SQL Data Modeling Assessment
Pet Adoption Agency

Features:

- Allow employees and customers to view animals
- Allow animals to have their own ids with photos and special characteristics/needs
- Allow employees to view details about customers(home situation, kids, age, etc.)
- Allow Matching appointments to be made
- Keep employee information for contact and access

Brainstorming/Data Needed:

- Employee ID
- Employee First Name
- Employee Last Name
- Employee Email
- Employee Password
- Employee Phone
- Customer ID
- Customer First Name
- Customer Last Name
- Customer Email
- Customer Password
- Customer Phone
- Customer City
- Customer State
- Will_foster BOOLEAN
- Has_children BOOLEAN
- Has_other_pets BOOLEAN
- Type of Housing
- Customer Age
- Species Desired
- Animal ID
- Animal Name
- Animal Species
- Animal Photo
- Animal Gender
- Neutered/Spayed BOOLEAN
- Appointment ID
- Appointment Date
- Appointment Time

Tables:

- Employee Table:
  This will hold employee access/contact information
  - Employee_id
  - Email
  - Password
  - First Name
  - Last Name
  - Phone

- Matching Appointment Table
  This will keep track of the appointments and who is assigned to them (employee, customer and animal)
  - Appointment ID
  - Employee ID
  - Customer ID
  - Pet ID
  - Date of Appointment
  - Time of Appointment

- Customer Table:
  This will hold customer information and
  To help match pets and make appointments.
  - Customer ID
  - First Name
  - Last Name
  - Email
  - Password
  - Phone
  - City
  - State
  - Will_foster BOOLEAN
  - Has_children BOOLEAN
  - Has_other_pets BOOLEAN
  - Type of Housing
  - Age

- Animal Table
  This will hold information about the animals and their needs/preferences
    - Animal ID
    - Animal Name
    - Animal Species
    - Animal Photo
    - Animal Gender
    - Neutered/Spayed BOOLEAN
    - Good with Kids BOOLEAN
    - Needs a Yard BOOLEAN
    - High Energy BOOLEAN

- Animal Employee Table
  Association table to link animals with the employees that work with them.
    - Animal ID
    - Employee ID

Relationships:

- One to one
    - Customers => Appointment
- One to many
    - Animal => Appointment
    - Employee => Appointment
- Many to Many
    - Employees => Animals

Columns:

```
CREATE TABLE employees(
  employee_id SERIAL PRIMARY KEY,
  email VARCHAR(100),
  password VARCHAR(500),
  first_name VARCHAR(20),
  last_name VARCHAR(20),
  phone INTEGER
);

CREATE TABLE customers(
  customer_id SERIAL PRIMARY KEY,
  email VARCHAR(100),
  password VARCHAR(500),
  first_name VARCHAR(20),
  last_name VARCHAR(20),
  phone INTEGER,
  city VARCHAR(40),
  state VARCHAR(20),
  will_foster BOOLEAN,
  has_children BOOLEAN,
  has_other_pets BOOLEAN,
  type_of_housing VARCHAR(50),
  age INTEGER
);

CREATE TABLE animals(
  animal_id SERIAL PRIMARY KEY,
```

```
  name VARCHAR(20),
  species VARCHAR(50),
  photo TEXT,
  gender VARCHAR(20),
  spayed_neutered BOOLEAN,
  good_with_kids BOOLEAN,
  needs_a_yard BOOLEAN,
  high_energy BOOLEAN
);

CREATE TABLE appointments(
  appointment_id SERIAL PRIMARY KEY,
  animal_id INTEGER NOT NULL REFERENCES animals(animal_id),
  customer_id INTEGER NOT NULL REFERENCES customers(customer_id),
  employee_id INTEGER NOT NULL REFERENCES employees(employee_id),
  date_of_appointment TIMESTAMP,
  time_of_appointment TIMESTAMP
);

CREATE TABLE animal_employee(
animal_id INTEGER NOT NULL REFERENCES animals(animal_id),
employee_id INTEGER NOT NULL REFERENCES employees(employee_id)
);
```