

## Part 3: Data Modeling

Imagine you are opening a pet adoption agency where you will rescue and care for animals and try to find them owners who are a good match for them.

Design a database with at least 4 tables for your pet adoption agency. Include any relationships between tables where you feel they are needed.

For example, you'll need an animals table. Perhaps you have an animal species table as well. The relationship between animal species and animals is one-to-many. For every one species in the species table, you could, at most, have many animals of that species in the animals table.

**Submit a diagram of your database for this project.**

### Drawing Tools

You can use <https://draw.io> or <http://drawings.google.com/> to create your diagram. Make sure you specify your relationships between tables in your diagram. When you're finished with your drawing, either take a screenshot or download a PDF of you diagram, add it to this repository, and push it to Github.

<b>TABLE pet</b> pet_id pet_age pet_name pet_address pet_health Pet_photo  pet_species_id INT NOT NULL REFERENCES pet_species(pet_species_id),  pet_adoption_agency_id INT NOT NULL REFERENCES pet_adoption_agency(pet_adoption_agency_id),	<b>TABLE pet_species</b> pet_species_id pet_species_behavior pet_species_nutrition pet_species_picture
<b>TABLE pet_adoption_agency</b> pet_adoption_agency_id pet_adoption_agency_phone pet_adoption_agency_address pet_adoption_agency_name pet_adopt_fee pet_adopt_requirement pet_care pet_adopt -FAQs pet_owner_id INT NOT NULL REFERENCES pet_owner(pet_owner_id),	<b>TABLE pet_owner</b> pet_owner_id pet_owner_email pet_owner_password pet_owner_phone pet_owner_address pet_owner_name Pet_owner_experience  Pet_owner_profile picture pet_id INT NOT NULL REFERENCES pet(pet_id),

## RELATIONSHIP

One to one:

### One to many:

Pet owner to pet

Pet adopt agency to pet

Pet species to pet

### Many to many:

Pet owner to pet adopt agency

```
CREATE TABLE "pet_species" (  
  "pet_species_id" SERIAL PRIMARY KEY,  
  "pet_species_behavior" VARCHAR(2000),  
  "pet_species_nutrition" VARCHAR(2000),  
  "pet_species_picture" TEXT  
);
```

```
CREATE TABLE "pet_adoption_agency" (  
  "pet_adoption_agency_id" SERIAL PRIMARY KEY,  
  "pet_adoption_agency_phone" INT,  
  "pet_adoption_agency_address" VARCHAR(500),  
  "pet_adoption_agency_name" VARCHAR(100),  
  "pet_adopt_fee" NUMERIC,  
  "pet_adopt_requirement" VARCHAR(2000),  
  "pet_care" VARCHAR(5000),  
  "pet_adopt_FAQs" VARCHAR(4000),  
  "pet_owner_id" INT NOT NULL  
);
```

```
CREATE TABLE "pet_owner" (  
  "pet_owner_id" SERIAL PRIMARY KEY,
```

```
"pet_owner_email" VARCHAR(300),  
"pet_owner_password" VARCHAR(500),  
"pet_owner_phone" INT,  
"pet_owner_address" VARCHAR(1000),  
"pet_owner_name" VARCHAR(500),  
"pet_owner_experience" VARCHAR(2000),  
"pet_owner_profile_picture" TEXT,  
"pet_id" INT NOT NULL  
);
```

```
CREATE TABLE "pet" (  
"pet_id" SERIAL PRIMARY KEY,  
"pet_age" NUMERIC,  
"pet_name" VARCHAR(500),  
"pet_address" VARCHAR(500),  
"pet_health" VARCHAR(2000),  
"pet_photo" TEXT,  
"pet_species_id" INT NOT NULL,  
"pet_adoption_agency_id" INT NOT NULL  
);
```

pet_species	
<b>pet_species_id</b>	int
pet_species_behavior	VARCHAR(2000)
pet_species_nutrition	VARCHAR(2000)
pet_species_picture	TEXT

pet_adoption_agency	
<b>pet_adoption_agency_id</b>	int
pet_adoption_agency_phone	INT
pet_adoption_agency_address	VARCHAR(500)
pet_adoption_agency_name	VARCHAR(100)
pet_adopt_fee	NUMERIC
pet_adopt_requirement	VARCHAR(2000)
pet_care	VARCHAR(5000)
pet_adopt_FAQs	VARCHAR(4000)
pet_owner_id	INT

pet_owner	
<b>pet_owner_id</b>	int
pet_owner_email	VARCHAR(300)
pet_owner_password	VARCHAR(500)
pet_owner_phone	INT
pet_owner_address	VARCHAR(1000)
pet_owner_name	VARCHAR(500)
pet_owner_experience	VARCHAR(2000)
pet_owner_profile_picture	TEXT
pet_id	INT

pet	
<b>pet_id</b>	int
pet_age	NUMERIC
pet_name	VARCHAR(500)
pet_address	VARCHAR(500)
pet_health	VARCHAR(2000)
pet_photo	TEXT
pet_species_id	INT
pet_adoption_agency_id	INT

