Robert Scanlon CS 496 Fall 2017 Final Project

Simple Pet Shelter API

This API implements a system which can be used by a small animal shelter to keep track of animals and volunteers. People and Pet entities can be added, removed, and modified within the database. People can also be assigned to act as 'caretakers' for animals. Each animal in the database can have either zero or one caretaker. People can act as caretaker for zero or more animals.

People Objects

People objects are returned with the following properties.

Property	Type	Description
id	String	url safe identifier
self	Url String	link to self (not an intrinsic property of People objects;
		added when request is made)
fname	String	first name of person
lname	String	last name of person
age	Integer	age of person (years)
address	String	home address of person
pets	String[]	a list containing the ids of pets for which this
		person is caretaker for

Pet Objects

Pet objects are returned with the following properties.

Property	Type	Description
id	String	url safe identifier
self	Url String	link to self (not an intrinsic property of Pet objects;
		added when request is made)
name	String	name of pet
species	String	species of pet (cat, dog, etc.)
age	Integer	age of pet (years)
weight	Integer	weight of pet
caretaker	String	id of the person who is caretaker for this pet,
		NULL if the pet does not currently have a caretaker

Get all People and Pets

GET /

Note: Returns a json object containing "People" (a json list of all People in the database) and "Pets" (a json list of all Pets in the database).

Get all People

GET /person

Note: Returns a json list of all People in the database.

Get a single Person

GET /person/:id

Note: A request containing a valid id string which does not identify a Person in the database will return a 404 status code. A request containing an invalid id string will return a status code 500 server error.

Get all Pets

GET /pet

Note: Returns a json list of all Pets in the database.

Get single Pet

GET /pet/:id

Note: A request containing a valid id string which does not identify a Pet in the database will return a 404 status code. A request containing an invalid id string will return a status code 500 server error.

Create a new Person

POST /person

Input: application/json

Name	Type	Description
fname	string	Required. First name of Person
lname	string	Required. Last name of Person
age	integer	Required. Age of Person (years)
address	integer	Required. Address of Person

Note: A request which contains invalid body data will return a status code 400 Bad Request.

Create a new Pet

POST /pet

Input: application/json

Name	Type	Description
name	String	Required. Name of pet
species	String	Required. Species of Pet
age	integer	Required. Age of Pet (years)
weight	integer	Required. Weight of Pet (lbs)

Note: A request which contains invalid body data will return a status code 400 Bad Request.

Modify a Person

PATCH /person/:id
Input: application/json

Name	Type	Description
fname	String	New First Name of Person
lname	String	New Last Name of Person
age	integer	New age of Person (years)
address	string	New address of Person

Note: The id, and Pets[] Person attributes cannot be modified through this request.

Modify a Pet

PATCH /pet/:id

Input: application/json

Name	Type	Description
name	String	New Name of Pet
species	String	New Species of Pet
age	integer	New age of Pet (years)
weight	integer	New weight of Pet (lbs)

Note: The id, caretaker Pet attributes cannot be modified though this request.

Delete a Person

DELETE /person/:id

Note: The caretaker attribute of all Pets for which this Person was caretaker for is set to NULL upon the deletion of this Person.

Delete a Pet

DELETE /pet/:id

Note: This Pet's id string is removed from a Person's pets[] attribute upon deletion of this Pet, if said person was caretaker for this Pet.

Get All Pets With No Caretaker

GET /pet/free

Note: This request will return a JSON array of all Pets in the database whose caretaker attribute is NULL.

Add Care Relationship

PUT /pet/:id/caretaker
Input : application/json

Name	Type	Description
person_id	string	Required. Person id string of the Person
		who will be caretaker for this Pet.

Note: If the Pet identified by the id in the url already has a caretaker, the id in the url does not match a Pet in the database, or the id passed in the request body does not match a person in the database, a 400 error code is returned along with an appropriate error message. If the request is successful the Pet's caretaker is updated, along with the Person's pets list.

Remove Care Relationship

PATCH /pet/:id/caretaker

Note: If the id passed in the url does not identify a Pet in the database, or the person id of this Pets caretaker does not identify a Person in the database, a 400 error is returned with the appropriate message. If the request is successful, the Pet's caretaker attribute is set to NULL and the Pet's id string is removed from the Person's pets list.

Get a Person's Pets

GET /person/:id/pets

Note: Returns a list of Pets who this person is caretaker for. If the id does not identify a Person in the database, a 404 error is returned.