCHAR(45)
- ◇ birthday INT
- ◇ gender VARCHAR(45)
- ◇ nuetered spayed TINYINT
- ◇ allergy type VARCHAR(45)
- ◇ allergy comments VARCHAR(45)
- ◇ heartwarm current TINYINT
- ◇ heartworm type VARCHAR(45)
- ◇ percent time outside INT
- ◇ diet comments VARCHAR(45)
- ◇ client signature TINYINT

2 more...

Indexes ▸

owns at least one — is owned by

may have

may have

belongs to

belongs to

medical history

- 🔑 petID INT
- ◇ prev date DATE
- ◇ prev weight INT
- ◇ prev temperature INT
- ◇ prev blood pressure VARCHAR(45)
- ◇ prev pulse VARCHAR(45)
- ◇ prev resperation VARCHAR(45)
- ◇ prev pain VARCHAR(45)
- ◇ prev vet initials VARCHAR(45)
- ◇ prev vaccine date VARCHAR(45)
- ◇ prev vaccine type VARCHAR(45)
- ◇ prev vaccine next due DATE
- ◇ prev vaccine details VARCHAR(45)
- ◇ surgical history date DATE
- ◇ surgical history procedure VARCHAR(45)
- ◇ surgical history details VARCHAR(45)
- Pet Information_petID INT

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vaccination history

- 🔑 petID INT
- ◇ dhpp date DATE
- ◇ lepto date DATE
- ◇ bordetella date DATE
- ◇ rabies date DATE
- ◇ lyme date DATE
- ◇ giardia date DATE
- ◇ fecal date DATE
- ◇ heartworm test date DATE
- ◇ vaccination comment DATE

Indexes ▸

```
-- MySQL Script generated by MySQL Workbench
-- Sun Sep 27 15:45:32 2020
-- Model: New Model    Version: 1.0
-- MySQL Workbench Forward Engineering

SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0;
SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0;
SET @OLD_SQL_MODE=@@SQL_MODE,
SQL_MODE='ONLY_FULL_GROUP_BY,STRICT_TRANS_TABLES,NO_ZERO_IN_DATE,NO_ZERO_DA
TE,ERROR_FOR_DIVISION_BY_ZERO,NO_ENGINE_SUBSTITUTION';


-- -----------------------------------------------------
-- Schema mydb
-- -----------------------------------------------------


-- -----------------------------------------------------
-- Schema mydb
-- -----------------------------------------------------
CREATE SCHEMA IF NOT EXISTS `mydb` DEFAULT CHARACTER SET utf8 ;
USE `mydb` ;


-- -----------------------------------------------------
-- Table `mydb`.`Owner Information`
-- -----------------------------------------------------
DROP TABLE IF EXISTS `mydb`.`Owner Information` ;

CREATE TABLE IF NOT EXISTS `mydb`.`Owner Information` (
  `OwnerID` INT GENERATED ALWAYS AS ()  COMMENT 'Unique ID assigned to each new owner',
  `owner name` VARCHAR(45) NOT NULL,
  `pet name` VARCHAR(45) NOT NULL,
  `petID` INT GENERATED ALWAYS AS ()  COMMENT 'unique ID generated for each new pet',
  `contact number` INT NOT NULL COMMENT 'owner phone number',
  `owner address` VARCHAR(45) NOT NULL,
  PRIMARY KEY (`OwnerID`))
ENGINE = InnoDB;

CREATE UNIQUE INDEX `OwnerID_UNIQUE` ON `mydb`.`Owner Information` (`OwnerID` ASC)
VISIBLE;

CREATE UNIQUE INDEX `petID_UNIQUE` ON `mydb`.`Owner Information` (`petID` ASC) VISIBLE;


-- -----------------------------------------------------
-- Table `mydb`.`vaccination history`
```

```
-- -----------------------------------------------------
DROP TABLE IF EXISTS `mydb`.`vaccination history` ;

CREATE TABLE IF NOT EXISTS `mydb`.`vaccination history` (
  `petID` INT NOT NULL,
  `dhpp date` DATE NULL,
  `lepto date` DATE NULL,
  `bordetella date` DATE NULL,
  `rabies date` DATE NULL,
  `lyme date` DATE NULL,
  `giardia date` DATE NULL,
  `fecal date` DATE NULL,
  `heartworm test date` DATE NULL,
  `vaccination comment` DATE NULL,
  PRIMARY KEY (`petID`))
ENGINE = InnoDB;

CREATE UNIQUE INDEX `petID_UNIQUE` ON `mydb`.`vaccination history` (`petID` ASC) VISIBLE;



-- -----------------------------------------------------
-- Table `mydb`.`Pet Information`
-- -----------------------------------------------------
DROP TABLE IF EXISTS `mydb`.`Pet Information` ;

CREATE TABLE IF NOT EXISTS `mydb`.`Pet Information` (
  `petID` INT NOT NULL COMMENT 'primary key inherited from owner information table',
  `owner name` VARCHAR(45) NOT NULL,
  `breed` VARCHAR(45) NULL,
  `color markings` VARCHAR(45) NULL,
  `birthday` INT NULL,
  `gender` VARCHAR(45) NULL,
  `nuetered spayed` TINYINT NULL,
  `allergy type` VARCHAR(45) NULL,
  `allergy comments` VARCHAR(45) NULL,
  `heartwarm current` TINYINT NULL,
  `heartworm type` VARCHAR(45) NULL,
  `percent time outside` INT NULL,
  `diet comments` VARCHAR(45) NULL,
  `client signature` TINYINT NULL,
  `Owner Information_OwnerID` INT NOT NULL,
  `vacinnation history_petID` INT NULL,
  PRIMARY KEY (`petID`, `vacinnation history_petID`),
  CONSTRAINT `fk_Pet Information_Owner Information`
```

```
    FOREIGN KEY (`Owner Information_OwnerID`)
    REFERENCES `mydb`.`Owner Information` (`OwnerID`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION,
  CONSTRAINT `fk_Pet Information_vacinnation history1`
    FOREIGN KEY (`vacinnation history_petID`)
    REFERENCES `mydb`.`vaccination history` (`petID`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;

CREATE UNIQUE INDEX `petID_UNIQUE` ON `mydb`.`Pet Information` (`petID` ASC) VISIBLE;

CREATE INDEX `fk_Pet Information_Owner Information_idx` ON `mydb`.`Pet Information`
(`Owner Information_OwnerID` ASC) VISIBLE;

CREATE INDEX `fk_Pet Information_vacinnation history1_idx` ON `mydb`.`Pet Information`
(`vacinnation history_petID` ASC) VISIBLE;


-- -----------------------------------------------------
-- Table `mydb`.`medical history`
-- -----------------------------------------------------
DROP TABLE IF EXISTS `mydb`.`medical history` ;

CREATE TABLE IF NOT EXISTS `mydb`.`medical history` (
  `petID` INT NOT NULL,
  `prev date` DATE NULL,
  `prev weight` INT NULL,
  `prev temperature` INT NULL,
  `prev blood pressure` VARCHAR(45) NULL,
  `prev pulse` VARCHAR(45) NULL,
  `prev resperation` VARCHAR(45) NULL,
  `prev pain` VARCHAR(45) NULL,
  `prev vet initials` VARCHAR(45) NULL,
  `prev vaccine date` VARCHAR(45) NULL,
  `prev vaccine type` VARCHAR(45) NULL,
  `prev vaccine next due` DATE NULL,
  `prev vaccine details` VARCHAR(45) NULL,
  `surgical history date` DATE NULL,
  `surgical history procedure` VARCHAR(45) NULL,
  `surgical history details` VARCHAR(45) NULL,
  `Pet Information_petID` INT NOT NULL,
  PRIMARY KEY (`petID`, `Pet Information_petID`),
```

```
  CONSTRAINT `fk_medical history_Pet Information1`
    FOREIGN KEY (`Pet Information_petID`)
    REFERENCES `mydb`.`Pet Information` (`petID`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;

CREATE UNIQUE INDEX `idmedical history_UNIQUE` ON `mydb`.`medical history` (`petID` ASC)
VISIBLE;

CREATE INDEX `fk_medical history_Pet Information1_idx` ON `mydb`.`medical history` (`Pet
Information_petID` ASC) VISIBLE;


SET SQL_MODE=@OLD_SQL_MODE;
SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;
SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;
```